

AGRICULTURAL INQUIRY

HEARING

BEFORE THE

JOINT COMMISSION OF AGRICULTURAL INQUIRY

SIXTY-SEVENTH CONGRESS

FIRST SESSION

UNDER

Senate Concurrent Resolution 4

IN THREE VOLUMES

Volume 2

AUGUST 2, 3, 4, 5, 8, 9, AND 11, 1921

PROPERTY OF THE

ECONOMICS

READING ROOM



WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

AGRICULTURAL INQUIRY

HEARING

BEFORE THE

C. 30, 67-69.
JOINT COMMISSION OF AGRICULTURAL INQUIRY

SIXTY-SEVENTH CONGRESS

FIRST SESSION

UNDER

Senate Concurrent Resolution 4

—
IN THREE VOLUMES

Volume 2
—

AUGUST 2, 3, 4, 5, 8, 9, AND 11, 1921

PROPERTY OF THE
ECONOMICS

HEARING ROOM



91341

WASHINGTON
GOVERNMENT PRINTING OFFICE

1922

H II
1753
.1922

UNITED STATES CONGRESS.
JOINT COMMISSION OF AGRICULTURAL INQUIRY.

LIST OF COMMISSION.

SYDNEY ANDERSON, Minnesota, *Chairman*.

HOUSE MEMBERS.

OGDEN L. MILLS, New York.
FRANK H. FUNK, Illinois.
HATTON W. SUMNERS, Texas.
PETER G. TEN EYCK, New York.

SENATE MEMBERS.

IRVINE L. LENROOT, Wisconsin.
ARTHUR CAPPER, Kansas.
CHARLES L. McNARY, Oregon.
JOSEPH T. ROBINSON, Arkansas
PAT HARRISON, Mississippi.
CLYDE L. KING, *Economist*.
IRVING S. PAULL, *Secretary*.

Exec Library
10-29-1925

AGRICULTURAL INQUIRY.

TUESDAY, AUGUST 2, 1921.

CONGRESS OF THE UNITED STATES,
JOINT COMMISSION OF AGRICULTURAL INQUIRY,
Washington, D. C.

The joint commission met, pursuant to call of the chairman, at 10 o'clock a. m., in room No. 70, Capitol Building, Representative Sydney Anderson (chairman) presiding.

The CHAIRMAN. The commission will come to order. The commission this morning will hear Hon. John Skelton Williams, former Comptroller of the Currency.

Mr. Williams, the commission is investigating, among other things, the causes of the present condition of agriculture; and the banking and financial resources and credits of the country, especially as affecting agricultural credits. The commission assumes that as Comptroller of the Currency you are familiar with the policies that have been adopted during the past 18 months, and that you will be in position to give the commission information upon which it can recommend a definite policy with reference to agricultural credits in particular. The commission will be glad to hear you develop the matter in any way that you desire to present it.

STATEMENT OF HON. JOHN SKELTON WILLIAMS, FORMER COMPTROLLER OF THE CURRENCY AND MEMBER OF THE FEDERAL RESERVE BOARD.

Mr. WILLIAMS. Mr. Chairman and gentlemen of the commission, the value of testimony depends not only upon the character of the witness and the study which he may have given to the particular subject which is under discussion, but also to a large extent upon the practical experience of the witness; and with the permission of the commission, I should therefore like to state briefly what my experience has been during the past quarter of a century.

For more than 30 years (except during the past eight years which I have spent in Washington as First Assistant Secretary of the Treasury and as Comptroller of the Currency) I have been a director, vice president, president, or chairman of trust companies and banks, both National and State, not only in the South, but also for a considerable portion of this period in Baltimore and New York City. Twenty years ago I was president or chairman of the trust company section of the American Bankers' Association, and member of the executive council of the American Bankers' Association.

More than 25 years ago I became president of a railroad company in the South, and three or four years later planned, organized, and was president of the Seaboard Air Line system, operating approximately 3,000 miles of railroad. I parted with my interests in that

property in 1904 and retired from its management, but about three years later when the property got into difficulties following the panic of 1907, I was urged to return to a participation in its affairs, aiding in its reorganization, which was probably the most successful ever carried through for a railroad of that size, the floating debt creditors being paid in full without assessment upon stockholders, and the credit of the company fully restored. I retired from membership in the board of directors and executive committee of the company a few months before coming to Washington in 1913.

Eight years ago, in 1913, I accepted from President Wilson and Secretary McAdoo the office of First Assistant Secretary of the Treasury, and by the President was designated Acting Secretary of the Treasury in the absence of Secretary McAdoo.

I declined the office of the Comptroller of the Currency when it was first offered to me, but later on when it was tendered a second time I accepted, and as comptroller had supervision over more than 8,000 national banks with 20,000,000 depositors and twenty-three billions of resources; I was also ex officio member of the Federal Reserve Board.

When the railroads were taken over by the Government in 1917, in addition to my other duties, I was appointed by Director General McAdoo, Director of the Division of Finance and also Director of the Division of Purchases, and as such arranged, under Director General McAdoo's direction, loans and advances of many hundreds of millions of dollars to the railroads; also supervised the purchases of about \$2,000,000,000 worth of supplies and equipment for the 300,000 miles of railroads in the United States. In March, 1919, I resigned the offices of director of finance and purchases, which were held by me without remuneration, and those positions were subsequently filled by two able men, Congressman Sherley, former chairman of the Appropriations Committee of the House, becoming director of finance, and Henry B. Spencer, former vice president of the Southern Railway system, becoming director of purchases, at salaries of \$25,000 per year, which were not large for the skill and responsibility involved.

I was also during the year 1918, by appointment of President Wilson, a member of the Capitol Issues Committee, and as such approved or rejected applications for the issuance of several billions of dollars of new securities. Those services were also rendered entirely without remuneration.

My appointments to public office have been three times confirmed by the United States Senate, practically unanimously each time. Upon the termination of my term as Comptroller of the Currency in 1919 I was reappointed, and my nomination was favorably passed upon by the Senate Banking and Currency Committee, but action by the Senate was prevented by a filibuster in the closing hours of the session. My renomination as comptroller was sent by the President to each succeeding session of the Senate. The Senate Committee on a strictly party vote refused to report favorably, but made no unfavorable report, although I urged them earnestly to make a report either favorable or unfavorable so that the Senate might act on it. This the chairman of the Banking and Currency Committee also refused to do. A member of the Federal Reserve Board who

saw Chairman McLean on the subject informed me immediately after his interview that Senator McLean agreed that I had made a good comptroller and said that he had nothing against me, and that as far as he was personally concerned, he would be willing to report the nomination favorably and have it confirmed, but that he had promised some one outside of the Senate that he would not do so, and was therefore restrained from favorable action; but that if the gentleman to whom he had given his promise would release him he would make, in behalf of his committee, a favorable report.

I think it only proper, gentlemen, that you should know plainly why my nomination was not reported or acted upon in the Senate. I am prepared to submit correspondence to corroborate the statement I have just made if it should be questioned or denied by anyone.

Let me say at the outset that my criticisms are not and never have been directed against the Federal reserve system, but against the administration of that system. My admiration for the system and for the men who created it has been expressed continuously publicly and privately, and I ask to insert in the record the following extracts from my address at Washington in April, and from my more recent address at Augusta, Ga.

Before the Peoples' Reconstruction League at Washington April 15, 1921, I said:

The theory, conception, and purpose of the Federal reserve system are as near perfection as the human mind can produce. I am earnestly sincere in declaring that it was one of the most potent means for saving this country and the world during the war, and that without it hideous disaster would have come upon us. I can recall numerous occasions during these past few fateful years when without the aid of the Federal reserve system ruin would have been inevitable.

But no machinery can operate successfully indefinitely without intelligent supervision and direction.

Regardless of whatever flaws there may be in its administration, our Federal reserve system has, in the past, saved our country from conditions far worse than those which we are now enduring, and I believe that with the reversal of certain policies, and by the adoption of a constructive program the Federal reserve system could now aid enormously in restoring lost confidence and in inspiring hope and a justifiable optimism.

There has, in my opinion, been an indefensible withholding of credit in many of the producing sections of the country when sorely needed. I stated frankly at a meeting of the Federal Reserve Board not many weeks ago that a high ratio of reserve, indicating useless impounding of funds in reserve banks, under existing conditions, when money is so badly wanted for the vital purposes of agricultural and business of all kinds, is a thing for the board to be ashamed of, rather than to boast of.

At Augusta, Ga., I said in a speech, July 14, 1921, before the board of commerce and Georgia Press Association:

The Federal reserve act is the finest tool for commercial protection and construction ever put into the hands of a Government and people. I believe that by awkward and inefficient handling it has been used to injure where it was intended to guard, and to encourage and protect what it should have restrained and prevented.

I will also add that I know of no present or past member of the Federal Reserve Board who has worked harder to defend the Federal reserve law from the attacks of men within and without the board who would impair or mutilate it, than Secretary McAdoo, Secretary Glass, and myself, assisted at times by Mr. Hamlin. I refer here especially to the efforts which were made in 1915 to disestablish four of the 12 banks, and also to the efforts which were made from within the board to reduce the capital of the Federal reserve banks by one-half. I also joined heartily with Secretary

McAdoo in insisting that the Federal reserve system should be started promptly in November, 1914, despite the gloomy prophecies which were made by a certain element within the board who urged delay and predicted that if the banks should open at that time they would have to close within a few months.

I understand, Mr. Chairman and gentlemen, that I have been asked to appear before you because of certain public speeches which I have made recently in which I have discussed the Federal reserve system and its administration. If it is agreeable, and permissible for me to do so, I should like to present for your record three of these public addresses which have dealt with the Federal reserve system, one address being made in Washington, in April, and a recent address in Augusta, Ga., and one—

Representative MILLS (interposing). Just one minute. It is not my understanding, Mr. Chairman, that Mr. Williams has been called before this commission because of any public utterances which he has made. It is my understanding that he is called before this commission by the request of one Member of Congress especially, and various other Members of Congress, because of his knowledge of the general credit situation. It is not my understanding that this commission is particularly interested in the charges which Mr. Williams made against the Federal Reserve Board, and therefore it seems to me that the introduction of speeches in toto, containing a lot of irrelevant matter, should not be permitted in this record.

The CHAIRMAN. The chairman thinks that whatever statements are to be made here should be made in such a way as to be subject to examination and cross-examination, and that if the comptroller desires to bring to the attention of the commission the matters contained in his speeches, the matter should be read into the record, rather than inserted into the record, so that there will be opportunity for cross-examination.

Senator HARRISON. Mr. Chairman, I do not think there is any doubt that one of the reasons why Mr. Williams is before the commission is because of these speeches he has made. When he was called I understand the rule or policy of the commission was that he was to discuss these things that were contained in the resolution adopted by the Senate and House. If these speeches cover that subject matter, it seems to me it would be admissible.

Representative MILLS. They cover a lot of other things.

Senator HARRISON. I do not know what they cover. I have not read them.

Representative MILLS. They do cover a lot of other matters, and if those matters go into the record, it will necessitate a great deal of investigation on the part of this commission.

Representative TEN Eyck. What are the matters that do not pertain to the general conditions of the country?

Representative MILLS. We would have to read the speeches, and that is the reason why I think it is objectionable to put any matter into the record in this wholesale fashion, without any opportunity to know what is going into the record.

Senator HARRISON. You have been more fortunate than I, to be able to read the speeches.

Representative MILLS. I have been able to secure only one.

Senator ROBINSON. As a matter of fact, I think the speeches have all been printed in the Congressional Record.

Mr. WILLIAMS. I do not think all of them have.

Senator ROBINSON. The Augusta, Ga., speech has, and I think one other.

Mr. WILLIAMS. It was only my purpose to introduce three, which it seems to me bear on the subject we are discussing. The speeches are the one delivered at Bangor, Me., a year ago; one delivered in Washington in April; and one delivered at Augusta, Ga., about two weeks ago.

Representative FUNK. Do those speeches pertain to the workings of the Federal Reserve Board?

Mr. WILLIAMS. Very directly.

The CHAIRMAN. The only objection I see to the introduction of these speeches is that the members have not read them, and will not have ample opportunity for cross-examination on what is in them. If there are portions which bear directly on the matters in which the commission is interested, it seems to me it would be more in accordance with proper procedure that those portions of the speeches should be read in, with such additional comment as Mr. Williams wants to make, and with opportunity for cross-examination with respect to those statements which are made.

May I ask you, Mr. Williams, if it is your intention to comment on the material already in those speeches and to amplify it in any way?

Mr. WILLIAMS. I thought we would save time by introducing the speeches, and I will have very little to say about them, as it is my feeling that they would speak for themselves.

The CHAIRMAN. So far as I am concerned, I think the commission is entitled to have full cross-examination with respect to the matter that is presented here for consideration, and I personally, am not willing that matter should go into the record in the form of speeches made at various places in the United States, without the opportunity on the part of the members of the commission, including myself, to examine into the facts upon which the claims are made, or the facts on which the statements made by the witness in those speeches are based.

Representative TEN EYCK. What is the difference whether he reads them, or speaks here, or puts the matter into the record? Each man has a right to read over the matter and cross-examine him, and bring him back for cross-examination, if desired. If the witness feels disposed to put it in here in typewritten form, or printed form, I see no reason why it should not go in, and later on bring him back for cross-examination, if desired. But instead of sitting here and listening to the three speeches, it seems to me they should go in.

Representative MILLS. But there are a lot of things in those speeches that will not go into this record, and that I assume Mr. Williams will not ask to go in. I admit there is a great deal of material in the speeches that should go into the record and is relevant, but there is a great deal that is not relevant. And this commission ought to have an opportunity to pass on what is relevant and what is not relevant.

Representative FUNK. We would consider only that part in each of those speeches that is relevant; if there is other and extraneous matter in the speeches, we will ignore it.

Representative MILLS. But can we ignore it in justice to the people against whom charges are made? And they will say that we have

allowed these speeches to go in, and they will desire an opportunity to refute these statements, and we will be investigating everything except agriculture. I think this commission should have an opportunity to pass on what is going into the record. I have only read one of the speeches, but I should like to read the other two.

Senator HARRISON. Why could we not put them into the record, and then after we have read them we could strike out that part which is not relevant?

Representative MILLS. If you allow that one speech to go in, I should like to examine Mr. Williams on everything that is contained in the Augusta speech, and we will be here for a week, I warn you, and that for 90 per cent of the time we will be talking about and investigating matters that do not pertain to agriculture.

Senator HARRISON. In order to get somewhere with it, Mr. Chairman, I move that the speeches be admitted into the record, with the opportunity of striking out everything that is not pertinent before they are printed in the hearings; and that the witness can then elaborate on the proposition.

The CHAIRMAN. Senator Harrison moves that the speeches be admitted into the record with the understanding that all matter not relevant to the subject under consideration be eliminated before printing.

Representative MILLS. May I ask how we shall proceed to determine whether the matter is relevant? Shall we proceed to consider the speeches and vote upon the various sentences?

Senator ROBINSON. As a substitute for the motion of the Senator from Mississippi, I move that the speeches be admitted into the record.

Senator HARRISON. I withdraw my motion.

The CHAIRMAN. The motion of Senator Harrison is withdrawn, and Senator Robinson moves that the speeches be admitted into the record.

Representative MILLS. Mr. Chairman, I make a point of order that under a rule adopted by this commission the matter of what was relevant to the terms of this inquiry was left to the decision of the Chair upon objection of any member of the commission, and it is obvious that under that rule you can not admit speeches which the Chair himself has not read.

Senator ROBINSON. Mr. Chairman, in reply to the statement of the gentleman from New York, and discussing the point of order, I call attention to the fact that this commission has never precluded itself from admitting anything into the record that the commission regards as admissible in evidence, and that the commission has never given the Chair arbitrary power to exclude or admit testimony which the commission itself desires to admit into the record.

The CHAIRMAN. The Chair is of the impression that the proper practice should be that if objection is made to the admission of testimony the Chair should rule, and if the Chair should rule that it was not admissible in evidence, that his decision is then subject to appeal to the commission and subject to the decision of the commission.

Senator ROBINSON. That is true; that is the practice in all the committees of the Senate and the House.

The CHAIRMAN. If the point of order is made by Representative Mills that the whole matter now submitted for the record is not in

order the Chair will sustain the point of order, and the Chair will now put the question whether—

Representative SUMNERS (interposing). Mr. Chairman, before the question is put I want to suggest for the consideration of the commission that perhaps a good way out of this situation would be for the commission to receive these speeches and have the commission at a later time decide whether or not they shall be incorporated into the record.

Senator ROBINSON. I am willing to do that.

Representative SUMNERS. It seems to me that would obviate the difficulty now confronting us.

Senator ROBINSON. The difficulty about that is that the purpose of Mr. Williams in offering these speeches is to condense his own testimony here, and I take it that the witness himself would like to know what part is going in, to the end that he may offer to read parts that he desires to have considered and which may be excluded by the action of the commission. I do not know what particular matter in the speeches might be objectionable, or whether any part is. The gentleman from New York has stated that parts of them are objectionable to him.

Representative MILLS. They are not objectionable to me, Senator, but they are irrelevant to the matter before this commission.

Senator ROBINSON. That is what I mean.

Representative SUMNERS. My suggestion grew out of this thought, that when Mr. Williams shall have concluded his testimony an examination of the speeches may be made, and it will then be apparent what part of the speeches supplement his testimony. It does not make much difference now one way or the other.

The CHAIRMAN. The difficulty is just this, Mr. Sumners: Of course, if these speeches are admitted to the record, then the various charges made in those speeches become normally the subject of further investigation by the commission, and that means that those who are attacked by Mr. Williams ought to have full and complete opportunity to refute any charges that are made. Representative Mills's idea, I take it, is to restrict the scope of the investigation to the matters that are clearly within the purview of the resolution under which the commission is acting.

The question now seems to be upon the ruling of the Chair that these speeches are not admissible, Shall the Chair be sustained?

Representative TEN EYCK. Mr. Chairman, I feel that here is testimony to be presented in printed form. I, for one, do not want to have it go abroad that we are endeavoring to restrict the investigation as to any particular subject; I think it will hurt the influence of the commission later on. And I feel that these speeches ought to be taken just as the witness presents them, and the commission always has the power to act in any way it wishes to afterwards.

Senator HARRISON. We shall not give any consideration to any part of it, except that part which pertains to the subject matter contemplated in the resolution under which we are acting.

Representative MILLS. But you will have in your record charges against individuals and institutions, and you will have given no opportunity to those individuals and institutions to refute those charges.

Senator HARRISON. I am perfectly willing to strike out of the record any part of those speeches that do not pertain to the subject matter under consideration here.

Representative MILLS. When do we have that opportunity?

Senator HARRISON. After we have read the speeches.

Representative MILLS. Then we shall solemnly sit here and make motions to strike out?

Senator HARRISON. I think we should read the speeches.

Representative TEN EYCK. I think we should read all of the testimony that is presented here, in order to make up an intelligent report.

Representative MILLS. I think we should read the testimony that is pertinent to the matter we are investigating.

The CHAIRMAN. The question is, Shall the decision of the Chair be sustained?

Senator HARRISON. The point of order was made, and as the matter now stands it is a question whether the Chair shall be sustained on his ruling.

The CHAIRMAN. The question is, Shall the Chair be sustained? Those in favor of sustaining the Chair will vote aye and those opposed will vote no.

(Thereupon a viva voce vote was taken.)

The CHAIRMAN. The noes seem to have it.

Representative MILLS. I ask for a roll call.

The CHAIRMAN. The clerk will call the roll.

Thereupon the clerk proceeded to call the roll. Senator Lenroot was not present. Senator Capper voted aye; Senator McNary voted aye; Senator Robinson voted no; Senator Harrison voted no; Chairman Anderson voted aye; Representative Mills voted aye; Representative Funk voted no; Representative Summers voted no; Representative Ten Eyck voted no.

The CHAIRMAN. On this vote there are 4 ayes and 5 noes. The decision of the Chair is not sustained, and the speeches will be admitted to the record, as follows:

TASK TITANIC—STRENGTH SUPREME—FAITH INVINCIBLE.

[Address of John Skelton Williams, Comptroller of the Currency, before the annual convention of the Maine Bankers' Association at Bangor, Me., June 26, 1920.]

Mr. President, members of the Maine Bankers' Association, ladies and gentlemen: My father's elder brother, who was an officer in the Confederate Army, was severely wounded and captured by Union troops in 1865. When he was paroled and sent home, he told his son, then a small boy, "Remember always, my son, if you meet anywhere a member of the Eleventh Maine Regiment, to treat him as you would your brother." He said many times afterward that he had resigned himself to die until he fell into the keeping of that regiment, the men of which were not only brave soldiers, but kindly and chivalric gentlemen, and had saved his life. Therefore gratitude and warm feeling for Maine is a kind of tradition in my family. My kinsman, to whom the charge was given, was talking to me about it a few days ago, when I mentioned that I was coming here; and he said to me, "I've been looking 50 years for opportunity to do something for a Maine man, but all the men from that State I've met were much more likely to do something for me than to need my help. They seem to be mighty well able to take care of themselves." So the family debt to your State and people not only remains unpaid, but is increased heavily by the honor you have done me in asking me here, and by the many delightful kindnesses of which I am the grateful recipient. Your invitation and reception are alike graceful, gracious, and generous, confirming the high and warm estimation for you I already had formed from contact with your honored president of the Maine National Bankers' Association. I knew an association which chose such a leader and representative must share his quality. It is easy to know strangers when you know what kind of a man they admire and honor.

My official contact with Maine banks and bankers, let me add, has illustrated and brought home to me the experience of my cousin in looking for a Maine man to help. They seem to be mighty well able to take care of themselves. Your State has the remarkable record of no failure of a national bank since the system was established 57 years ago. That absolutely clean score is a higher and better eulogy of the character and quality of the men who conduct your banks and of their predecessors than any words of mine could express. It is the conclusive and convincing evidence of sturdy honesty and that finest sagacity that sees straight and true because it fearlessly considers and faces facts and the real meaning of experiences. My observation is that most business troubles come from forming conclusions and purposes and trying to approve them by making hard facts malleable and inflexible logic flexible. I also congratulate you cordially upon the excellent record of your State banks—only one failure being reported in Maine during the past 10 years. In another State some distance off there were 10 State bank failures in one year, in 1919.

Maybe your Puritan ancestry and traditions harden you to the habit of recognition of actualities of right and wrong, and you inherit from New England women, famed the world over for careful housewifery, the instinct for cleanliness. Talking here frankly among ourselves, I may say that perhaps I get from a strain of New England blood in my own veins, that same instinct. It taught the New England women, long before the scientists gave us the germ theory, that thoroughness in housekeeping and house cleaning was an essential virtue, that slovenly and careless habits meant disaster and disgrace. If you could stand where I do officially, you would realize the distressing and dangerous consequences of absence or suppression of that instinct.

It is not quite true in banking that a chain is only so strong as its weakest link. It is true that a speck of foul method or malfeasance in a banking institution especially one apparently successful, spreads through the territory like a spot of rot in an apple, that when one bank begins to forget to throw out garbage and to leave trash in the corners, it becomes a center of infection. To put it in a homely way, one of my functions is to be absolutely sure that the rotten spots are cut out and that there are no dangerous, overlooked dust heaps in the corners, or under the furniture. The housekeeper who does that task in the home may be a bit disturbing at times, but she makes a clean, wholesome, safe house. Compliance by the Maine bankers with the Puritan standards and habits of thought, and obedience to the New England instinct seem to be proved by the condition of impregnable granite solvency befitting the State of much granite. If we were blessed with like conditions everywhere, the division of insolvent banks in the comptroller's bureau would have nothing to do and we would be rid of one office at least.

We are not so far from that now. A few years ago if any man had predicted that with 8,000 national banks in this country, more than a year would pass without a dollar of loss to a depositor among them, he would have been dismissed as a dreamer of idle dreams. Yet, if Maine can show the record of no national bank failure in 57 years, why can not the entire country do it? I am optimist enough to hope that men now here will live to see the time when a bank failure anywhere in the United States will be a thing unthought of. We are told it used to be so in China after the establishment of the system of chopping off with an ax the heads of all officers of a failed bank; but a much better way of prevention is to make sure that the officers have heads and keep their heads about them and their eyes open.

Efficiency and fidelity have already reached so high a point that the record of the national banks for immunity from failure for the 22 months' period from January 1, 1918, to the close of the last fiscal year, October 31, 1919, embracing 10 months of the trials of war and 12 months of the strain of the reconstruction period, was thirty times or 3,000 per cent better than the average for the 40 years prior to the year 1913.

With more careful management, stricter adherence to law, and closer supervision, our national banks have within the past six years reached the highest point of prosperity, and their net earnings in this period have shown a greater increase than during the entire 40 years prior to the year of 1914.

It will also interest you to know that the official reports show that the national banks of the country now have on their books more than 20,000,000 deposit accounts, as compared with something less than 7,700,000 ten years ago, an increase in the decade of over 150 per cent.

The apprehension which was at one time expressed that with the inauguration of the Federal reserve banks there might be a subsidence in our national banks was quite unjustified, for the records show that the annual increase in the paid-up capital of the national banks of the country during the past six years has averaged approximately 100 per cent more than the average annual increase in the 50 years prior to the year 1914.

You will judge—and judge correctly—from the record which I have the honor of placing before you that I am an optimist on American banking. I frankly avow myself to be one, not only on banking, but on everything else with which the American people are concerned. The more I read of our history the more firmly established my optimism becomes. I believe human nature improves, although the betterment is so gradual as to be imperceptible at times, except as we compare the standard methods, customs and conditions of now with those of two or three thousand years ago. But we have the faculties of holding the advancements we make, of learning from our own mistakes, of making disasters into blessings, of impressing our civilization and thought on those who come among us.

Another wave of bank wrecking and smashing in this country ought to be as impossible as another Civil War. Thus far, under the guidance and by the blessings of God, we have ripened through the variations of storm and sunshine without rotting. From the very beginning we have had waves of radical and revolutionary sentiment which have startled the people of successive generations. All have subsided and each has left us some residuum of real good. Wave after wave of immigration has come upon us and assumed threatening proportions, but we have absorbed, assimilated, used and improved all. It is true, in a measure, that the radicalism of to-day is the conservatism of to-morrow, and equally true with us, that the forces which seemed to mean destruction in one generation have become powerful implements of construction in the next—as the old Spanish proverb has it: "God writes straight upon crooked lines."

I think attentive consideration of our progress will prove that what we have regarded as violent radicalism has followed the pushing outward of our frontiers, that the newly come people and the pioneers have tended always to restlessness and revolution. As the churches, the methodical and conservative influence of the business man, and prosperity and stability of thought have reached them, they have steadied to substantial and valuable citizenship.

Not to flatter you here, but to be in accord with the facts and to do plain justice, I may repeat the familiar reference to the vast part New England's morality of thought, reverence for law and usage, political power, financial power, social power have had in this wonderful work. You have had your times of extreme radicalism when you were the outposts of a new civilization brought to a strange country. Witch burning was religion gone mad, the blue laws were morality made frantic by logic, followed to the absurd extreme of disregard of facts of human nature. Shay's rebellion was the conception of liberty and equality perverted to insane uprising. But history proves that our Constitution, which brought order from chaos and made an effective Nation from a loose association of jealous and undirected communities, was given us by the pressure and labor of the business men of the country led by our master business man, George Washington. The fierce struggle over the adoption of that great chart of government was largely between the nonprofessional doers of things and the professional thinkers of thoughts and dreamers of dreams. It is within the bounds of strict truth to say that Boston and Mount Vernon gave the Constitution life after great minds conceived it, and that our Virginia Chief Justice Marshall appointed by your President Adams made it effectual and efficient.

The Puritans who occupied New England, the people of different forms of worship and political training who landed in Virginia and on the southern coasts, both representing all the strata of society, were alike the living examples of the same great principle that the easy way is not the best way always, that for the things in life really worth having, for the ambitions and purposes worthy of manhood and womanhood, price must be paid in danger, in pain and sorrow, in deprivation and labor. They could not create or transmit a perfect race. They did establish here a race in which that principle lives, generation after generation, sometimes apparently dormant, but ever deathless, ready to awake to activity at the touch of occasion or the coming of emergency.

That principle is power, driving power, controlling power, spreading and permeating power, governing sometimes sternly, sometimes softly as the coming of the dew or the spreading of the morning light. It is the foundation which has given us safety after many mistakes and failures on which we have rebuilt after many disasters.

Because I see the evidence of it in every chapter and crisis of our varying history, because always the storms and waves of heresies, lunacies, crimes, and grievous error sweeping over it and beating upon it have left it enduring as your Pilgrim Rock, I am an optimist on America. In Virginia we celebrated 13 years ago the three hundredth anniversary of the landing at Jamestown. This year you celebrate the three hundredth anniversary of the landing at Plymouth. Study our history closely, step by step, from these two arrivals at points on our coast separated by so many hundred miles, of voyagers in many outward aspects so widely different, in the underlying essentials of character, fiber, instinct, and ultimate purpose so splendidly alike, so closely akin.

It was in obedience of an old, long-known law of humanity that you in New England went beyond us in developing wealth, commerce, and productive power. That law is that the greater and more complex the obstacles and difficulties that beset man, the harder he becomes, the faster he learns from necessity to utilize every opportunity to make the best of what he has. Because nature was kinder and conditions were easier, the South lingered in the path of material progress and let supremacy of wealth and population slip from her. You here, in New England and the Middle States, took the scepter and throne of financial control. Your stubbornness and unswerving fealty to the idea of a permanent and mighty Union was, probably, the most powerful factor in maintaining the Union and crushing secession. Your capital was one of the potent factors in rebuilding the South and reestablishing a great section which was dismantled, and to the eyes of the pessimist and those of little faith looked to be ruin—to be more hopeless, than any country of Europe seems now.

The South was taught by the adversities of war as your people before you were taught by the adversities of nature. The South has acquired strength from struggle as you did, as the brave and strong have ever done, and is now your friendly and eager rival in building our common country to unprecedented and unparalleled greatness and power—I hope, too, to such majesty of thought and consecration of purpose as will accomplish vaster work for humanity than any nation has ever dreamed.

That is my hope, my belief. It is not for us to look with contempt or indifference upon any people. Considering where we stand now in the world, we have ample reasons for exultant pride; but with the pride in our power must be overwhelming sense of the responsibility that power fastens upon us which we may not escape, which manhood and honesty and our own welfare forbid us from attempting to avoid.

We have the right to look to the future with confident hope; but as we look backward, our pride and hope must be glorified by deep humility and earnest gratitude to the power that has made and preserved us a Nation. Some residents of South Carolina say the people of that State go stark, raving, crazy regularly about every 33 years. It seems to me sometimes that many other States of the Union have about the same record. There is hardly a crime or a lunacy of which we have not been guilty at one time or another. Maybe we have been saved by the fact that always some of us—some of our powerful men and States—have maintained sanity, so that we did not all go wild at the same time. When Massachusetts, while your State was yet part of it, and most of New England blustered of seceding, along 1812, other States stood steady. Ten years later, when Virginia, Ohio, and Kentucky were threatening defiance of the Government and withdrawal from the Union, New England and the Middle States decided that the Union was good enough to endure.

So we have come through these 300 years since your Pilgrims landed and these hundred and forty-four years since our independence was declared. Radicalism, unrest, revolution have risen on our frontiers as we have spread outward and onward, have caused dismay and affright and subsided. The waves of immigration which have come upon us and aroused gloomy forebodings and developed dark presages of disaster have all settled presently to peace and harmonious unity with the mighty mass of stability and strength. States and sections have threatened dissolution and ruin and lived to give examples and evidences of the sturdiest patriotism, to become immovable forces of conservatism. History tells us all this of the past. The visible facts give us assurances of the future of the Nation.

I can find in the facts no confirmation of the opinion, sometimes expressed, that we have grown rich by squandering our capital, exhausting our natural resources. The truth seems to me to be that we have not yet taken the cream from those resources. We are finding continually new ways to multiply them. We get from coal, from oil, from gas, from cotton seed—which we used to throw away—from animals we kill for food, a thousand new useful products and by-products undreamed of a generation ago. We have in reserve within our own borders 80,000,000 horsepower of water power yet untouched and undeveloped and ready to give us light, heat, and driving force equivalent to 640,000,000 tons of coal a year perpetually, which is more coal annually than we have ever yet produced in any one year. We have learned how to take from air, from the sea, from the unconsidered waste or desert lakes, the means of keeping our soil perpetually replenished.

And how are we prepared to provide for utilizing all this for ourselves and doing the part becoming the strongest of the nations in the rebuilding of nations, the readjustment of the world, the hastening of a time of ordered peace and more progress, safety and happiness for humanity than the world ever has seen?

Let us turn now for a while to the figures which tell us something of our present financial position. Looking back over certain important features and aspects of our banking record we may perhaps read more clearly the prospects for the immediate or near future of money conditions and the banking outlook upon which all other business interests so greatly depend.

Until the Spanish-American War we were regarded by the older countries of Europe with rather supercilious disdain, and more or less as an experiment in government. Perhaps all the powers but Germany began to realize after that event, and the rapidity with which the climax came, that we were to be reckoned with. Now we are conceded by all to be the mightiest, strongest, and richest nation of the globe—the balance wheel of the world.

Our industrial and financial growth has broken all records in the history of progress. Hardly 20 years have passed since England exceeded us and led the world in the production of steel, iron, and coal—the foundation stones of industrial wealth. This country is now mining yearly more coal than was produced in the whole world as late as 20 or 25 years ago, and our present output already is more than twice that of Great Britain—and with the water power and the limitless oil shales of the West to reinforce and conserve our stores. In 1918 our furnaces turned out nearly twice as much pig iron as all the rest of the world produced in 1897, and our production of steel in 1918 was three times as great as that of all other countries of the world combined just 20 years before.

In 1919 the foreign commerce of the United States amounted to \$12,000,000,000, exceeding by more than \$5,000,000,000 the total foreign commerce at the time of the outbreak of the European war, in 1914, of Great Britain, until that time the greatest commercial nation on the globe, while our exports of merchandise last year were two and a half times as great as the maximum exports ever reported by Great Britain at any time in her commercial history.

Our growth in banking power has fully kept pace with our industrial and commercial expansion, and at this time it is estimated at \$50,000,000,000, or more than three times the total banking power of the whole world in 1890. It is amazing but nevertheless true that the banking power of the United States has grown more in these past seven years than in the entire century and a quarter which elapsed from the adoption of the Constitution in 1789 down to the year 1913.

We have been swiftly transformed from a debtor nation, owing to the rest of the world, as we did in 1914, some four or five billion dollars, represented by securities and debit balances, into the world's greatest creditor, holding the demand obligations of foreign Governments for more than \$10,000,000,000, in addition to several billion dollars due to our merchants, bankers, and investors by the banks and business men of the most solvent nations of Europe and South America.

The total resources of the national banks of issue of the leading countries of the world—including the Bank of England, the Bank of France, the Bank of Italy, also the great national banks of Spain, of the Netherlands, Belgium, Norway, Sweden, Denmark, Switzerland, Rumania, the Imperial Bank of Japan, the Reichsbank of Germany, and the Austro-Hungarian Bank—now aggregate, at the normal rates of exchange, approximately \$51,000,000,000; but at the exchange rates which prevail at this time, the combined resources of all of the national banks of these 14 leading countries of Europe and Asia are worth in American money less than \$12,000,000,000, which is about one-half of the resources of the national banks of the United States alone, exclusive of the resources of our Federal reserve banks, about \$6,000,000,000, and of our State banks and trust companies whose resources amount to over \$26,000,000,000 additional. This means that the assets of these foreign banks show a depreciation in value, as compared with the normal exchange rate of nearly \$40,000,000,000.

While taking the leading part in the commercial, the banking, and industrial affairs of the world, our people, rich and poor alike, have also distinguished themselves for high altruism, and have now the deep satisfaction of having given away for the relief of human misery and human suffering—and in aid of our own and our allies' fighting men in these several soul-stirring years through which we have just passed—sums vaster than any people have ever before raised and contributed in so short a time for the relief of mankind. During these past three years we have poured out to the hungry, the sick, and destitute abroad through the American Red Cross and one or two other like agencies alone nearly as much as the whole of the resources of the great Bank of England a little while before the beginning of the World War in 1914.

The tremendous impetus which was given to industrial development here by the European war and the insatiable demand arising from the absolute need for American products of all kinds, food, equipment, and munitions, regardless of cost, brought about a price inflation and expansion, resulting in unprecedented increase in wages and profits which sound economists believed could not continue without leading ultimately to explosion and collapse. Through many months past the best thought of statesmen, economists, and financiers has been directed toward the problem of replacing our business and industrial interests on a solid and enduring basis. The deflation and subsidence in prices are proceeding by orderly and satisfactory steps and methods. If we will continue to act on wise counsel and keep clear heads and steady hands, we can and will avert a panic or crisis like those which have in the

past followed periods of wild prosperity and excessive business activity. The fact that deflation is gradual, marked by occasional pauses, is the best possible evidence that it will proceed safely. A process of change involving many billions of dollars, a hundred millions of our own people, and, less directly, all the nations of the earth must be smooth, slow, and steady to avert a crash.

We need the prospective of history to enable our people to realize fully their splendid financial achievements of the past six years. It was the United States of America which not only provided all of the money needed to mobilize, equip, and feed its own Army and Navy of 4,000,000 men, of whom 2,000,000 were fighting 3,000 miles from home, but this country also, by its financial aid to England, France, and Italy prevented the defeat of the Allies. They would have been unable to continue the war but for American money, so liberally and promptly put at their service. I remember vividly the earnest statement to me by the then British ambassador, Spring-Rice, soon after we entered the war, that if our country should not continue its financial assistance and maintain in the money markets of the world the price of sterling exchange, the Allies would be obliged to surrender. He warningly added, "It will be our time to go first, but yours next."

In the three years from our entrance into the war this country raised for itself and its allies thirty-seven and one-half billion dollars, about one-third by taxation and two-thirds by the sale of bonds and short-time notes. Present indications are that within the first two years from the signing of the armistice, this Government will have reduced its debt from the highest point by two, if not three, billion dollars. In other words, we will, in two years have paid off an amount almost equal to the total debt of the United States at the close of the Civil War, then at the highest point since the formation of our Government.

The total amount of Liberty bonds and Victory notes placed by this country was about twenty-one and one-half billion dollars, the balance of the Government debt being made up of short-term certificates of indebtedness. The records of our national banks show that at the beginning of May, 1920, the amount of Liberty bonds and Victory notes owned by them, plus the amount upon which they were making loans, was only \$1,940,000,000.

If we assume that the State banks and trust companies of the country hold an equal amount of these securities for investment and as collateral, it would appear that the aggregate amount of Liberty bonds and Victory notes now owned by investors upon which no money is being borrowed in the banks, reaches the huge total of \$16,000,000,000. This vast sum, therefore, represents savings of the American people which they have invested in Government securities during these past three years exclusive of the enormous investments which they have made in the same period in other securities and enterprises.

I believe that the banks of our country, both national and State, are now fully prepared to meet any strain or shrinkage in business. The Federal reserve system, without which it would have been impossible for this country to have financed itself or the Allies, and without which the war would have been lost to us—involving miseries which baffle imagination and would have been protracted through generations—is operating smoothly and most efficiently, with the gathered and accumulated experience of the past five and one-half years.

I am happy to be able to say to you that I see no clouds upon the horizon to justify fears of a financial cyclone, but we can not count upon enjoying fair weather forever. There will necessarily be some stiff breezes, perhaps some stormy weather, but none that we can not safely endure by adjusting our sails and holding firmly the helm. He is a foolish captain who fails to reef when weather signals and barometer tell of squalls coming.

Much has been said in the newspapers recently of alleged scarcity of money and credit, and grave fears and doubts have been expressed regarding the ability of the banks of the country to furnish the funds which will be required in the next few months for the movement of the crops. The popular idea is that the money needed for crop movement may be obtained only by loans and accommodations from banks, national and State. I am not in a position to give you full figures as to State banks and trust companies, but I have figures in regard to the national banks, which I think throw much light upon the present situation.

The loans and discounts of the national banks of the country at the time of the last reports from all banks, just a year ago, amounted to something over \$11,000,000,000 as compared with about \$7,000,000,000 of loans and discounts in State commercial banks and private banks; \$3,000,000,000 of loans and discounts in mutual and stock savings banks, and \$4,000,000,000 of loans and discounts in the trust companies. As the loans and discounts in the national banks therefore represent so large a proportion of the total, I think we may be justified in assuming that the figures as to the national banks are typical of general banking conditions.

An analysis recently made of the loans and discounts of all the national banks of the country, as reported at the time of each call for the past 50 years, brings out the difference shown between the third call for statements of condition, usually in June, and the fourth call, usually in September or October. This interval is the active period of crop moving, supposed to be the critical time of the year. For the past 50 years the loans and discounts of the national banks have shown between the summer and autumn calls the following average annual percentages of increase for each of the five decades:

	Per cent.
From 1870 to 1880, average yearly increase in loans and discounts.....	1.5
From 1880 to 1890, average yearly increase in loans and discounts.....	2.3
From 1890 to 1900, average yearly increase in loans and discounts.....	.4
From 1900 to 1910, average yearly increase in loans and discounts.....	2.2
From 1910 to 1920, average yearly increase in loans and discounts.....	1.5

It is also worthy of note that in years of financial panic or special money pressure the loans and discounts of the national banks instead of increasing in this particular period of the year have usually shown an actual contraction. For example, in the year 1884, between June 20 and September 30, there was a reduction in loans and discounts in the national banks of 1.9 per cent. In the panic year 1893, between July 12 and October 3, there was a shrinkage of 8.8 per cent. In 1896, between July 14 and October 6, there was a decline in loans and discounts of 4 per cent. In 1914 between June 30 and September 12, there was a shrinkage of 0.5 per cent, and in 1918, the last year of the war, between June 29 and September 1, there was a shrinkage of 0.4 per cent.

The present indications, unfortunately, are that some of the principal crops of the current year are likely to be less abundant than in 1919, and as prices are also showing a declining tendency, the amount of money necessary to move the crops this year should be proportionately reduced.

The primary function of the reserve banks as originally designed was to provide an agency which could furnish credit and currency in times of financial emergency, or in periods of the year when additional funds were necessary for the movement of crops or to meet the legitimate demands of expanding business. Until the creation of the Federal reserve system, and until Secretary McAdoo, just before this system was inaugurated, deposited Government money in the banks to help move the crops, the only means the banks had for providing funds for special emergencies was by borrowing through loans and rediscounts of other banks which might happen to be better supplied, or by drawing upon their reserves, principally carried with the national banks in the reserve cities. For some years prior to 1914 there had been no opportunity for increasing the circulating currency by issuing more bank notes because of the scarcity of the old issues of Government bonds, nearly all of which had been retired, except those which were already deposited as security for bank circulation.

Let us now consider the extent to which the banks, on their part, have met the demands upon them by borrowing money from other banks. The records of the comptroller's office show that the total borrowings of all the national banks of the country for the 50-year period prior to 1913, both on notes rediscounted and on bills payable, had never exceeded at the time of any call for reports of condition \$100,000,000; the maximum of 100 millions being reached at the time of the fifth call in 1907 for reports of condition, after the panic in October of that year. By November, 1908, the total borrowings of all the national banks on notes rediscounted and bills payable had been reduced to 39 millions. In the summer of 1913 the aggregate of notes rediscounted and bills payable again went up, this time to \$108,000,000 at the time of the August call. In 1914, after the outbreak of the European war, the total amount of bills payable and rediscounts of all national banks reached \$162,000,000—the highest that had ever been recorded prior to the inauguration of the Federal reserve system.

During the year 1915, after the opening of the Federal reserve banks, the maximum borrowing of all the national banks was 105 millions, at the time of the September call. In 1916 the highest borrowing of the national banks on notes rediscounted and bills payable was \$91,000,000, in September of that year.

The records show and it is worthy of note, that the national banks of the country did not avail themselves of the discount facilities of the Federal reserve system to any material extent until the first Liberty loan was placed in the summer of 1917—two and one-half years after the opening of these banks.

In the year 1917 the first and second Liberty loans were placed, reaching a total of nearly \$6,000,000,000, but the maximum borrowings by national banks at the time of calls that year, including all advances from the Federal reserve banks were reported, in December, at \$741,000,000. In 1918 the third and fourth Liberty loans aggregating over \$11,000,000,000 were floated, and the borrowings from the Federal reserve and other banks at the time of the December call, in 1918, had in-

creased to \$1,380,000,000. The Victory notes for \$4,500,000,000 were placed in 1919, and the borrowings of the national banks from the Federal reserve and other banks advanced from 1,380 million in December, 1918, to the then maximum of \$1,911,000 in December, 1919, of which the far greater part was borrowed on notes secured by the war bonds.

It is also distinctly reassuring to contemplate how comparatively small has been the expansion, which the placing of these huge bond issues has involved, in the loans and discounts made to their customers by the national banks during the period in which the Government was thus marketing and collecting the proceeds of \$21,500,000,000 of Liberty bonds and Victory notes, and several billion dollars additional of short term certificates of indebtedness. Although these vast transactions were carried through in a time of extraordinary business activity, yet the increase in the loans and discounts of the national banks, exclusive of rediscounts, in the three years between May 1, 1917, and May 4, 1920, was only about \$3,500,000,000—less than 15 per cent of all Government securities placed in this period.

At the present time the total amount of money which all the national banks of the country are borrowing on notes rediscounted and bills payable, from the Federal reserve banks, and from all other banks, is only about \$2,000,000,000. As these national banks now, themselves, own only about \$1,000,000,000 of Liberty bonds and Victory notes and are holding, as stated, approximately one billion additional as collateral, it is apparent that, if by any means the Government should take over or redeem the \$2,000,000,000 of Liberty bonds and Victory notes owned and held as collateral by national banks, these banks would be able to discharge practically all their loans obtained from the Federal reserve banks and from all other banks. These figures are indicative of the strength of the banks at this time, but there is neither need nor probability that the Government will redeem its bonds in the immediate future save by purchases in the open market, and through the operations of the sinking fund, as provided by law.

The striking feature of the situation is not that the banks of the country should have become as much indebted to the Federal reserve banks as they are, but that they should have been able to handle these gigantic transactions during these past three years so easily and so comfortably, with so little inflation, and with such comparatively small borrowings, when we consider the unprecedented size of the bond issues which were sold and collected for through our banks, both National and State, from 20,000,000 buyers.

It will probably be surprising, and certainly reassuring, to the public to know that at the time of the last call for statements of condition, the 4th of last month, 4,596 national banks, out of a total of 8,000, reported that they were not borrowing one dollar from their Federal reserve banks either through notes rediscounted or on bills payable; the total number so borrowing being less than 42½ per cent of the whole.

The Government financing is now practically completed and the Nation is reducing instead of increasing the public debt. With the declining tendency in the prices of commodities, now visible in many directions, with the quieter tendency in many classes of business, there are cumulative reasons for expecting a gradual and healthy reduction of the indebtedness now due by the member banks of the country to the Federal reserve banks and an early return to more normal financial and industrial conditions.

In view of the apprehension which has been expressed as to a possible shrinkage in bank deposits between the summer and autumn calls, incident to the harvesting of the crops, it may be interesting to you to learn first, that in the amount of deposits held by national banks for other national banks in the past half century there has been an increase between the times of the summer and autumn calls for reports of condition almost as frequently as there has been shown a shrinkage. Increases are reported in 22 years and reductions in 23. Secondly, the individual deposits in the national banks of the country for the past 50 years have far more frequently increased than they have declined during the period while banking resources have been drawn upon to furnish the crop-moving fund. In 30 years of this period the individual deposits of national banks actually increased, and in only 20 years of this time did they show a decline.

For reasons which I have endeavored to explain to you here in some detail, the probabilities are that the demands upon the banks for funds for crop moving purposes this year will be less than last year and less than for several years past. But if this anticipation should not be fulfilled, and if the member banks should make larger calls than ever upon the Federal reserve banks, these will be abundantly able to meet any legitimate demand for which human foresight may provide.

I have shown you that the largest amount the national banks of the country ever borrowed in any one year through rediscounts and bills payable prior to 1913 was

\$100,000,000. Without reducing their reserve limits which, under the law, the Federal Reserve Board has the right in its discretion to waive, the Federal reserve banks showed last week an unused lending power of more than \$700,000,000, and by reducing the gold reserve requirements by only 10 per cent on deposits and on notes this additional lending power could be increased to two and a half billion dollars which, added to the \$2,000,000,000 already loaned (mostly on war issues) would bring the total lending power of the reserve banks up to about four and a half billion dollars, or 45 times as much as the maximum amount which the national banks of the country (comprising a vast majority of the membership of the reserve system) ever borrowed at any one time prior to 1913, as disclosed by the official records, and far more than they are likely to avail of for a great many years to come.

The abounding prosperity and strong condition of the business houses of this country generally are vividly illustrated by the official record of yearly commercial failures as compiled by the mercantile agencies. These reports tell us that the number of business failures in the United States for last year, 1919, was actually the smallest in about 40 years, or since the year 1881, despite the fact that the total number of business houses has more than doubled in that time.

Furthermore, the percentage of business failures to the total number of business houses in the country for the year 1919, following in the wake of the greatest war in all history, was the lowest reported for any year since the Civil War, and the total liabilities of the failed business concerns in 1919 were also the lowest, with one exception, of any year since 1882. These figures are encouraging and are reflected in the reduced losses accruing to the banks, and in the unprecedented prosperity of these banks—for the records prove that our national banks have enjoyed a far greater increase in net earnings in the past six years than in the entire 40 preceding years.

In conclusion, I have the pleasure of saying to you that so far as can be foreseen now with known conditions, from the actual figures of the present and study of the past, the banks of the United States are at this time amply provided to meet any imaginable emergency. Not only the cash and other resources in sight, but the character and methods of our banking community and fraternity give me confidence. I think our bankers are not only sure of the machinery of the system, but surer than ever before of their own institutions, of their associates and connections, near and far, and of the country. I have something of the feeling of that good New England housewife, of whom I spoke a while ago, and after whom you seem to have patterned so faithfully and loyally, when she could look about her satisfied that her house was in order.

Gentlemen, let me thank you again for the honor you did me in asking me here; for the pleasure you have given me with the opportunity to be among you; for the patience with which you have heard me. I confess to being a proud enthusiast on our American banks; and when I begin to think of them, write of them, or speak of them, it is a little difficult for me to find a stopping place. I am ready to stop now in a moment. I do congratulate you Maine men particularly, on the great record of your own banks, both State and National. Then I congratulate you as citizens of the Union, on our general financial condition, and on the magnificent showing of our National and Federal reserve banking systems especially. Our country, through many tribulations and dangers, has come from poverty, extreme weakness and obscurity to wealth, power, and the foremost place among the nations, to strength and power and greatness beyond the conception of the most ardent dreamer who landed on these shores three centuries ago. "Thank God and take courage," they would have said. It is for us, too, to thank God, to enlarge our courage, to fix our faith in America and the American people, to feel we are on granite foundations, to realize that we have the huge strength to do the huge tasks before us and to set our faces to them and go right on.

Address of John Skelton Williams, formerly First Assistant Secretary of the Treasury, Comptroller of the Currency, and ex officio member of the Federal Reserve Board, and Director of Finance and Purchases of the United States Railroad Administration, before the convention of the People's Reconstruction League, at Washington, D. C., Apr. 15, 1921.]

"WHAT CONGRESS SHOULD DO."

Mr. Chairman and members of the People's Reconstruction League, it is no mere form of words when I tell you that I thank you for inviting me here to speak. I am glad of the opportunity, because eight years of experience and observation behind the scenes in the financial department of our Government have taught me much and formed for me thoughts and opinions which, if time allowed—fortunately for you it does not—I could pour out here before you through many hours. I venture to hope

that some of these thoughts, results of what may be called expert training, may be useful, at least so far as to suggest further thought among my fellow-citizens.

I am asked to speak on "What Congress Should Do." There is a Federal law which requires the Comptroller of the Currency to include in his annual reports to the Congress such recommendations as he may think desirable for the improvement of our banking and currency system, or to increase the safety of the depositors and holders of national bank notes and other creditors of our national banks: and in obedience to that law I have had the honor of submitting, in my annual reports as comptroller, for the past seven years, many such recommendations, some of which have been enacted into law and others are still waiting.

I shall begin my address by adding in advance one declaration of what I think Congress should not do. As I am out of office and desire to stay out, you will acquit me of selfish motive when I express my strong belief that Congress should not abolish the office of the Comptroller of the Currency, as it is asked to do. Having held that post from February, 1914, to March, 1921, I am peculiarly well qualified to judge of its importance in our banking system, on the integrity and ability of which our stability and general prosperity so greatly depend. But more of that presently.

SECRETARY OF AGRICULTURE SHOULD BE EX OFFICIO MEMBER OF FEDERAL RESERVE BOARD.

One of the things that in my opinion Congress should do is to make the Secretary of Agriculture, ex officio, a member of the Federal Reserve Board, and I would give him authority to deputize an Assistant Secretary of Agriculture to represent him at meetings of the board which he may be unable to attend. This I believe to be desirable, even though it involve a reduction in the number of appointed members. The Hon. E. T. Meredith, of Iowa, was one of the ablest and most useful directors of the Federal Reserve Bank of Chicago until he resigned to enter President Wilson's Cabinet as Secretary of Agriculture. If he had been a member, ex officio, of the Federal Reserve Board during the past critical year, while he was Secretary of Agriculture, his services on the board would have been invaluable. The Secretary of Agriculture is, or should be, a man who knows closely and thoroughly the needs and condition of the farmers, the original producers, the real mainsprings of our activities and sources of our strength. We are at a moment of reaction—reaction in this case, in the right direction. "Back to the farm" has meaning far wider than the return of individuals from the cities to the furrows and fields. It means that the strongest and most earnest intellect of the country is being directed to the farm, and the farmer, and their requirements, and has been aroused to the truth that unless there is fair opportunity and reward for the investment, intelligence, and labor of the man and woman on the farm, the halting of our progress and the collapse of our power are inevitable.

The agricultural interests—quiet, generally steady, inarticulate, scattered and unorganized and sometimes wasting strength, and losing cause by misdirected outbreak and protest vainly vehement—has not had the power, or the consideration to which its importance entitles it. That unhappy fact is being realized now as never before in three-fourths of a century. We see the curious and apparently contradictory condition that now when the city and town population, the first time in our history, outnumber the country population, the welfare of the farmer is studied more zealously and its promotion sought more diligently than when the farmers outnumbered the urban residents five to one. The cities have been taught by strokes of adversity that they can not fatten and thrive while there is starvation and poverty on the farms. Therefore the presence of a direct representative of the farming people in the supreme council of the nation's financial management would be in exact accord with the trend of present-day political philosophy and economic doctrine.

MEN ENTITLED TO MAIN CREDIT FOR FEDERAL RESERVE ACT, WHICH IS DESCRIBED AS "THE GREATEST PRODUCT OF FINANCIAL AND POLITICAL GENIUS THE WORLD HAS KNOWN."

If a real farmer or a man in real sympathy with farmers, and having practical knowledge of their situation, had been on the Federal Reserve Board, perhaps his influence and representations might have saved that body from some of the errors into which, in my opinion, it has been led, or has strayed. As you know, the Reserve Board forms and directs the policies and management of the Federal reserve system. That system, I believe, to be the greatest product of financial and political genius the world has known, and the men who had the largest part in its creation and development were: President Woodrow Wilson, William G. McAdoo, Secretary of the Treasury; Carter Glass, later Secretary of the Treasury; and at the time of the passage of

the Federal reserve act chairman of the Banking and Currency Committee of the House of Representatives; and Senator Robert L. Owen, then chairman of the Banking and Currency Committee of the United States Senate.

WITHOUT FEDERAL RESERVE ACT THE WAR WOULD HAVE BEEN LOST.

The theory, conception, and purpose of the Federal reserve system are as near perfection as the human mind can produce. I am earnestly sincere in declaring that it was one of the most potent means for saving this country and the world during the war, and that without it hideous disaster would have come upon us. I can recall numerous occasions during these past few fateful years when without the aid of the Federal reserve system ruin would have been inevitable.

But no machinery can operate successfully indefinitely without intelligent supervision and direction. The finest watch must be examined, corrected, oiled, and cleaned sometimes. I think one mistake of the Federal Reserve Board, of which I, officially, was a member, was in leaving the Federal reserve machine to operate to too great an extent automatically, regardless of special and exceptional circumstances and changing conditions. By that mistake farming communities and farmers and business men and others in all parts of the country have suffered, in my opinion. I am jealous as any conservative business man must be of intrusive interference by Congress, or any political power, in commercial or financial affairs. Yet it seems to me some wrongs have been done and some unnecessary hardships inflicted by lack of regulation of the machinery, such as Congress could require and enforce, and by some changes make certain.

HOW MONEY RATES IN NEW YORK CITY ARE ARTIFICIALLY MADE AND MAINTAINED.

A primary purpose of the reserve system is to provide for the ebb, flow, and distribution of the country's supply of money to meet the legitimate needs of the people and of commerce. Generally, that purpose has been fulfilled admirably. Sometimes it has been impeded or prevented and troubles have ensued in consequence. For instance, when abnormally high rates for money for speculative or other purposes have been made and maintained in New York, the natural result has been to draw money from sections where it was needed for productive and constructive work to where it could earn extraordinary profits from the necessities of speculators and promoters. The farmer, merchant, or manufacturer in the West and South, and also elsewhere found money scarce at the 6 per cent, 7 per cent, and 8 per cent rates he could afford to pay, because New York was offering from 10 per cent to 30 per cent. This tends to defeat the wise and beneficent purpose of the system.

I used my official powers to investigate this subject as thoroughly as possible and made some astounding discoveries. The daily rates for call money, meaning money loaned on stock and bond collateral, to be called at will, are fixed daily by from five to eight members of the New York Stock Exchange, men also actively concerned in the purchase and sale of stocks, meeting informally at the exchange or consulting over telephones. They are responsible to nobody, under no direction. Their casual, hasty decisions not only affect the prices of money and stocks there—frequently meaning disaster or gain to hundreds of individuals and interests—but tend strongly to determine the movement and prices of money and incidentally, to a greater or less extent, of wheat and other commodities—for more than a hundred million people.

Perhaps it may be difficult to prevent this fixing of the daily money rate, and adoption of it, by all the banks in the financial capital of the country. The State of New York makes the sky the limit for interest on demand collateral loans for \$5,000 or more. I respectfully suggest to the Congress that these burdensome and sometimes destructive rates could be largely, if not entirely, prevented by an amendment to the Federal reserve act which should provide that no Federal reserve bank shall loan money to a member bank which charges its customers as interest on any of its loans a rate in excess of what Congress may regard as a reasonable maximum rate. Many of the most successful banks in the country—both large and small—adhere closely to the interest rates fixed by law, and prosper while doing so. It has been suggested that the passage of such an amendment would result in the withdrawal from the Federal reserve system of many State banks and trust companies, which would refuse to accept such restrictions, but my answer is that I believe the system would be stronger and better off without those banks which think they can not exist or prosper without exacting usurious and unconscionable rates for money. I also believe that even without such a law, active, vigilant, intelligent administration of the Federal reserve system machinery could prevent or limit such conditions and methods, which so greatly impair its usefulness and diminish its value.

"BUREAUMANIA" AND THE "CIRCUMLOCUTION OFFICE."

Talking on this subject I shall be forced to speak bluntly. I do not know that it is necessary for me to follow the recent example of another Comptroller of the Currency to regale and entertain you with colloquial conversations quite as vivid and picturesque as those he employed so brilliantly, so successfully. But it is proper for a man talking to, and for, men who dig their livings from the ground to call a spade a spade when necessary.

I believe Congress should so amend the Federal reserve act as to make it not only fool proof and crook proof, but immune from the disease which I coin a word to describe as "bureaumania." That is the mania so prevalent here in Washington, and at every other seat of Government, for trusting the official machinery to work automatically, insisting on inflexible routine, refusing to recognize or imagine that the shifting and changing of conditions may require departure from established rules and precedents. It is not a new trouble. Dickens' description of the "Circumlocution office" in London, written 70 years ago, reads like a photograph of one of our departments. Every civilized Government has been and is hampered in every emergency by "bureaumania." Victims of it lose initiative, human sympathy, and the capacity for human interest in any event or person. Their thought is compressed in fixed uniform molds, each exactly like all the others. Emotions are diluted until hardly a trace of them remains, and faculties are congealed and atrophied.

BANKS CAN NOT BE EFFICIENTLY SUPERVISED BY A "DEBATING SOCIETY."

Early in my tenure of office I learned that the national banking system can not be properly watched, regulated, and governed from Washington merely by traditions, fixed rules, form letters, and "respectfully referreds." Eight thousand banks represent eight thousand, more or less, different personalities and conditions to be dealt with. With some of them the blunders of honest men must be corrected and ill consequences averted with generous and gentle consideration. With others arrogant defiance and disregard of the law, crookedness, or culpable carelessness must be met by stern rebuke, and, when necessary, prosecution. In my judgment attempt to operate this vast complex system either automatically or by a debating society of seven benevolent gentlemen, through usual bureaucratic methods, and without the direction of a vigorous, thinking, understanding personality familiar with facts and problems outside official information, would be injurious certainly, disastrous almost inevitably.

That this evil of "bureaumania" that would threaten our national banking system has already impaired the value of the Federal reserve system I believe strongly—my belief based on practical experience and the results of actual experiment. Using my privilege as an ex officio member, one of a total of seven members, of the Federal Reserve Board, I have filed protests as strong as I could make them against failure to use the board's power to correct or modify the wrongs and evils which I thought I could see very distinctly. I regret to say that my remonstrances and appeals seemed to create in the majority of my fellow members the mood of an old gentleman aroused rudely from a nap. They were more querulous than interested, seemed to be more intent on constructing a snarling retort than on considering whether there was need of reform or correction. They had started the machine to work, strictly in accord with the law, and apparently considered their duty to be to let it work along, regardless of what havoc or injustice it might cause or what unforeseen conditions might demand some tightening up here or loosening there, slowing down, or oiling.

EARNEST PROTESTS AGAINST BOARD'S FAILURE TO USE ITS POWERS TO CORRECT PRESSING EVILS PASS UNHEEDED.

The ensuing correspondence was voluminous—more than 100 pages of typewritten matter. They seemed to me to dodge and evade the main issue by making complaint that the Comptroller of the Currency's examinations of banks were too frequent or too infrequent, too rigid or too lax. As to that they were promptly referred to the official records for complete vindication of the methods and policies of the comptroller's bureau under my administration. The official figures showed them that in the matter of immunity from failure, in growth, in earnings, and in service rendered, the record under the last administration was by far the best in the history of the national banking system. For example, the percentage of losses to depositors to total deposits, last year was the smallest in about 40 years, except only the fiscal year 1919, when there was not one dollar's loss to any depositor in any national bank in the United States, although the number of depositors was approximately 20,000,000 and the sum total of their deposits about \$16,000,000,000.

It is obvious that the question of the examination of national banks was quite irrelevant to the grave matters of which I complained in my correspondence with the board, such as (a) the perilous swiftness of the process of deflation; (b) the artificial diversion to New York of hundreds of millions of dollars, sorely needed elsewhere; (c) the huge sums advanced to certain banks for use in promotions and speculations, and (d) the excessive and burdensome interest rates imposed upon so many banks in the West and South. The rate charged at one time by a Federal reserve bank, under regulations approved by the board, in one exceptional case to a small bank in a farming section amounted to more than 80 per cent per annum.

These things seemed wrong to me from my standpoint, as an ordinary working American business man, temporarily intrusted with certain official powers and duties. The majority of the board apparently was very much more concerned over my duties than their own, and judging from a recent letter from the board it saturated itself with some kind of a vague suspicion that I was trying to "establish a record" at its expense—as if I was a candidate for something. It did not seem to awake to the possibility that I might be very seriously intent upon doing something to revive and help the business of the country and make our recovery as quick and painless and comfortable as possible. In this same letter I am informed, to my great astonishment, that the board does not perceive or comprehend the constructive suggestions I had so consistently urged, but it complains that I have attacked or criticized the board of which they appear to be acutely sensitive. If that were true, it seems to me that the criticism should have caused thought rather than resentment, amendment if that were found to be justified, or definite contradictions if the facts and figures would sustain it. The truth is, I have offered a series of suggestions and recommendations, results of study and of conditions, some for the board itself, others to be put before Congress and for which the board's approval was urged.

NEW YORK RESERVE BANK LENDS AT 6 PER CENT TO MEMBER BANK, CHARGING CUSTOMER AT SAME TIME EQUIVALENT OF 200 PER CENT PER ANNUM ON LARGE LOAN FOR SIX MONTHS.

I am giving this outline of inside events to support my contention that Congress should take action to provide against negligence, lack of ability, or stubborn disregard of the needs and rights of the public by the board or any future board. As an illustration, I knew that certain New York banks were borrowing from the Federal reserve bank, which means from the people of the United States, millions of dollars at 5 per cent to 6 per cent, and lending it at from 10 per cent to 50 per cent, and sometimes higher still. In fact, among others, I gave them one instance, an extreme case, where a certain large bank last summer borrowed money from its reserve bank at about 6 per cent per annum, and about the same time loaned a customer, the head of a large manufacturing enterprise, \$1,000,000, well secured by collateral, of which loan about \$300,000 was passed on to correspondent banks (without liability to the selling bank) at about 12 per cent per annum, and \$500,000 of the loan retained on a basis of interest and commission which yielded the lending bank about 200 per cent per annum, on its net outlay, the whole loan being paid in full in six months. When that 200 per cent transaction was referred to in a meeting of the reserve board, one member, to my amazement, was disposed to condone or defend it on the ground, as he expressed it, that "the banks all charge such rates, more or less." I resented his imputation upon the banks of the country, and I am happy to say that his opinion can not be sustained, for the vast majority of our banks, of which I am informed, conduct their business on a very different plane, and would not be guilty of exacting such extortionate rates of interest as I have here referred to, which might well bring the blush of shame to Shylock's cheeks.

BOARD CAN NOT ESCAPE NATURAL CONSEQUENCES OF POOR ADMINISTRATION OF A GREAT SYSTEM.

In a letter to the board, February 19, 1921, in commenting upon the exaction of the 200 per cent per annum interest from a customer by a member bank to which the reserve bank was at the same time lending at about 6 per cent, I said:

"Is not this incident another strong argument in favor of the recommendation which I have recently made to Congress that banks obtaining accommodations from reserve banks should be prevented from charging their customers more than a reasonable and moderate advance above the rates they pay to the reserve banks?"

* * * * *

"Every business man knows that the inevitable, logical results of such unscrupulous extortion as these here brought to your notice is ruin for the victim of them. The crash which the banks exacting such tribute—with the unconscious assistance of the

Federal reserve bank—created to conserve and protect our commerce and finances—did so much to precipitate, might have been far-reaching. It might have thrown thousands of employees out of work, forcing distress on their families and destroying their power to buy from our merchants and manufacturers and pay their rent to real estate owners. It would have added very seriously to the dangers to our welfare already existing.

“The Reserve Board can not with impunity condone or sit silently by while its funds are being used for wrecking purposes. It may make itself, it seems to me, particeps criminis, accessory before and after the fact.”

Furthermore, the 200 per cent transaction referred to above was a time loan, and in direct violation of the usury laws, even in the State of New York. But the penalties provided by statute were not enforceable by the Comptroller of the Currency. Action in such cases has to be brought by the borrower, but as the victims in usurious transactions are generally reluctant to bring proceedings against banks for fear of being shut off from further credit, offenders ordinarily go unpunished. In my last annual report I again urged an amendment to the bank act, which I had recommended in several previous reports, to authorize and direct the Department of Justice to bring suit against offending banks guilty of usury—and I think the amendment should also include all banks which are members of the reserve system—upon information furnished either through the Comptroller of the Currency or other sources. Such a law vigorously enforced would be of inestimable value to the country.

CERTAIN MEMBER BANKS BORROW HEAVILY FROM RESERVE BANK WHILE LENDING LARGE AMOUNTS TO THEIR OWN OFFICERS FOR SPECULATIONS IN STOCKS AND BONDS.

In formal communications I made it quite clear to the Federal Reserve Board that certain favored institutions, to which a certain prominent Federal reserve bank had handed out enormous sums of money, were employing their funds largely in the promotion of speculations of divers kinds, and I called attention to various instances where the executive officers of certain large debtor member banks were borrowing heavily from their own banks for their speculative ventures and hazardous promotions and were also obtaining money from other banks to which the Federal reserve bank was advancing large sums. The reserve bank making these huge, and often, improvident, loans was itself borrowing, at times, heavily from other Federal reserve banks, far and near.

In my last annual report to the Congress, in urging an amendment to the national bank act, to prevent bank officers from borrowing from their own banks, I said:

“Cases from time to time come to light where important banks to which are intrusted millions of dollars of the funds of depositors are found lending the funds of the bank in large sums to practically all their senior and junior officers—president, vice presidents, cashier, and assistant cashiers—and while they are extending these large and excessive accommodations to their own officers, directly and indirectly, largely for speculative ventures, the banks are themselves borrowing heavily from the Federal reserve bank of their district.”

HUGE LOANS GRANTED ON EASY TERMS TO BIG MEMBER BANKS CONSPICUOUS FOR SPECULATIVE OPERATIONS, WHILE SOME OTHER MEMBER BANKS SUFFER AND PAY EXTORTIONATE RATES.

Another phase of these loans made by member banks to insiders, on stocks and bonds, is what has been called the “family” rate, charged by certain banks to their own officers, and officers of other banks who may be expected to reciprocate, and which rate is materially less—sometimes less than half—the rate charged other less favored customers. It is quite impossible to justify practices prevailing in some of the banks which have received, at easy rates, the largest indulgences from the reserve system, while smaller banks have been skimmed, and taxed unconscionably on the far less advances grudgingly doled out to them.

More than a year ago, on January 28, 1920, I warned the board, by letter, against concentration of the funds of the Federal reserve system for use in speculative operations and promotions, and expressed my strong disapproval of certain conditions to which I specifically directed their attention.

In another letter to the reserve board under date of February 19, 1921, I said:

“The manner in which certain New York banking institutions have borrowed enormous sums from the Federal reserve bank of New York at rates of from 5 per cent to 7 per cent and have taken advantage of the necessities of needy borrowers, in trying times, by ‘accommodating’ them with time money at rates, in some instances as high as 50 per cent per annum, and in at least one instance about 200 per cent per

annum, is, in my opinion, uneconomic, unconscionable, and barbarous, and I am not willing, as far as I am concerned, to have such operations pass unnoticed or without protest.

"Our reserve board will not hereafter be able to escape heavy public censure on the excuse that it was not advised of the details of such transactions."

RESERVE BOARD AND RESERVE BANKS SHOULD EXERCISE CLOSER SUPERVISION AND CARE IN DISPENSING FUNDS OF RESERVE SYSTEM.

The Federal Reserve Board, as I understand, claims that it is not within the duty or the power of either the board or the officers of the New York reserve bank to prevent this abuse and misuse for extortionate private gain of the facilitateis for safety and convenience of all the people, provided by the Government. I say that if the authority does not exist, it should be provided by act of Congress. I know enough of the practical facts of banking to know that it is also always possible for a bank to restrain a borrowing customer—big or little—who is borrowing more than his share or using what he borrows for purposes improper or detrimental to the public welfare. But the instances I have cited, in my correspondence with the board, prove that the board and the reserve banks should be given specifically the power, if they lack it, and they should be specifically required to use it.

But it is useless and foolish to contend that our Government is impotent to forbid diversion of money supplies it provides so liberally, through the issue of its Federal reserve notes and otherwise to maintain general prosperity, to hinder that prosperity and enable powerful individuals to fatten their purses without risking a dollar of their own. It is indisputably true, as I have stated, that banks have borrowed heavily from Federal reserve banks and used the funds so obtained to promote speculative undertakings of their own officers, as well as for customers—sometimes by the use of "dummies"—to amounts far in excess of prudent limits, or even the limits fixed by law. I contend, and shall continue to contend, that the duty of the Federal Reserve Board or the directors of the Federal reserve banks is to call imperative halt on such dangerous and unlawful habits, and if that duty, for any reason, is neglected, Congress should find others to assure its performance.

BOARD APPROVED "PROGRESSIVE" INTEREST POLICY UNDER WHICH AS HIGH AS 8½ PER CENT PER ANNUM INTEREST WAS CHARGED MEMBER BANK BY A FEDERAL RESERVE BANK.

Many weeks ago I urged the board very earnestly to suspend, in all districts, the so-called "progressive" interest rates which were working serious hardships upon many small banks which could least afford the exactions imposed. My attention had been called to a little national bank in the cotton section of Alabama, which, in September, 1920, in the height of the cotton-moving season, was straining its resources and credit to aid its community and assist its customers, 85 per cent of them farmers and cattle raisers. That country bank was charged by its reserve bank under the "progressive" plan from 6 per cent to 8½ per cent per annum. The average rate which it paid the last two weeks in September for the advance of \$112,000 was about 45 per cent. The excess interest above 6 per cent which was charged this small bank for that two-weeks' period was equivalent to more than 7 per cent dividends on the bank's capital stock for a whole year. I do not know how many other cases of extortionate interest charges there were, but there were others, and there should be none.

The record shows that on February 4, 1921, in a letter to the board referring to the extortionate interest rates charged by reserve banks to member banks in certain districts, I said:

"If you care to call for them, the records of the reserve banks, I am advised, will provide you too many instances of the exaction of these amazing and ruinous rates.

COMPTROLLER'S MOTION TO LIMIT RATES CHARGED MEMBER BANKS BY ALL RESERVE BANKS TO 10 PER CENT VOTED DOWN BY BOARD.

"I trust that the board may determine that a safer, sounder, and more humane policy will be to lend member banks as much as discretion will allow at rates in no event in excess of 10 per cent per annum (as was contemplated in the resolution which I had the honor to offer recently in the board, but which was voted down at the board meeting of the 2d instant), and when that line has been reached refuse them

further accommodation—certainly not impose upon them interest rates which are merely aids to suicide.”

“The practical meaning of this is that the bank” (which had been charged the 87½ per cent per annum interest) “was driven to choose between permitting the ruin of dependent customers on the one side, and on the other side putting itself in serious danger while trying to save its clients of having surplus and perhaps capital wiped out by the exorbitant interest charges exacted by the reserve bank.

“The superinterest charged this little bank, in excess of 6 per cent per annum for the two weeks ending September 30 last, was so exorbitant that if kept up it would in less than a year have eaten up the bank's entire capital and surplus and rendered it insolvent.”

The board claimed that the “average” interest charged by the reserve bank on all loans to all member banks in the district referred to was not high, but this is a poor consolation to those member banks from which were exacted killing rates, which certain victims in some districts expired in paying, as, for example, in Colorado and in Texas. It should be said to their credit that certain Federal reserve banks, including the reserve bank of Atlanta, had, formally or informally, urged the board in the summer of 1920 to give them permission to adopt more liberal policies, especially with respect to loans on Liberty bonds, but their requests were refused, the board alleging technical objections.

I am gratified to be able to add that the “progressive” plan in the Atlanta district under which the 87½ per cent interest charge was made, was suspended two weeks after the governor of the board had received my letter of October 18, 1920, in which I had urged general reconsideration and revision of “the plans and policies which have aided in bringing about deflation.” I had also warned the governor in the same letter that “if this is not done speedily I am fearful as to the consequences which may ensue.”

When my motion, however, to abolish the “progressive” interest rate in the other districts in which it was then still in force, or limit it to 6 per cent per annum, was refused by the board in February, I sought to provide that in no case should a reserve bank under that plan charge a member bank interest exceeding 10 per cent per annum. But this motion was also rejected. The “progressive” interest plan as it has been operated in some sections exactly defeats one of the chief and best purposes of the Federal reserve system, which is to prevent congestion of money at the centers and scarcity in the agricultural districts when needed to gather and move crops. I thought the suggestion for a suspension or modification or reasonable limitation of the progressive rate in all districts, as well as in those where it had already been discontinued, was distinctly constructive. I think now that Congress should enact an amendment to forbid such exactions resulting from misunderstandings or bad judgment or lack of sympathy with the plight of small banks and those they serve.

I am bound to say that so far as I can judge from the correspondence, neither the burdens put on small banks in the agricultural districts nor the enrichment from Government funds of the big banks in the centers, interested the majority of the Federal Reserve Board so much as the alleged too frequent or too infrequent examinations of banks by the comptroller's bureau, my own motives in raising these annoying questions, the names of persons to whom I had given copies of my remonstrance, and the tremendous issue as to whether or not I should be furnished with copies of stenographic reports of certain meetings of the board, which minutes the board has apparently decided to keep secret and, as they have stated solemnly, “under seal.”

TIME WASTED IN TRIVIAL DISCUSSIONS IN BOARD MEETINGS; IMPORTANT MATTERS OVERLOOKED OR SIDETRACKED.

I was about to forget the other great disturbing question—the number of board meetings I did and did not attend. I confess my absences from the board (but not from the comptroller's office) were frequent, although I probably averaged two or three such meetings per week. I really felt that I could employ my time more usefully than in attending board palavers and in listening to discursive discussions, beginning nowhere and ending in precisely the same place, conducted by eminent gentlemen. Probably our board is not exceptional in this weakness. The New York Herald only yesterday, in opposing editorially the addition of another member of the Cabinet, described perfectly the situation as I sometimes found it.

The editorial says: “Any man, though he be a steam engine for work and a wonder for achieving results in the world of affairs, knows how perfectly hopeless it is to get

anything worth while done by a large committee. The beginning and the end of its functioning is nearly always talk. Pretty much everything in between is talk. Decision is postponed for conversation, and accomplishment is sidetracked by debates."

A great statesman gave us the axiom, "Battles have been won by fools and cowards, but never by a debating society." I am so much of an iconoclast and so thorough'y broke to the habit of trying to do something practical that even eminence does not make futility interesting.

The intensity of the intellectual activities of these board convocations may be judged from the fact that on February 14, 1921, I received a notice that the board on February 10, 1921, four days previous, had decided to take action and make a report relative to a somewhat energetic and, I thought, important communication I had addressed and forwarded to it, from a distance of about 25 feet, on December 28, 1920, 44 days previous. The conclusion reached by this solemn consultation was that I be asked or required to supply the board with names of persons to whom I had given copies of my letter, so that the executive committee might be in a "position" to "formulate its report" to the board.

COMPTROLLER UROES PUBLICITY FOR CORRESPONDENCE REGARDING BOARD'S POLICY AND MANAGEMENT.

What on earth the names or numbers of persons to whom I had given these copies had to do with the board's process of incubation, or how such information possibly could effect the quality or quantity of the hatch, I never have been informed, although I very earnestly demanded in two separate letters to have it explained to me. My clear inference from all the circumstances was that if the board had not caught rumor that eyes other than mine and theirs had seen my communication the keen interest they began to manifest in the subject would not have been aroused. Let me add that in a letter to the board, March 1, 1921, I said frankly:

"I will be glad to have the whole of my correspondence with the board made public, deleting such names or references as may cause individual hardships or injury."

I had also said in a previous letter, "To make public this information I believe would be distinctly salutary and beneficial," and I believed the public entitled to it, but the board shrank, apparently in dismay, from the suggestion. I also told the board that I would gladly forward to each person who had received from me copies of the letter about which they expressed so much concern (where publicity might embarrass or injure others names had been deleted before giving out the copies of the letter) any answer or explanation or defense the board might have to present, but at this offer they also shied.

BOARD SUMMONS AID OF NEW YORK RESERVE BANK OFFICIAL TO "LOBBY" FOR IT AT CAPITOL.

Instead of giving the public the benefit of the facts set forth in the correspondence the board, I hear, sent a hurry call to New York for a certain high official of the New York Reserve Bank who was supposed to have a large acquaintance and influence with United States Senators, and this gentleman, I am informed, spent five days or more at the Capitol, in the latter part of February—in plain language—"lobbying," for the board, and endeavoring to find out what Senators had "seen" the correspondence, in order to make quiet and ex parte explanations of matters for which the board had been seriously criticised, and as to which I had urged publicity and open discussion, which the board had refused.

It is my judgment that conditions and features of management contained in that correspondence were of special interest to Members of the Senate and the House of Representatives by which the Federal reserve system had been created as well as of vital concern to the public. Communications I laid before the board on February 19 and 26, 1921, would also be instructive in this connection—likewise my letter to the board of March 26, 1921.

Comprehensive statements from the Comptroller of the Currency giving facts with in his official knowledge, and asking attention to serious and alarming conditions in the business world were before the Federal Reserve Board, and the comptroller's definite recommendations unacted upon after 44 days. At the expiration of that time, more than twice as long as is required for the productive activities of the ordinary hen—the board, suddenly aroused, bestirred itself and responded with demand to know who else had read the comptroller's letter, that it might "formulate a report." Even the gravity of the occasion could not hidethe humorous aspects of the performance.

BOARD WARNED IN OCTOBER, 1920, TO REVISE POLICIES TO MEET NEW AND CHANGED CONDITIONS AND ADMONISHED AS TO FEARFUL CONSEQUENCES OF NEGLECT.

In all seriousness, gentlemen, I am impressed with the necessity for some amendment to the Federal reserve act which will awaken the board from the inertia and stiffness and concentration on trivialities that are symptoms of "bureaumania." The subject on which I wrote in October last, and again in December, and which developed faint reaction in February, was of vital importance. I had begun in October to beseech for it the board's attention. On the 18th of that month I pointed out that the decline in prices, facilitated by the policies of the Board, had become too rapid. I itemized some of the appalling shrinkages of values, for instance, loss of \$50,000,000 in wheat, to which 500,000,000 or more is to be added since that time; from one to two billions in corn, a billion in cotton. I used these words at that time: "The plans and policies which have aided in bringing about deflation in the great staple commodities should be at once taken up for consideration and revised as far as may be necessary to meet present and changed conditions. If this is not done speedily, I am fearful as to the consequences which may ensue."

Three days later, on October 21, 1920, I addressed a communication to the Secretary of the Treasury, who is also the chairman of the Federal Reserve Board, presenting arguments which seemed to me to be impelling, urging that some constructive measures of relief be adopted to steady the situation and ease the further shrinkage in values, which has since then taken place with such ruinous results. In that letter I said, in part:

"The strain upon the business fabric of the country is, in some respects, unparalleled, and I do feel that the time has come for the exercise of such salutary and constructive powers as may be at our command. * * *

"The situation * * * has become more aggravated of late, and unless relief can be found an increase in bank failures, I believe, will be inevitable.

"The revival of the War Finance Corporation would, provide in my judgment, a much-needed steadying influence at this time "

My remonstrances, however, went unheeded, but the War Finance Corporation was revived as a result of action by Congress about five months later and against the earnest exhortations of the chairman of the Federal Reserve Board.

WARNINGS REPEATED IN DECEMBER AND BOARD AGAIN URGED TO ADOPT EFFECTIVE MEASURES OF RELIEF.

By the end of December two more months had gone. Reports reaching me from all parts of the country increased my concern. It was then that I wrote the letter of December 28. In this I reviewed, repeated, and amplified what I had said before, adding that shrinkage of additional billions had come since October. I tried to demonstrate that the welfare of the world depended upon the welfare of this country, and that the fate of this country, for the near future at least, depended largely on the policies of the Federal Reserve Board, controlling the financial levers. In the letter of December 28 the following paragraphs, I think, may be interesting to you just now:

"Since my letter to you was written, commercial, industrial, and financial conditions have become steadily worse and the further shrinkage which has taken place since the middle of October amounts to billions of dollars.

"I feel more strongly than ever that the welfare of the country calls for the adoption of somewhat more liberal policies on the part of the Federal Reserve Board and the Federal reserve banks, whose powers are now more widely recognized and acknowledged than ever before.

"It is my strong belief that it is within the power of the Federal Reserve Board at this time, by the adoption of new, wise, liberal, and sound policies and the announcement of such policies, to instill a feeling of confidence and hope and to check the spirit of demoralization which, unless arrested in time, may lead to disaster. * * *

"Events, developments, and conditions warn us to remember that a stoppage too sudden may be disastrous as an explosion, that an unyielding barrier thrust into the path of a runaway machine may only hasten wreckage and assure a smash which skillfully regulated guidance might prevent.

"Two months of actual experience which have elapsed since my letter to you of October 18, 1920, was written tend to intensify rather than diminish my fears for the immediate future. I am as confident of the safety and development of American business, society, and government as the most enthusiastic optimist, but it is our part to strain every nerve and apply every resource of labor, thought, and self-sacrificing patriotism to avert an interval of disaster, or to make it brief and easy as may be possible. * * *"

TREASURY IN PREVIOUS YEARS MET CRISES RESOURCEFULLY AND PREVENTED DISASTER BY SWIFT, CONSTRUCTIVE ACTION.

In that same letter I had reminded the board of the constructive work of Secretary McAdoo in previous crises in the following language:

"During the past several years I have seen many occasions where the action of the Treasury Department has distinctly prevented financial panics.

"I have witnessed other occasions where the mediation and timely action of the Treasury Department has ameliorated many serious and dangerous situations and has been an important factor in checking grave losses to the business interests of the country.

"At other times the same influence has been exerted to aid directly in the stimulation and encouragement of our commercial and industrial interests.

"The part which the Treasury took in the formation of the cotton pool in 1914 is one illustration. Another illustration was the action of the Treasury in organizing the War Risk Insurance Bureau, which made possible the continuance of our export trade in the early days of the war when cargo insurance was unobtainable elsewhere.

"The action of the Treasury in making practicable the emergency currency law and in facilitating and expediting the issuance of that currency in the summer and autumn of 1914 averted a financial catastrophe and prevented chaos. These illustrations could be multiplied if need be, but you are doubtless as familiar with them as I am."

BOARD URGED TO RESTRAIN PROFITTEERING BY MEMBER BANKS BORROWING FROM RESERVE BANKS AT 4½ TO 7 PER CENT AND LENDING TO CUSTOMERS AT 20 TO 200 PER CENT.

The excessive rates which were being exacted by member banks to which the reserve bank of New York was in some instances lending lavishly, were also alluded to in the same letter, as follows:

"Member banks should be given to understand that the board disapproves and will not countenance the excessive rates which have been in vogue in New York City and which are higher than the rates charged by banks in any other country in the world. Such rates, in my opinion, have been very damaging to the commercial and financial interests of the country, and I submit that it would be well for the board to establish regulations to prevent the reserve banks from lending money to member banks at 6 per cent to be passed on to customers at extortionate rates. The effect of such a regulation, I believe, would be most helpful and salutary.

"The records of this office show numerous instances of banks which have gotten large sums of money from the reserve banks to be loaned in Wall Street for the purpose of profiting by the difference in interest rates.

"The official reports also show that in addition to the money which the New York banks were lending on call in New York for account of their correspondents and customers, the national banks of New York City this time last year had on deposit to the credit of their correspondent banks in all parts of the country approximately \$900,000,000 more, while the total sum which the New York national banks were lending, directly and indirectly, to all other banks throughout the country was considerably less than one-fourth of that sum. * * *

"The important thing is to find and apply proper remedies. Perhaps there has never been a time when the business and industrial interests of the country were more deeply dependent upon a sound, wise, and courageous administration of our banking and financial system than at the present moment."

RESERVE BANKS SHOULD NOW REDUCE RATES TO 6 PER CENT MAXIMUM.

In the same letter among the measures and changes in policy which I urged upon the board were the following:

First. Reduction in the rate of interest charged by Federal reserve banks on the loans to member banks secured by Liberty bonds from 6 per cent to 7 per cent to a uniform rate of, say, 4½ per cent, as it was clear that the policy of the reserve banks toward loans on Liberty bonds, besides working hardships on borrowers, was depressing the market value of the bonds and the credit of the Government.

Second. Suspension or modification of the "progressive" rate in the three Federal reserve districts where it still prevailed, to 6 per cent per annum. Instances can be cited where banks had been charged 20 per cent, 30 per cent, and 40 per cent, and in one exceptional case as high as 87½ per cent. I brought to the attention of the board specific instances of suffering and the lack of money and credit scarcity in many different sections of the country, and said:

"Such facts and conditions as have been brought so vividly before us can not be met with theories or removed by explanations and should not be dealt with by vague surmises and promises or unconsidered experiments. They demand definite and energetic action, even if precedent must be disregarded, accepted rules suspended or waived, and new plans and methods devised.

"The people have entrusted their welfare and interests to those of us who have been honored with public office of any degree and in any department of the Government, supposing us to be fitted for our task by knowledge, intellect, and character. Our plain duty is to act as promptly and as independently of usual habits of thought as may be necessary to find and apply remedy.

INEQUALITIES IN LOANS GRANTED BY RESERVE BANKS, SOME GOT LAVISH LOANS, OTHERS DENIED CREDIT.

"While there appears to be this scarcity of money and of credit in the great agricultural and producing sections of the West and Northwest and in the South and Southwest, we find that individual banks in New York City are borrowing from the reserve system, in a number of cases, more than \$100,000,000 each and sometimes as much as \$145,000,000 is loaned there to a single bank, twice as much as the total loans some of the reserve banks have been lending recently to all the member banks in their districts. * * *

"The inequalities and injustice in the distribution of these funds become apparent when we analyze the uses which big favored banks in the East sometimes make of the money they borrow from the reserve system."

A few weeks later, on January 17, 1921, in again urging the board to some constructive action for the relief of the situation, conditions in many parts of the country having become still more desperate, I said:

"I can not see that any former expansion of values, however artificial or exaggerated, would make an excuse for us if we aided in or by inaction allowed such rapid and extreme shrinkages as would mean general collapse and ruin. Perhaps the supreme test and finest achievement of statesmanship is in saving the people from the worst consequences of their own mistakes. In this present situation the vast majority of those on whom the ruin would fall are those in no way responsible for the conditions that caused it.

"I do not think we would prove ourselves fit for the important work entrusted to us if we stood content to remind thousands suffering from hunger and cold that some profiteers and speculators and a few others produced and many partook of a surfeit last year. The gain in prices may have been fantastic and largely on paper, but the loss, coming so swiftly, produces very real distress for hosts of good people, including women and children. We can not cure or palliate destitution by philosophizing or explaining or proving that it comes obedient to the laws of political economy."

WARNINGS AND REMONSTRANCES, GIVEN TIME AND AGAIN, PASS UNHEEDED BY BOARD, WITH DIREFUL CONSEQUENCES.

Fourteen months have elapsed since my letter to the board of January 28, 1920, with reference to which, in a letter to the governor of the board of February 19, 1921, concerning the unequal distribution of the funds of the system and the large loans which were being extended to certain favored member institutions, I had said:

"I pointed out to you that the New York reserve bank was, at that time (January, 1920), lending an amount nearly six times its own capital, that is to say six times the capital of the reserve bank of New York to * * * one member institution, and I showed you that the money which the New York reserve bank had loaned to * * * one borrower on December 31, 1919, amounted to nearly twice as much as the aggregate amount of loans and discounts which the Federal Reserve Bank of Dallas was lending at that time to all of its member banks in that great district, embracing the entire State of Texas and part of the States of Louisiana, Oklahoma, New Mexico, and Arizona.

"It appears that in order to make these huge loans to those institutions the New York Federal reserve bank had found it desirable to rediscount or borrow. About the time of my letter to you of January 28, 1920, over \$118,000,000 from seven other Federal reserve banks, including among others, the reserve banks of Dallas, Chicago, and Atlanta, whose resources available for their own member banks were to that extent lessened."

Six months have now passed since I took the liberty of giving my warning of October last to the Secretary of the Treasury and to the board, and of urging so earnestly a revision of policies.

Four months have gone since I supplemented that warning in an earnest and elaborate presentation of the situation. The suffering throughout the country had meanwhile become greatly intensified. In that subsequent letter I had advocated reduction of interest rates and increased extension of credit for urgent business needs to the limits consistent with prudence and the equitable distribution of our available resources.

Instances illustrative of the widespread distress in the West and South, and in the East as well, and argument for such a policy of forbearance and consideration for borrowing banks, as would enable them to give like treatment to individuals, was drawn as strong as my ability permitted. It seemed to me something was wrong somewhere and somehow, when with an actual shrinkage in values of our commodities within a year of twelve to eighteen billion dollars, four or five favored member banks in New York City were borrowing from the Government's reservoir of money and credit as much as four or five thousand member banks in the West and South were borrowing from five Federal reserve banks, embracing in their respective districts 21 great States.

"AVERAGE" RATES CHARGED ARE DELUSIVE, SOME GORGED, OTHERS STARVED.

The board, with its knowledge of these huge loans to certain New York City banks, claims there was, "on an average," no restriction of credit, etc.; but again it must be pointed out that it is a poor consolation to starving families to be assured that taking into consideration food wasted in riotous living and luxury, the "average" amount consumed in their community is fair. Of such "averages" as these we may well exclaim, "What crimes are committed in thy name." The purpose of the Federal reserve act is not to secure satisfactory "averages"—we already had tolerably good "averages"—but to secure a fair distribution and equitable allotments to each and every one.

\$500,000,000 FROM OTHER SECTIONS, ENTICED BY FANCY INTEREST RATES, FOR LOANS IN WALL STREET.

I was further painfully impressed by the evidence of the official records that at the beginning of August, 1920, in crop moving time, the national banks in New York City were lending for correspondents on so-called "Wall Street" loans for stock speculations and operations, more than \$500,000,000 coaxed from banks everywhere in the country by the high rates speculators would pay. This was more than the Federal reserve banks of Minneapolis, St. Louis, Kansas City, Dallas, and Atlanta were lending to their 4,000 or more member banks.

This document, my letter of December 28, 1920, to the board, was long, elaborate, carefully prepared. I tried to make the statements of conditions, as I saw them from my inside view, vivid and energetic and the suggestions for improvement clear. The reaction I got, after 44 days, was that I had written something, not to be acted upon but to be reported on—when the board knew how many persons had seen my letter, and what their names were. The board was to determine, not how to do something, but, perhaps, how to formulate reasons for not doing it. "Whatever was required to be done," says Dickens, "The circumlocution office was beforehand with all the public departments in the art of perceiving how not to do it."

BOARD SAYS SHRINKAGE IN VALUES "SOMEWHAT ANALOGOUS TO PUNCTURING BALLOON TO LET OUT GAS." COMPTROLLER REPLIES SENSIBLE MEN BRING DOWN BALLOONS BY CAREFUL HANDLING OF VALVE ROPES AND BALLAST.

After a preliminary incubation of two weeks, the governor of the board had also written me in a general way on January 13, some comments on my letter of December 28, defensive of board policies and the status quo, but without acting upon the recommendations in my letter, and he stated that the views expressed in his letter were also those of other members of the board. He impressed me as being rather more intent on rasping me, if possible, than on acting to meet the unhappy conditions existing, but did remark that the process of deflation was "somewhat analogous" to what takes place "when a balloon is punctured and the gas escapes." Taking this as a text, I urged that sensible men bring down balloons by careful handling of valve ropes and ballast, not by driving a hole in the bag and precipitating collapse and destruction. That had been the gist of my entire complaint and plea. It was impossible so far as my experience went, to fasten the minds of the board on that point. I never have, to this day, secured a definite denial of any material statements I have made or a solid reason for opposing any of the suggestions or recommendations I ventured to offer.

While in the earlier period the board was very helpful in facilitating an orderly decline, its subsequent obtuse refusal to recognize changed conditions, and to revise its policies accordingly, though fully warned and urged to do so, has, in my opinion, to use the board governor's simile been "somewhat analogous" to puncturing a balloon and producing a ruinous and needless crash, which wise management could have averted. This was no fault of the Federal reserve act, but of its administration, for without the Federal reserve system conditions would be infinitely worse than they are, despite its faulty administration. The most perfect machine which genius can invent, or ingenuity construct, may be ruined by ignorance and mismanagement.

WISE EXERCISE OF POWERS BY RESERVE BOARD COULD HAVE MADE SHRINKAGE MORE UNIFORM AND GRADUAL AND SAVED COUNTRY "FROM MUCH OF THE DISTRESS AND RUIN THROUGH WHICH WE HAVE BEEN DRAGGED."

All this has been cited to illustrate the need of some action by Congress in the interest of farmers, of the laboring men, and the business men of the whole country, to make the vastly important Federal Reserve Board a more elastic, more initiative, sympathetic, and responsive body than it is; to put it in more direct contact with the public, and to fix its responsibility. There is no time or need here to consider details of such legislation. Among our 532 members of Congress there is brain power enough to devise simple remedies for an obvious situation. I believe firmly that the board by its power to regulate and increase or reduce the supplies of funds and the interest charges for money could have saved us from a fall so precipitate and smashing, and from much of the distress and ruin through which we have been dragged, it could have made the shrinkage of values more gradual and uniform instead of violent and sporadic, could have helped strongly to keep the circulating currents of commercial at more even flow, so that the losses of each producer might be offset by reasonable reduction in the cost of what he must consume.

LORD LEVERHULME DECLARES "TOO RAPID DEFLATION" HAS BROUGHT STAGNATION AND UNEMPLOYMENT.

These views and apprehensions, which I expressed in urging the board, during the past six months, to constructive action and to a revision of its policy of contraction before it was too late, were shared by able and clear-thinking men far and wide. The fatal consequences of its folly or inertia, or both, have been far-reaching. Lord Leverhulme, one of the largest and most successful manufacturers in the British Empire, a man of broad vision whose interests are world-wide, recently declared in an interview, as reported in our newspapers, that:

"The process of too rapid deflation is undoubtedly the cause of the present unemployment and trade stagnation."

Continuing, the interviewer said:

"The prices of commodities rose to the extreme limit during the war, and their reduction was a prime necessity, but the fall has been too sudden for adjustment. This deflation has been accomplished through the banks calling in loans which were used to finance stocks at high prices, and the effect of the forced realization of these stocks has been to drive down prices of commodities below the cost of production.

"Under these circumstances, manufacturers are not likely to go on producing at a loss, and have consequently been compelled to shut down their factories."

Our country being now the principal creditor nation of the world, its financial policies, as is clearly recognized, have a world-wide effect.

NEED FOR WISE COUNSEL, EXPERIENCE, KNOWLEDGE OF BUSINESS, COURAGE, AND SYMPATHY WITH PUBLIC NEEDS.

We learn by experience, and should provide that the Federal reserve boards of the future shall have less of the characteristics of the automatic bureau and more of the activities and spirit of the wide-awake business man. I believe it desirable from the standpoint of the public, and of the commercial interests of the country that the membership of the board should include at least one man of wide business experience, outside of banking. The six members at the time of my resignation included, in addition to the Comptroller of the Currency, two college professors, two bankers, a lawyer, and a newspaper man from Poughkeepsie. A Chicago business man of signal ability and exemplary character whose counsel would have been of great value, especially in our recent experiences, was refused by the Senate when nominated by the President several years ago.

ENLIGHTENED STATESMANSHIP SHOWN BY BANK OF FRANCE IN LESSENING VIOLENCE OF CRISIS.

The enlightened statesmanship with which the management of the great Bank of France met this world crisis and tempered its strain and shock for its people may be judged by a statement made by the governor of the Bank of France in his recently published annual report. In referring to the existing financial and commercial crisis, he said:

"We have welcomed, whether by means of rediscount or by direct discount, all paper whose creation responded to the legitimate needs of commerce and production. By this liberal policy, to which we have remained and always will remain faithful, we expect to support with all our power the activities of widely varying business enterprises which in France are needed to lessen the violence of the crisis."

In striking contrast was the plan discussed by an "important official" of the Federal Reserve Bank of New York, with a heartlessness which even amazed Wall Street, and of which I shall speak again presently, which called for "putting on still more pressure, thus cleaning up the after-war mess in a hurry and getting it over," though it should involve "many forced failures;" but the "important official" referred to complacently concluded that it seemed best to stick to the present set course without increasing or reducing pressure, "despite the criticism" which it was admitted was "heard from all quarters for lower interest rates and withdrawal of pressure to force payment of outstanding loans."

As is natural and proper, I offer my suggestions of what Congress should do chiefly within the limits of my own direct experiences. Along the same line I have embraced in my annual reports, including the last, a number of suggestions for legislation to cleanse and strengthen our national banking and Federal reserve systems. Among these is included the measure to give the Federal reserve banks, under proper safeguard, more latitude and power to render aid in an emergency, to member banks than is permitted under the law as it now stands. Other important changes in and additions to existing laws which my observation convinces me are needed are set forth clearly in my last report to Congress, submitted not many weeks ago; but these are not of special interest here.

I have attempted to indicate briefly how the Federal reserve system might have been used, in my opinion, to lessen the difficulties with which our agricultural interests have been beset so sorely, and how it may be used in the future. It is not yet too late for the board to face about and help.

GOVERNMENT EXPENDITURES ENSUING YEAR CAN AND SHOULD BE REDUCED TO \$3,000,000,000 AND EXCESS-PROFITS TAX SHOULD STOP.

Turning now to more general matters, let me say that from such study as I have been able to give the subject, and based upon my experience and observations, I believe it possible for the ensuing fiscal year, beginning July 1, for the present administration to reduce the total expenses of the Government, including interest and a reasonable sinking fund on the public debt, to approximately \$3,000,000,000, and in reducing receipts raised by taxation, I believe a way should and can be found to do away with the burdensome and complicated excess-profits tax. We have been engrossed in fighting and winning a great war and in handling the immediate effects and results. The time for setting our house in order after the fray has come. I was an American before I was a Democrat, and like every other man whose ambition is to be a good citizen, I hold the welfare of people and country far nearer my heart than any party or political advantage.

Therefore, I hope most sincerely that the present Congress and administration will complete the work of retrenching expenses and reducing taxes thoroughly and promptly.

BUSINESS WORLD GETTING DOWN TO BEDROCK. READJUSTMENTS IN STEEL AND IRON PRODUCTS; IN RETAIL DEALERS' PROFITS AND IN WAGES, YET TO COME.

Before closing I will, if you will indulge me a little longer, say a few words as to present business and financial conditions, and the outlook. We are now indisputably closer to bedrock than we have been for years, and we have it within our power to hasten the time when farms, factories, mills, mines, and railroads shall again go forward at full speed.

For generations past the market for steel and iron has been regarded as the thermometer of trade. The prices for these underlying basic commodities have been regarded as an index of general condition of business. At the present time this is not

entirely true, for in the great depression which now exists, the most acute perhaps that we have experienced in this generation, owing to the heat artificially applied to the bulb of the steel thermometer, steel and iron prices are still registering about 100 per cent above the prewar basis. These artificial prices are adding enormously, directly and indirectly, to the cost of living and I believe firmly are doing much to block the road to business resumption and prosperity. They must be reduced radically.

The exclusive profits still being exacted by some middlemen and retail stores are also unfair and are delaying the needed increase in consumption and in production which must precede better times.

Like all who think and honestly hope for the welfare and happiness of our race, I am earnestly in favor of decent hours and liberal wages for the working man and of a fairer division of the joint products of capital and labor. But in making these adjustments there are great economic laws of which it is necessary for us to take cognizance. It is hopeless to attempt to force a railroad, or any other joint-stock corporation or business enterprise to continue to operate at a heavy loss and to pay one class of employees \$8 or \$10 a day if there are hosts of men well qualified and anxious to do the same work for \$5 and \$6 a day.

PRINCIPLE OF 8-HOUR DAY AND EFFICIENCY OF LABOR ADVOCATED.

I am an earnest advocate of the principle of the 8-hour day, which has necessarily to be modified under some conditions, but I am equally strong in insisting that service rendered shall be efficient and thorough. Let me also add that it ought to be clear to any thinking mind that it is far better for manufacturers and business men of all kinds to keep their mills and factories going even if they have to operate at no profit, or at a small profit. It is also sound policy and common sense for the workman to accept such reduction in wages as may be necessary to enable his factory to operate rather than to precipitate a strike or a lockout and earn nothing at all.

The 12, 14, and 16 hour days, 7 days in the week, which it has been charged have been, up to now, exacted by some great corporations, are intolerable and inhuman. Eight years ago, as Assistant Secretary of the Treasury, my duties included supervision of the Bureau of Engraving and Printing, employing then about 4,000 workers, and under my instructions the director of the bureau arranged for operatives whose work was particularly monotonous and wearing to have a number of rest periods of, say, 10 minutes each, at intervals during the day, without requiring them to work overtime for time so taken. He subsequently reported to me that as a result of that plan the efficiency and output of that department was increased about 15 per cent—more work performed in less time.

Regardless of whatever flaws there may be in its administration, our Federal reserve system has, in the past, saved our country from conditions far worse than those which we are now enduring, and I believe that with the reversal of certain policies, and by the adoption of a constructive program the Federal reserve system could now aid enormously in restoring lost confidence and in inspiring hope and a justifiable optimism.

RESERVE BOARD UNDER EXISTING CONDITIONS SHOULD VIEW WITH SHAME RATHER THAN PRIDE BIG RESERVE RATIOS.

There has, in my opinion, been an indefensible withholding of credit in many of the producing sections of the country when sorely needed. I stated frankly at a meeting of the Federal Reserve Board not many weeks ago that a high ratio of reserve, indicating useless impounding of funds in reserve banks, under existing conditions, when money is so badly wanted for the vital purposes of agriculture and business of all kinds, was a thing for the board to be ashamed of, rather than to boast of.

The time has come, in my judgment, when the rates of Federal reserve banks in all districts should be reduced to a maximum of 6 per cent per annum.

RATE ON BANK LOANS SECURED BY LIBERTY BONDS SHOULD BE REDUCED TO 4½ PER CENT.

On United States Government bonds purchased and subscribed for at par upon which the banks are now lending the original subscribers, the discount rate to member banks should be reduced to 4½ per cent, with a proviso that the member bank shall reduce the rate to its customer to not exceeding 5 per cent.

UNUSED LENDING POWER OF FEDERAL RESERVE BANKS NOW FIFTEEN HUNDRED MILLION DOLLARS—TEN TIMES AS MUCH AS ALL NATIONAL BANKS OF THE COUNTRY EVER BORROWED AT ANY ONE TIME BEFORE 1914.

Prior to the inauguration of the Federal reserve system, according to the official reports, the maximum amount of money which the national banks of the United States had ever borrowed at any one time on their bills payable and rediscounts was not over \$150,000,000. I know it will be of genuine interest to every man in this assembly to know that our 12 Federal reserve banks at this time have an unused lending power of approximately fifteen hundred millions dollars, or 10 times as much as the maximum amount which all the national banks of the country ever borrowed at any one time on their bills payable or rediscounts prior to the European war.

Under such conditions as these, there is no reason why every farmer and business man in this country of good credit should not be able to obtain all the money needed for their conservative business wants—at least so far as the domestic requirements of our own country are concerned. Obviously the question of funds for foreign trade while the world is upset as it is at this time is another problem yet to be solved.

Of course, you do not expect, and I do not intend, that I pour out on you any theories of government or general program of legislation, domestic and foreign. I presume you have agreed on legislation you will ask in favor of the organized farmers and workmen of the country. I have tried to give you for your consideration and mental digestion some of the thoughts brought to me by contact with conditions.

POLICY DISCUSSED BY "HIGH OFFICIAL" TO PUT ON "STILL MORE PRESSURE" AT THIS TIME RESENTED AS A "MASSACRE OF BUSINESS."

Precisely in point with what I have been saying and as illustration of what I may call callous, if not the brutal, attitude of some of our officials, let me read you a paragraph or two from the New York financial article printed in the newspapers the day before yesterday.

The writer of the article said:

"From a talk I had to-day with one of the important officials of the Federal reserve bank here it appears that there is a consensus of opinion among the different governors of the Federal reserve banks favoring a continuation of present policies despite the criticism heard from all quarters for lower interest rates and withdrawal of pressure to force payment of outstanding loans. There are three general policies which might be adopted, it was pointed out.

"One would be to ease up on interest rates, but that policy, with the heavy inflow of gold, it was argued, might result in a renewal of dangerous speculation and inflation.

"Another policy might be adopted that would result in putting on still more pressure, thus cleaning up the after-war mess in a hurry and getting it over. But if that course were adopted, it was pointed out, 'we would be a long time in picking up the pieces caused by the many forced failures.'

"By far the best plan, it was argued, was the one now being followed, which permits continuous, but moderate liquidation."

It must be noted that the only objection mentioned by the "important official" of the Federal reserve bank quoted, to the plan for "putting on still more pressure," was not the cruel injustice, the disregard of every principle for which the Federal reserve measure was created, which it would involve, but the probability that they "would be a long time in picking up the pieces," i. e., the dead bodies "caused by the many forced failures."

One policy "might" cause renewal of dangerous inflation and speculation. Another would mean acute panic forced by unskillful or indifferent management or wanton mismanagement of the machinery ably devised to give relief and prevent panics. It is proposed to check disease, and give the doctors and nurses surcease from troubles and responsibility by killing all the patients in the hospitals—a plan actually under discussion being to restore business to general sound condition by a preliminary massacre of business.

The now prevailing method is supposed to be a compromise between these two, and we are told there is a consensus of opinion among the governors of the Federal reserve banks to let it continue. The suggestions offered by the "important official" of the Federal reserve bank quoted above are, I assume, a reflection of the attitude of the board, for which I can conceive of no excuse. Apparently it has not occurred to the board that it may be possible by anxious and alert vigilance and careful responsiveness to daily situations and varying sectional requirements, to avoid either of the alternatives described above—delirium on one side, death on another, or a sleeping sickness, as at present.

The man who put an automobile on the road with steering gear set and let it run; or the doctor who failed to adapt his treatment to stimulate or retard heart action, as conditions indicated, would be liable to indictment for murder.

The policy outlined in this newspaper paragraph, as obtained from a Federal reserve bank official, is precisely that against which I war, and against which I hope all of us will war. It is the policy of setting the steering gear and letting her go; of applying the same treatment to high fever and paralysis—the "bureau" method of hard and fixed rules.

The Federal reserve system was not intended to be worked that way. It presupposes attention, intelligence, flexibility of thought in those who operate it, the capacity to feel and understand and to value the welfare of the country and of each of the individuals composing it as more important than official dignity, pride in an adopted policy, or blind and slavish allegiance to rules by those who first create them, and then abjectly worship them.

"LIQUIDATION NEEDS TIME IF DISASTER IS TO BE PREVENTED," SAID PROF. LAUHLIN.

The method mentioned by the "important official" of the Federal reserve system, as quoted by the New York financial writer, is directly contrary to common sense, fair dealing, and the most elementary principles of economics. In painful contrast with certain board theories and practices, are the mature conclusions, not only of leaders in business, but the ablest thinkers, and teachers of economics. For example, Prof. J. Laurence Laughlin, of the University of Chicago, a distinguished and accepted authority, nine years ago, in discussing the subject of banking reform, made the following statements, which in the interest of the country, I respectfully submit, it would be well for our reserve board to ponder, inwardly digest, and act upon:

"A crisis comes because credit has been unduly expanded in a period of prolonged prosperity; in an optimistic spirit men have entered into transactions beyond their actual means, as is shown when the test of actual payment is exacted, and in a time of fright collateral as well as goods falls in price. In such a situation liquidation needs time if disaster is to be prevented.

"* * * the great need is some means—whatever it may be—which will enable a bank to make loans to a client, who can thereby be saved from failure and from hasty and ruinous liquidation."

Contrary to this sound, practical and humane doctrine the "important Federal reserve bank official" announced that a plan actually under discussion, conscienceless though it be, contemplates "putting on still more pressure," and it appears that the only argument he mentions against that policy, is not the cruelty and suffering which such a plan would entail, but "the long time" which would be consumed in "picking up the pieces," which he frankly tells us "the many forced failures," i. e., financial ruin of thousands of firms, corporations, and individuals—would involve. Bradstreet's Mercantile Agency reports that there had already been in the United States in the six months ending on the 1st instant 8,607 failures, an increase of 5,775 over the same period a year ago. Now it is suggested to put on "still more pressure" and "force" many more failures.

FEDERAL RESERVE SYSTEM INTENDED FOR GOOD OF THE WHOLE PEOPLE, AND SHOULD BE ADMINISTERED IMPARTIALLY.

I believe, gentlemen, the Federal reserve system was intended and should be used for the good of the whole people. I also believe the rural sections and agricultural interests have not been given the share of advantages and benefits they should have had and have suffered from that denial. I know that legislation can aid enormously in assuring to those sections and interests their fair share, and can make our banks stronger and safer even than they are, which would be good for all of us.

I am here to say what I think, and to share with you what I have learned and to assure you that I shall never neglect an opportunity to use voice, energy, and influence, and any knowledge or ability I have, for the purpose of having the protection and benefit of our wonderful Federal reserve system—designed and constructed for all—bestowed equally and impartially on all.

SILK SHIRTS AND BUBBLES.

[Address of John Skelton Williams before the Augusta Board of Commerce and Georgia Press Association at Augusta, Ga., July 14, 1921.]

Hon. John Skelton Williams spoke as follows:

"Mr. Chairman, members of the Augusta Board of Commerce, farmers of Georgia, members of the Georgia Press Association, ladies and gentlemen, addresses of this kind, according to immemorial custom, are served like a Chinese banquet, hind part before. We begin with the dessert of compliment and oratorical confectionery, put the spice and pepper in the middle, and wind up with solid intellectual food, in case we have any to offer.

"It is not, however, merely complimentary or conventional when I say I thank you for the honor you have done me in inviting me here, for I appreciate most deeply your invitation to talk to the imperial powers of the Empire State, an empire in territory, in wealth, and in power, conducted on the highest principles of democracy.

"I thank you for asking me here not only because I feel gratified by the personal courtesy but because I believe I have something to say that should be said. Having no political purpose, no ax to grind, as you people say, I suppose I can talk rather more freely than those who are more or less entangled with parties or factions or individuals.

"My employment through the last seven years as Comptroller of the Currency of the United States has given me exceptional opportunities for knowing the inside and the outside of our commercial and banking operations and conditions, the moving spirits and influences, and has imposed on me the duty of making special study of them, divested as I am of the interests and alliances which sway the judgments of men.

"We are now passing and have been passing through the same processes that have followed every great war. In my opinion we have been subjected to unnecessary hardships and losses by failure to use properly the means provided for avoiding or ameliorating those hardships. We will recover completely and triumphantly, but there have been delays, dismays, and disasters from methods and policies which I believe to have been unnecessary, erroneous, and inexcusable, and neither political party can charge the other with responsibility for these grave errors, because the men in authority upon whom the responsibility primarily rested were, I believe, affiliated in equal numbers with both parties.

"Newspapers and magazines and much of our daily conversation have been filled with the period of extravagance among the people. We have read columns, and many of us have listened for hours to talking of the silk shirts of the workmen and the fine automobiles the farmers bought during the flush times. Both those much-discussed classes may comfort themselves with the knowledge that if they were unwise and lacking in foresight, they were not more so than many, if not most, of those supposed to be the seers and high priests of our finance and the special repositories and sources of business wisdom. The silk shirt was on the man's back, and the automobile was on the big road or plainly in view in the barn, but the millions invested in wildcat, impossible, or fraudulent enterprises and schemes are out of sight on the pages of books locked in safes and vaults or shut in safe deposit boxes in the shape of paper with pretty pictures and printing and bearing large figures and not worth what was paid the printer to make them. The difference is that, while the money spent by the workman and farmer went to help the dealers and manufacturers, and was their own, the investments in worthless so-called securities oftentimes built nothing, developed nothing, and frequently, if not generally, belonged to other people, who were made to foot the bill.

"Recklessness in expenditure and investment amounting almost to madness is one of the greatest of the many evils attending and following war. It has never been fully explained, as far as I know, but it seems like a psychological reaction of human nature to emergencies. Poorer men go to silk shirts or other corresponding indulgences, and those better off to bubbles, apparently spontaneously and automatically.

"Exactly two centuries ago, after two decades of long, general, and deadly European war, there was a period of riotous waste among the people, and frantic speculation which culminated in the notorious South Sea bubble, one of the most famous scandals of history. Kings of the world's foremost countries involved themselves, and even the Prince of Wales himself was forced to resign from the presidency of a bubble company. Contemporary history tells us of nobles, dukes, bootblacks, and criminals elbowing each other in the London streets about the offices where stock might be bought at a high premium, in wild competition to secure some; of ladies of the highest rank compromising their characters that they might win the favor of a few shares. It was a swindle often repeated since, familiar to some of to-day from recent instances in Roston and elsewhere. the simple scheme of using the money paid in for new stock

to pay dazzling dividends on the old, but in the South Sea days the Government of Great Britain became a partner, adding new frenzy to the mania and for the time displacing the Bank of England itself in showering its confidence on the agents of a crazy dream and a fraud ridiculously barefaced.

"The official reports of the debates of the British Parliament of 1721 reveal that the ruin became widespread, tens of thousands of families, once prosperous and respected, disgraced, bankrupt, and destitute.

"To check the speculative mania in those days it became necessary for the King and Parliament, by proclamation and otherwise, to call a halt to the schemes and promotions which, in the language of the official record of those days, were described as 'pernicious projects and undertakings, first set on foot and promoted by crafty knaves, then pursued by multitudes of covetous fools, and at last appeared to be, in effect, what their vulgar appellation denoted them to be, namely, bubbles or mere cheats.' Continuing, the official report declares: 'By these extravagant and unwarranted practices many unwary persons were defrauded and impoverished and a few busy upstarts enriched, to the great detriment of domestic trade.'

"Among the corporations and flotations which two centuries ago were specifically mentioned in the parliamentary debates were such as a company for the purpose of carrying on 'an undertaking of great value, but nobody to know what it is;' another 'for erecting salt pans in Holy Island, two million sterling;' for 'importing walnut trees from Virginia, two million sterling;' 'for insuring to all masters and mistresses the loss they shall sustain by servants, three million sterling;' for the 'transmutation of quick silver into a malleable fine metal;' for 'buying and fitting out ships to suppress pirates,' etc. The famous company for extracting sunshine from cucumbers does not appear on the list, but the worst of them all are but little more absurd than some of the enterprises in which our people of this day were putting their money a year or two ago.

"Incidentally this country gained vastly from the destruction abroad, because many people of fine heritage, abilities, and ambitions were driven to seek to mend their fortunes in the new land of Virginia, and their descendants have peopled and blessed all the older States of our Union.

"I cite this matter to illustrate that what we are seeing and feeling is no new thing under the sun, and as a comforting assurance that we are no worse and no more subject to crazes and paroxysms than our respected forefathers, who ruined themselves with considerably more rapidity and completeness than we do, and with less provocation or excuse.

"Coming down another hundred years, we find more of the same conditions we have known in the last four years, only very much worse in proportion to our size and wealth. In 1821, following the Napoleonic wars and our war with Great Britain, this country and Europe were feeling the results of a debauch of imaginary prosperity. Seven years after we had made peace with His Britannic Majesty and six years after Waterloo we were in the depths. Until about 1820 anybody could sell anything at any price. Wildcat banking was the rule and conservatism the discountenanced exception. The crash and panic that came were as inevitable as the operation of any law of nature. Newspapers of those days were filled with advertisements of real estate bought at fancy prices in boom times, for which buyers could not pay, and of farms and homes seized for debt improvidently contracted. The older American States in their turn contributed to the frontier States, as they had been contributed to by the old country, swarms of active and enterprising people who had been swept from discretion by the frenzy of the time and compelled to seek in new surroundings the fortunes hoped for and missed. As is the case always in such conditions, a few who had kept their heads and taken advantage of the follies of their neighbors, or who had been lucky enough to close out at the right moment, profited enormously and piled up fortunes enormous in that day, but in the cities the appeals for charity were incessant, and New York and Philadelphia saw bread riots.

"Fifty years later, after our Civil War, after duplication of the whirl of reckless spending, came duplication of the crash, and the panic of 1873 shook the world. Complete recovery from this did not come for many years.

"Now we are less than three years from the armistice of November 11, 1918. We have come through the period of lavishness in far less time than was required for the lever to exhaust itself after most of the other modern wars in which we have been concerned. The inherent wealth of our country is so enormous, the energy and intelligence of our people so unlimited, and our prestige among the nations of the world is so high, that with a wise use of our opportunities, an intelligent and courageous handling of our financial machinery, and an unselfish leadership on the part of our business and financial leaders, it is entirely possible for us to get back speedily to prosperity and good times. However, one of the most important opinions I am

here to express to you is that we are not recovering as rapidly and as smoothly as we should have done, and as our great Federal reserve system was intended to enable us to do. I further declare the opinion that the partial failure is not the fault of the Federal reserve system itself, but is the fault of the administration of that system by individuals who have not measured up as they should have done to the great responsibilities imposed upon them. I know this opinion is founded on facts. I believe I can convince you that it is fully sustained by the evidence. I formed that opinion from close knowledge of the situation and developments acquired by me officially and accurately while I was comptroller. I expressed my views as strongly and clearly as I could put them into words, both orally and in writing, during the past 18 months or more, and I believe that if my remonstrances had been heeded and my admonitions given the consideration to which I considered them entitled, coming from a member of the reserve board, untold loss and suffering might have been avoided.

"Perhaps it is too late now to correct the very serious mistakes that have been, as I think, made, or to avoid or cure the natural and inevitable consequences. It is not too late to try to point out some of those mistakes, especially when there is opportunity to do so before the ruling powers of a powerful Commonwealth. The local press and the farmers of any community can and should be powerful in guiding its thought and directing its action.

"All progress of the human race and of individuals is based on understanding of our blunders. My hope is to expose and explain blunders that have been made, to try to make them so thoroughly understood that they will not be repeated or continued.

"The Federal reserve act is the finest tool for commercial protection and construction ever put in the hands of a Government and people. I believe that by awkward and inefficient handling it has been used to injure where it was intended to guard, and to encourage and protect what it should have restrained and prevented. I believe it has been weakened and misdirected by the 'bureau disease,' a disease which I have described heretofore as 'bureaumania,' to which too often those intrusted with authority seem to become subject. It is so much easier to hold and regard policies and rules when once adopted as final, fixed, and unalterable, rather than to undertake the labor of studying their workings and effects and deciding on modifications and changes. It is so much more self-satisfying to accept our own opinions as the supreme fruit of wisdom than be at the trouble of analyzing and amending them in the light of results and to fit changing conditions and circumstances.

"I question nobody's motives. The dismal, cold fact, as it seems to me, is that the Federal reserve act, which was designed to provide a system of banking and currency supply, pliable and elastic, adaptable to the variations of seasonal and sectional requirements and of supply and demand and commercial development, became stiff and inelastic, consequently oppressive and injurious where it should have been helpful, and dangerously lenient where it should have been repressive.

"A valiant little country bank in Alabama, striving and straining to help its farmer customers, needed \$112,000 to meet the needs of its community in crop-moving time, the latter part of September, 1920, and that little bank was charged for the use of that money for about two weeks by its Federal reserve bank an average rate of about 4 per cent—not 4 per cent per annum, gentlemen, but about 4 per cent per month on an average; in fact, the rate charged for a portion of that money was actually 87½ per cent per annum.

"I have studied the reports of the interest rates charged by the Government banks of all the other civilized countries of the globe—England, France, Italy, Scandinavia, Japan, China, and you may also include Germany and Austria, and all others—and I think the records will show, gentlemen, that the rates which certain small banks in Colorado, Kansas, Texas, Louisiana, Alabama, and other States were charged by their reserve banks, in certain exceptional cases, amounted to from two to five times as much as the rates charged by any Government bank in any civilized country on the globe. Gentlemen, these amazing rates are brutal, wholly without excuse. The Federal reserve system should be made to refund in every instance every dollar of interest exacted in excess of 10 per cent, if not in excess of 6 per cent.

"More than six months ago I urged the Federal Reserve Board to abolish entirely these grossly excessive rates which were being imposed under what was called the 'progressive interest plan,' and offered a resolution to make the rate of interest 6 per cent, but my resolution was voted down. I then offered another resolution that the rate of interest should not exceed 10 per cent in any instance, but this resolution was also disapproved by my colleagues.

"Writing to the board, under date of February 4, 1921, I said very plainly:

"The more I have looked into this subject the more I am convinced that the progressive rate, as it has been applied in certain districts, is wholly indefensible, and I

believe that the reserve banks and this board would be very severely criticized if the rates of interest which have been exacted upon this plan by some of our reserve banks should be made public. I do not believe we are ever justified in pursuing a policy which can not be approved by a sound public opinion.'

"It is due to the Federal Reserve Bank of Atlanta that I should tell you that officers of that bank earnestly pleaded with the Federal Reserve Board a year ago for permission to adopt, in certain respects, more liberal policies than those laid down for them by the board, but their supplications were unavailing.

"While small banks in the farming districts were being taxed in this manner, great banks in New York were being supplied with practically unlimited amounts of money at 5, 6, and 7 per cent. The official record will show that while the reserve bank collected \$2,100 (equal to 8 per cent on the bank's entire capital stock for 12 months) from a little bank in your adjoining State of Alabama for the use of about \$112,000 for two weeks in crop-moving time a year ago, a big bank in New York, whose funds were largely employed in speculative operations and deals, for the same cash consideration, or, say, \$2,100, was given the use of about \$800,000 for the same time.

"The policy of the Federal Reserve Board and of certain reserve bank authorities seemed to be that if certain big banks wanted anything, why let them have it promptly and no questions asked; but if a little bank or a farmer needed funds, comb him well; make him give up everything he has as security, and then make the directors, as well, guarantee the loans for all they are worth. This policy was carried so far that I have been informed recently of a national bank in the Southwest claims that it was not saved but was broken by the exactions of a reserve bank, and its directors are now planning to bring suit against a Federal reserve bank demanding that they pay its depositors in full. The prodigality with which certain big banks disposed of the funds so unstintingly loaned them by certain reserve banks may be illustrated by a loan of \$500,000 to a fisheries company made by a big northern bank which came to my notice. When I inquired what the security for the loan was, I was informed that the collateral was fish. And when I asked where the fish were, I was informed officially that the fish had not been caught at the time the loan was made, but that they were supposed to be swimming in the oceans thousands of miles away; but that the corporation had promised to go fishing, and if they caught any fish, pack them and can them and then put them in warehouses and then deposit the warehouse receipts as security for their loan, which, when I last heard from it, had not been paid or reduced.

"Of course, much of the money loaned by the reserve banks was used for the legitimate purposes of trade and commerce, but entirely too large a proportion of it was also used for the promotion of all kinds of speculative schemes, and many millions borrowed from the New York reserve bank was employed by the borrowing banks to promote speculative schemes of the executive officers of prominent banking institutions in that city, to whom in various cases specially low interest rates, commonly spoken of as 'family' rates, were sometimes charged.

"In other cases banks which were borrowing from the Federal reserve bank at 6 per cent took advantage of the necessities of their customers, and in some instances charged them 20, 30, and 50 per cent per annum on good security, and I have before me one case where a bank which was borrowing several million dollars from the Federal reserve bank at 6 per cent charged its customer, the head of a large manufacturing corporation, the equivalent of about 200 per cent per annum interest on the net amount of money which the bank itself advanced to the borrower. That loan was secured by collateral and repaid within six months. For six months' use of about \$250,000 the reserve bank charged the member bank approximately \$7,500. About the same time that the member bank borrowed at 6 per cent from the reserve bank it loaned its customer approximately \$250,000 net—exclusive of a portion of the loan which it passed on to the correspondents without indorsement—and for the accommodation exacted, in interest and commission, the sum of approximately \$250,000 for a loan repaid within six months, the interest rate being the equivalent of about 200 per cent per annum. In other words, the rate of interest per annum which that particular bank exacted from its unfortunate customer was about 33 times the rate of interest which it paid to the Federal reserve bank for the money at the time the loan was made. Is there any honest man in the entire United States who will seriously attempt to defend that transaction?

"The directors of the New York reserve bank include men of high character and excellent ability, and I do not believe that they would have approved of some of its methods and policies if they had been kept fully informed by the officers in active charge.

"You have noticed the uneasiness and well-nigh unprecedented depression in the security markets and in financial circles. This, my friends, is, in my judgment, in no small measure the natural result of a collapse of public confidence and the suspicions

aroused by the operations of some of the men at the head of some of our big institutions, who have shown themselves unworthy of the trust which has been reposed in them. The public have the right to demand, and will demand, that the heads of the great banking institutions of our country, to whom are intrusted the savings and property of millions of business men and other depositors, shall be men of the highest integrity, whose first thought and duty shall be the protection of the interests committed to them, and whose time and thought and energy must not be dissipated or absorbed by their fantastically wild speculative ventures and promotion schemes, of too many of which it might be truly said as Horatio Walpole said of the South Sea bubble in his day, that it was 'weak in its projection, villainous in its execution, and calamitous in its end.'

"My attention was recently directed to the case of a certain prominent high executive official of a certain large banking institution, to which he should have given all his time and thought and energy, but who was also a director in some 30 or 40 other corporations, a majority of which had already been crippled or come to grief. The shrinkage which has already taken place in the securities of less than half of those corporations from the top prices at which their stocks were sold in the past to the prices prevailing now amounts to about as much as the combined capital of all the banks and trust companies in New York City, or, say, from a quarter to a half billion dollars.

"Such instances as these emphasize the importance of the recommendations contained in my last annual report to the Congress, that the active officers of large banks should not be permitted to be directors in other corporations.

"The novel theory, which, unfortunately, appears has been acted upon sometimes in the past, that proper selections for bank executives, presidents, and vice presidents are active speculators and stock jugglers, on the one hand, or expert publicity men and 'tooters' whose main functions are to prepare press statements or attend bankers' conventions and maneuver the appointment of committees, who adroitly shape resolutions and policies for such conventions to adopt, has received a rude setback during the past year, and the importance of having men of the highest integrity, ripe experience, and sound views, both on the ethics and economics of banking, is, I am happy to observe, recognized now more thoroughly than ever before in our history.

"I have no hesitation in telling you that, as far as I am able to see, the decent and conservative banking element in New York City, as everywhere else, regards just as I do, and as I know you do, the operations and methods of certain big speculators, all the more dangerous because of the prestige given by their official positions, who have made playthings of the funds of other people, and the performances of accidents and sons of somebody who have used the wealth and power intrusted to them to defy the moralities and decencies. When the stockholders understand how their confidence has been abused there will be radical changes in the personnel of some of our big banking institutions.

"If this was not the richest and strongest country the world has ever known, with its big element of the best people, immeasurable power of production, and natural resources, we would face to-day disaster by a comparison with which the disaster following the explosion of the South Sea bubble would appear trivial, despite our admirable banking system intended to make disaster impossible.

"Yet while this orgy of usury and speculation was raging in New York many of you here had the experience of going to your local banks for money with which to pick or hold your cotton or to carry your paper through the dull season, and of being told of the difficulty of getting money through the reserve bank, and of the limitation being put on the small borrowers. Seeing these things as I do, nobody on earth can convince me that there is not something wrong, a perversion of purpose somewhere. I do not mean to suggest that the New York banks, for instance, were handed out money without security. I do mean that they could and should have been admonished and restrained by the Federal reserve administrators precisely as the village man or the country farmer, even with ample assets, is advised and restrained by village and small-town bankers when showing a disposition to be too speculative or extravagant. These things, as all of you know, occur every day.

"I heard much talk while I was a member of the Federal Reserve Board about forcing the farmer to sell his wheat, or the cotton planter his cotton, or the cattle raiser his live stock, to the wholesaler or retailer their stocks of goods, but I must tell you frankly that I do not recall a single occasion during the past year or two of deflation when the board ever discussed seriously the importance or desirability of requiring the big banks in New York City, some of which were lending millions of dollars to their own executive officials on highly speculative securities and to big syndicates

in which those officials were actively interested and which those banks had been carrying for months and sometimes for years to liquidate a portion of these loans, in order that by so doing those banks might have more money to supply the legitimate use of trade and commerce.

"Eighteen months ago, while this speculative orgy was under full headway, I addressed a written communication to the Federal Reserve Board, protesting against the extent to which the funds of the system were being used in fanning the fires of speculation, and I pointed to one instance where the Federal reserve bank of New York was lending to one institution about \$130,000,000, twice as much money as the Federal reserve bank of Dallas was lending to all of the 1,000 member banks in that great district, embracing the State of Texas and parts of the States of Louisiana, Oklahoma, New Mexico, and Arizona. It was also shown that the New York reserve bank was lending to that particular institution at one time an amount equal to nearly six times the total capital of the Federal reserve bank of New York. The significance of this may be better appreciated when we remember that for many years a national bank was forbidden to lend to any one borrower more than 10 per cent of its capital stock. In my written remonstrance I said:

"This is a concentration of the funds of the system with one debtor bank * * * which, in my judgment, is not only not justified but distinctly dangerous, and I feel it my duty to register my strong dissent from a continuance of such conditions as these."

"In my letter to the board of January 17, 1921, I pointed to the extraordinary fact that the Federal reserve bank of New York was lending to one particular institution in that city at one time last year more money—in one instance more than twice as much—than the seven Federal reserve banks of St. Louis, Kansas City, Minneapolis, Dallas, Richmond, Atlanta, and San Francisco were lending to all of the member banks, both National and State, in any of those seven respective districts.

"I also said in that same letter:

"It is entirely true that I wish to go on record * * *. I wish to be recorded definitely as having done my utmost to urge our board to saving or palliative action and consideration for the troubles of the public, and thereby at least free myself from the censure that will fall on us with crushing force if we omit any possible effort to mitigate present and real suffering or to avert disaster, although the consideration of personal exculpation is, of course, slight and negligible in comparison with my main purpose and hope, which are to obtain from the board some prompt and effective action for relief."

"Neither I nor any other local banker can regulate the conduct of our business by unreasoning iron-clad, inflexible rules. We can not lend without limit to every man who offers security, or require \$2 of gilt-edge security for every dollar we lend. We consider, if we are at all fit for our jobs, such matters as the moral hazard and the purpose for which the money is to be used. We do not lend without stint to the richest customer if we know he is gambling beyond the safety line, while denying the man who is trying to build something useful or productive, or to enlarge the trade of the community and promote its prosperity.

"The intent of the framers of the great Federal reserve law was that the system should be governed and conducted on those plain, common-sense principles applicable to both the village and small-town and big-town banker.

"One of the primal and most vital purposes was to prevent congestion of money at the centers for use in gambling or exactions from gamblers and speculators when funds are needed for moving or carrying crops, or for development and for the conduct of productive enterprises. I say that broad and noble purpose has been hindered, perverted, and in a large measure reversed by the attempt of a majority of the members of the Federal Reserve Board to maintain and enforce rules and policies, unnecessarily hard, inflexible, and unvarying.

"I have been and am very much in earnest about this. For a long time past, as the records will show, but especially during the past 18 months, I poured in remonstrances and protests and also prophecies as to what would happen if my warnings were not heeded, and most of these prophecies, I am sorry to say, have been verified by unhappy events and unnecessary troubles for the people and our business. I gave facts which could not be disputed, deductions which could not be refuted, pointing to inevitable consequences. The correspondence would frighten you to look at. It covered hundreds of pages of writing paper. I was met with responses which certainly were not answers which, to my limited intelligence, seems to be absolutely apart from the important points which I was trying to have considered, dealing laboriously with matters of detail so small that I do not think I am discourteous when I describe them as trifling. In discussions in board meetings in which I sought to urge vital reforms for the welfare of the people so largely committed to our care, some astonishing and dismaying replies were elicited.

"When I remarked that serious failures might occur unless a certain course of action was taken, one member remarked with a cynicism and heartlessness which I was unable to comprehend, 'Let them fail.' Since then the same idea actually has been published in newspapers as a suggestion discussed by an important official of a certain prominent Federal reserve bank.

"The writer of the newspaper article to which I refer said:

"From a talk I had to-day with one of the important officials of the Federal reserve bank here it appears that there is a consensus of opinion among the different governors of the Federal reserve banks favoring a continuation of present policies despite the criticism heard from all quarters for lower interest rates and withdrawal of pressure to force payment of outstanding loans. There are three general policies which might be adopted, it was pointed out.

"One would be to ease up on interest rates, but that policy, with the heavy inflow of gold, it was argued, might result in a renewal of dangerous speculation and inflation.

"Another policy might be adopted that would result in putting on still more pressure, thus cleaning up the after-war mess in a hurry and getting it over. But if that course was adopted, it was pointed out, we would be a long time in picking up the pieces caused by the many forced failures."

"In commenting upon that article I took occasion to point out that it was not the cruel injustice or disregard of every principle for which the Federal reserve measure was created which, it seems, prevented the immediate adoption of the policy of further pressure, but it was because of the 'long time we would be in picking up the pieces caused by the many forced failures.' It was perhaps to lessen the troubles of the doctors and nurses by killing all the patients in the hospital--a plan actually under discussion being to restore business to generally sound condition by a preliminary massacre of business.

"The deflation policies of the past 12 months have borne their fruit. The mercantile agencies tell us since October last there have been about 14,000 business failures in this country, an increase of not far from 10,000 failures over the same period last year. I can not forbear drawing a parallel between such policies as these and the attitude of the Treasury Department in the Comptroller's Bureau toward the business interests of the country in the critical months following the outbreak of the European war. In the autumn of 1914, when the stock exchanges in the principal cities of the country had been closed as the result of the European crisis, a number of national banks in the big cities arbitrarily raised the rates of interest on their loans which were generally secured by bond and stock collateral from the prewar rates of 2 or 3 per cent to 8, 9 and 10 per cent, and also to as high as 12 per cent. Some national banks, however, in the same cities refrained from charging, in any instance, more than 6 per cent per annum. The Treasury Department, through the Comptroller's Bureau, had furnished to the national banks in New York, Chicago, St. Louis, and Philadelphia emergency currency to the extent of more than \$200,000,000 upon which these banks were paying 3 per cent per annum interest. By November 1 the money situation had greatly improved, but the stock exchanges were still closed and there was no market for securities and no way open by which the owners of securities could sell them to pay those banks who had raised the rates of interest on their loans. As Comptroller of the Currency I sent telegrams to national banks in New York and other big cities asking them to inform me as to the maximum interest rates which they were charging on loans and inquiring in event the rate should be in excess of 6 per cent when a reduction to 6 per cent might be expected. As a result of those telegrams nearly all the banks addressed which were charging more than 6 per cent promptly reduced their interest rates to that figure. But in New York there were three large banks, one of which had received from the Government over \$10,000,000 of emergency currency on which it was paying 3 per cent, which refused to reduce their rates. This latter bank in replying registered a formal protest against what its officers referred to as an attempt to force upon them a policy which they did not approve. The president of that bank said in his letter:

"We judge there is a sentiment by debtors not of prime standing or with prime collateral, and we feel that they should not assume that they are entitled to the same treatment by banks when they know the way they can easily have their notes reduced to 6 per cent or can pay."

"In answering that communication as Comptroller of the Currency, I replied as follows:

"You suggest that debtors not of prime standing and not with prime collateral 'should not assume that they are entitled to the same treatment by banks, when they know the way they can easily have their notes reduced to 6 per cent or can pay.'"

"In such times as these through which we have been passing I consider that the weaker concerns and those who may not have been in possession of abundant resources

should have been treated with special consideration and forbearance, and to levy against and exact from them excess or unjust interest rates simply because they were under unparalleled conditions, unable to help themselves is not defensible.

"In all kindness let me remind you that the usury laws are framed more for the protection of the weak than of the strong, who can take care of themselves, and I am sure that you will agree with me that it is neither good policy nor good ethics, in times like these, to take advantage of the weakness or misfortune of a bank's clients and customers. If some of those borrowers should have been forced to the wall and compelled to sacrifice their collateral, the consequences, in the delicate conditions through which we have been passing, might have been unfortunate and serious."

"The bank which refused to reduce its rates of interest also protested warmly against the comptroller's publication of the list of banks which were charging not more than 5 per cent per annum interest. In answer to that protest as comptroller, I said:

"May I suggest that, if it was improper or unjust or unethical or unbusinesslike to exact excessive interest rates, the fact that such a policy is kept from the public does not make it right; nor is it the publication of such facts that constitutes the wrong. A bank should not make, nor take part in, transactions which will not bear the light of day."

"If a bank is willing to have it known that it is charging one rate of interest but is ashamed or unwilling to have it known that it charges another rate, there must be something about the other rate which challenges criticism or calls for an explanation. Nothing is gained by concealing such operations from the public; and under conditions like these, it is no part of the business or the proper function of this office to do so, directly or indirectly."

"In commenting on the correspondence published in the comptroller's report to Congress in 1915, I said:

"The effect of the action of the comptroller's office at that time was as above stated, an immediate reduction in the high rates of interest which were being charged by a number of banks in the larger cities to a uniform rate of 6 per cent, which other banks there had adhered to through the crisis. This result inured greatly to the benefit of borrowers on collateral who had been obliged to pay the high rates dictated by the banks, as the stock exchanges being closed, they had no possible way of realizing upon their collateral except by ruinous sacrifices."

"It seems to me that these references to the work of the Treasury Department in the early days of the European war are not out of place at this time."

"I have been wholly unable to understand the point of view of some of my colleagues as matters affecting the welfare and well-being of the country came up for consideration from time to time in board meetings and conflicting views developed."

"For example, I was wholly unable to sympathize with the theory referred to by an eminent member of the board upon one occasion who alluded to, with what seemed to me to be a certain degree of approval, the theory that 'It is better to be unanimous than right,' which was certainly a striking parody on Henry Clay's famous declaration: 'I had rather be right than President.'"

"Stenographic reports were taken of certain important discussions within the board shortly before I retired, and at the time the record was made the governor of the board stated before the board that he would furnish copies of the proceedings to myself and to another member who was retiring about the same time. Subsequently he changed his mind, denied making the promise, and notified me that the record of the meeting referred to would be kept under seal, and the promised copy has never been supplied. If he really thinks he made no such promise his memory has become dangerously feeble. The records of those meetings, if they have been preserved intact, may be interesting some day to an investigating committee."

"The Federal reserve system, despite its faulty administration, in some respects has been of tremendous service to the country; but from the very outset Secretary McAdoo and the more liberal elements of the board had to combat and oppose the reactionary faction which fought for the centralization rather than the democratization of banking power."

"In the latter part of 1915, while the European War was raging and world finances were in a delicate condition, three or four members of the board made a determined effort to secure the closing up of 4 of the 12 Federal reserve banks, their efforts to do so being finally defeated as a result of Secretary McAdoo's appeal to President Wilson and the effective action of the Attorney General."

"I think it will surprise you to know that again in the early part of this year the governor of the Federal Reserve Board, who hails from your adjoining State, proposed at a Federal Reserve Board meeting, and informally advocated, the disestablishment or removal of the only two Federal reserve banks located south of the States of Virginia and Missouri, namely, the Federal reserve bank of Atlanta and the Federal reserve bank of Dallas. I can not conceive what his purposes were, but in a letter

which I had occasion to address him under date of March 26, 1921, I said to him very plainly:

"I am convinced that the proposition to close those banks and to attach the sixth and eleventh districts to other districts would work a grievous and unpardonable injury to a vast section of our country, and furthermore that the agitation of such a plan at this time will result only in harm.

"The 12 Federal reserve banks as at present established have, I believe, vindicated fully their right to exist, and if properly supervised and administered they can be of untold value to our country and to the world, both now and in the years to come. I earnestly hope that they may never become the footballs of politics or the instrumentalities of unscrupulous or designing interests of any kind.

"I trust any effort to close up reserve banks and centralize further the money of the country may be as abortive now as were the efforts to this end in 1915, in which I vividly recall you joined, and which attempt was frustrated finally by action of the White House and of the Attorney General. It is far more important at this time to provide the reserve banks which we have with wise supervision and management and to have them function efficiently and adequately than it is to agitate for their disestablishment, removal, or increase."

"Facts which I have tried to give you briefly, and a multitude of others, were put before the board by me with names, dates, figures, times, places, and circumstances, sustained by official reports on file and accessible, but it seems that I failed to make at the time the desired impression upon my colleagues.

"I know of no way of dealing with what I regard as wrong but to fight it with all the fair means I can command, and with both fists, and to go on fighting. I confess that as this fight progressed I had but little hope except that in some way the battle might go before the people direct or through Congress. Experience had taught me to hope for little from the board itself. During the difficult uphill work of rooting out evils which had crept into our national banking system, all the more dangerous because they had been made respectable by long acceptance and uninterrupted usage, I had little or no help from the majority of the board or evidence of their sympathy. Struggling against tremendous political, social, financial, and journalistic powers in my efforts to rescue an important bank in Washington from mismanagement that had degraded it in certain respects to the plane of a pilfering bucket shop, and which had been openly violating nearly every provision of the national bank act or decent banking, and which I was endeavoring to convert into a useful, decent, and legitimately prosperous institution, I had the loyal, unwavering, and energetic support of Secretary McAdoo, but distinct indications of what I regarded as a discreditable lack of sympathy upon the part of certain board members. Their motive for their attitude I will not discuss. Striving to cure the disease of usury, which was not only oppressing and injuring the people but bringing the banks into disrepute, I had reason to know that President Wilson and Secretary McAdoo were supporting me cordially, but a majority of the members of the Reserve Board gave no sign or word of accord with my purpose, which was performed nevertheless, and the propriety of which time and conditions have fully vindicated.

"The heart-breaking and purse-breaking collapse in prices of farm products and other commodities were referred to in the board in terms of satisfaction, as indicating the success of its policy of deflation, and in response to my appeals of more than six months to apply the brakes and secure a more orderly recession in values, their response was as expressed by the governor of the board, to the effect that a balloon was merely being punctured to let the gas escape. My reply on this point was that wise and sensible men should try to bring a balloon laden with human lives and fortunes safely to earth by the intelligent use of valve ropes and ballast, not by precipitating a sudden and ruinous crash.

"Some months before my retirement as Comptroller of the Currency and ex officio member of the Reserve Board I was impressed with the exposed position of certain important institutions, and feared that in an emergency it might be difficult, if not impossible, for them to provide a sufficient amount of eligible paper to enable them to obtain the help they might need from the reserve banks in the event of a run upon them, and I therefore recommend to Congress in my annual report that in an emergency but under proper safeguards, securities other than Government bonds and business paper not now eligible, which might include, for example, warehouse receipts for corn, wheat, cotton, and merchandise, might become necessary in order to prevent failures and avert a financial crisis. The majority of the members of the Reserve Board of both political parties opposed my recommendation, and it was then that one of the speakers in doing so said in effect, with a heartlessness which to me was incomprehensible: 'Let 'em fail. Their condition is the result of their own mismanagement, and they can take the consequences of it.' I remonstrated that the failure of an important banking institution would not only bring ruin to the culpable officers, but

would mean wreck and disaster to many depositors and shareholders, and might also lead to widespread trouble elsewhere, but these considerations failed, apparently, to arouse the interest or concern of my distinguished colleagues.

"Upon another occasion when certain policies were being discussed in the Federal Reserve Board, which were being opposed on the ground that they might result in forcing the failure or retirement from business of many small State banks throughout the country, a certain member of the board, who has never been conspicuous for a knowledge of banking or an adequate comprehension of the difficulties which the country has had to face in the past year, spoke up and said in effect that 'if this plan means the failure of the small State banks, that need not stop it; in fact, if we can't get rid of the small State banks by any other method, it might be as well to get rid of them that way'—that is to say by their failure. It was the same statesman and member of the board who a few weeks later condoned the action of a large bank in a big city which had been discovered to have charged a valued customer the equivalent of about 200 per cent per annum interest on a loan of several hundred thousand dollars for about six months, with the remark that 'all banks charge those rates more or less.' His imputation upon the character and methods of the banks of the country I resented instantly, for a large majority of our banks are operated decently, honorably, and efficiently, and most of them would not countenance for a moment such interest rates as those which I deprecated, and which a colleague on the board sought to condone or justify.

"In the early days of my administration as Comptroller of the Currency I took some pains to determine what the experience of the national banks had been in the matter of loans to farmers. I know it will be gratifying to you to know that the managers of hundreds of country banks stated to me that the eventual losses on their loans to farmers had been strikingly small, a mere fraction of 1 per cent of their aggregate loans, and that although the farmer is not always prompt in meeting his notes at maturity, the farmer's loans are about the best and safest the banks make, despite the fact that it was principally the farmer who was usually required to pay the highest rate of interest and who suffered most from the excessive interest charges.

"While the Federal Reserve Board has been, during the past year, preaching and urging deflation with such vengeance it is interesting to note there has been no deflation in the salaries paid to the officers of the 12 Federal Reserve banks, especially to big banks. For example, in 1916 the salaries paid all officers of one reserve bank aggregated \$93,000, while the amount paid for officers' salaries for the same bank in 1920 was over \$400,000, and for 1921, I understand, there has been still further inflation in officers' salaries. The total pay roll of the Federal Reserve Bank of New York, in the period of acute deflation from 1919 to 1920 actually increased \$778,000 in that one year.

"I will not tire you at this time to give you illustrations of the extravagance and waste which have characterized certain features of the management of the reserve system. Perhaps there may be reasons why four officers of one reserve bank are allowed to draw salaries exceeding the aggregate salaries paid the President of the United States, the Vice President of the United States, the Chief Justice of the United States, and to Gen. Pershing, or why one officer of a reserve bank is given a salary while off duty and on a 12-months' leave of absence exceeding the aggregate salaries paid to three United States Senators for the same period. It also seems to me ridiculous for a reserve bank to employ at a salary exceeding that paid to a United States Senator or the editor in chief of many important newspapers in big cities, a man for whose employment an urgent argument was made by the reserve bank employing him that he was needed to touch up and give literary style to the press statements which the bank had occasion to give out from time to time, although high-priced men were already employed in the bank's publicity department who were supposed to be fully competent for such work.

"These high salaried officials of the reserve bank, men not particularly conspicuous either for talent or constructive achievement, have luxurious tastes. You probably saw in the newspapers that plans were filed in New York by the reserve bank there last Thursday for a temple of banking in New York City to cost, including land, it is estimated, \$16,000,000—probably more than the combined cost of the White House and Treasury Building at Washington, and the State capitols of a dozen States of the Union. This building with its luxurious and lavish appointment of marble and brass, its auditoriums, gymnasium, club quarters, restaurant de luxe, and objects of art will make Solomon's temple of old seem quite cheap by comparison.

"Not caring to be left behind, I am told the governor of the reserve board, some months ago, made quiet inquiries looking to the purchase of the expensive Metropolitan Club Building in Washington, sometimes referred to as the Millionaires' Club, with a view to converting it, if obtainable, into the Washington headquarters of the Federal Reserve Board and their employees. I hope these negotiations have fallen through.

"The reserve board can authorize a \$10,000,000 or a \$20,000,000 bank building when it pleases, but you can not get a \$50,000 post-office building or a customhouse or court house—however badly it may be needed—without passing a bill through both Houses of Congress.

"While members of the Cabinet and other important Federal officers are limited in their traveling expenditures (exclusive of transportation) to \$5 per day, officers and employees of the Federal reserve banks, I am advised, have been permitted to spend on their traveling expenses several times as much as the highest officials of the Government. But I will not weary you with further evidences of looseness or extravagance at this time.

"All this is history. What has been done can't be undone, but we can prevent it from being done again. We can stop it from continuing to be done—we, the people, masters in the last analysis and when it comes to the final showdown. That is why I am here and welcome and thank you for this opportunity to put the case before you, directors of public opinion and men and women who mold public opinion and make it irresistible. I say that the losses and the ruin which have attended the drastic shrinkage and deflation of values have been accentuated and made unnecessarily hard to bear by the stubbornly unwise and unwisely stubborn course of a majority of the members of the Federal Reserve Board. This will be borne out by the testimony of men of affairs, statesmen and bankers in this country and abroad. One of England's foremost thinkers and economists in discussing a few months ago what he describes as the extremely sudden slump which was overtaking the business world said:

"What, then, are the common denominators which best account for the universality of that disaster now impending over the new year? I have pointed out one, namely, the deflation of credits and currencies. It is enough to say that if this intentional and malevolent destruction of credit is followed to its logical conclusion men's hearts may well fail them everywhere for the days that are at hand.'

"The effects of the Federal Reserve Board's policies and criticism of them have been world-wide. To illustrate, a Tokyo, Japan, newspaper in April, 1921, in discussing trade between the United States and China, mentioned an instance of machinery which had been bought in the United States by a Chinese firm on a four months' draft, and then—

"When the Federal Reserve Board called in credits, the firm was told that they would have to pay cash on delivery. This almost threw them into bankruptcy.'

"The newspaper adds significantly:

"The Chinese memory is a long one.'

"I say to you, gentlemen, that the process of deflation has been accompanied by loss and suffering and danger which could have been avoided or greatly ameliorated by intelligent study and comprehension of the facts and of developments and consistent compliance with the teachings of such study. I say, and the record proves, the board was abundantly warned by the leaders of public opinion from many parts of the country, by able Members of both Houses of Congress, and by me as Comptroller of the Currency and ex-officio member of the board, on divers occasions of the necessity for the revision of their policies before the resulting losses should become irreparable. For example, on the 18th of October last I pointed out to the board some of the appalling shrinkages in values which had already taken place; for instance, the loss of \$500,000,000 in wheat, of two billions in corn, of a billion in cotton, and I used these words at that time:

"The plans and policies which have aided in bringing about deflation in the great staple commodities should be at once taken up for consideration and revised as far as may be necessary to meet present and changed conditions. If this is not done speedily I am fearful as to the consequence which may ensue.'

"Three days later, October 21, 1920, in a letter to the Secretary of the Treasury, who was also chairman of the Federal Reserve Board, I said:

"The strain upon the business fabric of the country is in some respects unparalleled, and I do feel that the time has come for the exercise of such salutary and constructive powers as may be at our command. * * *

"The situation * * * has become more aggravated of late, and unless relief can be found an increase in bank failures, I believe, will be inevitable.'

"All these remonstrances, however, appear to have fallen on deaf ears. I now say to you, my friends, that if the policies and methods hitherto governing the course of the reserve board are continued the purpose of assuring proper distribution of the available currency of the country to meet the needs of the people and of legitimate business will be defeated in large part certainly, perhaps entirely, but I believe that if the public understands the situation it will make its opinions and demands felt at Washington so strongly that the administration of the system will be revised and we will have a reserve board whose members will have an understanding of the needs of

the country and of all parts of it, as the local banker understands the needs of his own community and is sympathetically helpful to each great section as the local man is to his neighborhood and within his own territory. That is what we want and what we will have when the real conditions are understood.

"It is reported that the board has become much agitated over recent exposures and criticisms of its mismanagement, although I am now hopeful of better results from certain new elements recently introduced into its personnel. I have received a number of personal warnings, including a letter a few days ago from a gentleman of prominence more or less in touch with the situation, who wrote concerning the board's uncomfortable position:

"I have found a disposition initially to belittle your exposures, then to condemn you, and now to destroy you by "propaganda," and it is of the utmost importance that the facts as you have stated them should be gotten clearly into the comprehension of every business man, farmer, and laborer in the country."

"I might also add in this connection that the governor of the reserve board, at a meeting of the board which I attended shortly before my resignation, forgetting the proprieties, angrily threatened to defend himself with 'poison gas' in the event I should continue my attacks and exposures of board methods and policies. Concerning his threat to use 'poison gas,' I said to the governor of the board in a letter of March 26, 1921:

"I promptly informed you that as far as I and my administration of the comptroller's office were concerned or my relationship with the board, I had nothing whatsoever to conceal, and that you were quite at liberty to go ahead and publish anything you pleased, so long as you confined yourself to the truth. In fact, I rather urged publicity for our correspondence. I also informed you, in the presence of the board, that whatever methods of attack you might adopt, I should certainly not use "poison gas" or any other plan or method not consistent with honor or fair play, and I should not expect you to adopt unworthy methods of attack. However, I am, of course, abundantly ready for any attacks from you or anyone else, whatever form they may take; and your threat of "poison gas," etc., impresses me merely as an evidence of desperation on your part, which I beg to assure you gives me not the least annoyance or concern. My only regret will be the damaging reaction on you."

"At another time I may have something to say concerning efforts made to suppress information concerning Federal Reserve Board matters.

"This is practically the message I have to give you. I am trying to be useful to you and to the country by pointing out the weakness, as I see it, in a system controlling literally the heart's blood of our commercial life and prosperity, a weakness which is entirely curable in a structure designed and entitled to endure.

"I am anxious to have you think over what I have said, the merest bare outline of what I could say, and to have the results of your thinking on a matter touching the last one of you, your homes, and families passed on to your Representatives in Congress.

"We are living in a kind of era of good feeling, and this is not a party matter. As it happens, the needs of Democratic cotton growers of the South and of the Republican wheat growers of the West are the same, and the country is awake as never before to the truth that there can be no prosperity in this country unless the farmers—the great producers of wealth and buyers and consumers of commodities—are prospering. If the last five years have done nothing else, they have taught that. You may feel that in the South as you are, and Democrats as many of you are, you have a powerful say in directing matters of internal policies.

"But what I would like to impress on you would be incomplete if I did not go further. You people—you editors and farmers here in Georgia—may as well realize now that you will have to think not only for your own counties and States and country, but for the world. All I can learn from the past and from the intimate study of world conditions forced on me by the position I held, and can discern in the present, give me not a vision of enthusiasm but a deliberate conclusion based on irresistible facts and realities. That conclusion is that the United States must be for generations to come the dominant financial power of the world, and therefore the umpire for the world. We can not avoid it. Our financial and commercial resources will develop to an extent hitherto undreamed. Our banks and bankers and people will view an ever-widening horizon, not only of opportunity, but of duty and responsibility. To put this subject in its very lowest and most practical and prosaic aspect, your thoughts must follow your cotton bales, because the buyers of those bales are in England, France, Belgium, Germany, Japan, China, and Africa. On their ability to buy and pay for what you make in your fields here your prosperity largely depends. The nations are now woven and knitted together by the strongest threads of mutual interest and interdependence, so that nothing but the destruction of civilization can dissolve them. You must meet and deal with the facts as they are. Those facts

are that the United States, especially you cotton makers, are vitally concerned in the restoration of the world's peace and growth for increase of its own wealth and development, and that the world is dependent on the power, the wealth, and wisdom of the United States for restoration. Therefore, in doing your part to make this superb Federal reserve system of ours do its best work and fulfill its highest purposes you will be doing service not only for your own country and yourselves, but for humanity, for people of all lands and tongues.

"I am an optimist. I am taught by history and observation to trust confidently to the American people to retrieve their own mistakes and correct faults and strengthen weak places in their own Government and to find their way, sometimes after many divergencies and errors, the right, the generous, and noble course.

"Looking back 200, 100, or 50 years, I am forced to believe that we have learned much, and with wonderful speed, because 50 years is supposed to be but a short time in the life of a people. We are thinking more broadly and on higher planes. It is the business of those who have had special opportunity to learn of the internals of our life, or any part of it, to communicate their knowledge to the people as opportunity offers, and the duty of the people is to assimilate and weigh and consider what they hear and to give the results of their thought tongue and action.

"I have tried to outline some of the difficulties, it seems to me, I have seen in what now is the most important agency of our Government. I shall leave believing that I have not spoken in vain. My look backward, my knowledge of our people, and observation of present conditions combine to teach me to look forward with strong faith and brilliant anticipation. I believe we will make progress in the next 50 years along all lines of thought, discovery, development, and endeavor far surpassing the progress of the 50 years just past. I see much reason to believe that our country has met gloriously its last great emergency, has come bravely and with honor through this last great crisis. I hardly dare dream of what we shall be and do, because I know what we are and are doing reach so far beyond the visions and most brilliant hopes of the great and far-seeing men who founded and freed and established our country. I do dare, however, believe and humbly trust that with continued guidance of the Almighty Power our preeminence in the world will become secure and acknowledged without war or wrong to any people, will be accepted gratefully and gladly by all people, because it will be used always to make the world and its nations better and happier and to lead humanity forward to fulfillment of its vast, mysterious—I believe, magnificent—destiny."

The CHAIRMAN. Mr. Williams, you may proceed.

Representative MILLS. May we have copies of those speeches to-day, Mr. Williams?

Mr. WILLIAMS. Yes, sir.

In the autumn of 1919 we were in the midst of a whirl of speculation, not only in public securities of all sorts but in commodities. As Comptroller of the Currency I was sincerely concerned over the situation, and urged upon my associates in the Federal Reserve Board the importance of a conservative course. I did not agree with them that the wisest method of restraining speculation was simply to advance money rates.

The CHAIRMAN. What period are you talking about now?

Mr. WILLIAMS. In the autumn of 1919. I felt that there should be a greater discrimination exercised on the part both of the member banks and of the Federal reserve banks in the extension of credit. More than 18 months ago, on January 28, 1920, I filed a remonstrance and protest with the Federal Reserve Board against the manner in which the funds of the Federal reserve system were being concentrated in the East and loaned with what seemed to me to be an unjustifiable prodigality for speculative purposes.

Senator ROBINSON. Under what date was that?

Mr. WILLIAMS. January 28, 1920. In my letter I directed the board's attention to a concrete instance where the Federal reserve system was lending, directly and indirectly, to a certain banking institution in New York City about \$130,000,000. I said in my letter—

Representative **MILLS**. Mr. Chairman, I move to strike out the testimony with reference to the loan granted to a specific institution, on the ground that it is irrelevant and immaterial to the purposes of this inquiry.

Senator **HARRISON**. Mr. Chairman, he has not named any particular institution. He says in the East, and in New York City. That may be very relevant if he is going to show in other agricultural sections that it was not loaned proportionately at all. It seems to me it is very relevant, if that is what he is leading up to.

Mr. **WILLIAMS**. Mr. Chairman, right there, departing for a moment from the line I was pursuing, and in connection with Senator Harrison's statement, I would like to read this memorandum:

On page 222, volume 1, of the comptroller's annual report for 1920 will be found a statement showing the principal items in the assets and liabilities of the national banks at the time of the autumn call each year from 1913 to 1920, classified according to central reserve cities, other reserve cities, and country banks.

The following comparison gives the figures as to the banks in the three central reserve cities of New York, Chicago, and St. Louis as compared with the country banks; that is to say, with all national banks outside of the reserve and central reserve cities.

The comparison is made for September 8, 1920, and shows in one column the rediscounts and bills payable, and in another the loans and discounts, and in another the total assets exclusive of rediscounts.

This statement shows that the central reserve cities at that time had in rediscounts and bills payable \$896,000,000, and the country banks had \$596,000,000.

Representative **MILLS**. What date is this?

Mr. **WILLIAMS**. September 8, 1920. The rediscounts and bills payable for the central reserve cities was \$896,000,000, and for the country banks, \$596,000,000.

Representative **FUNK**. Mr. Williams, are you sure of that date, 1919; wasn't it 1920?

Mr. **WILLIAMS**. Yes; 1920.

The **CHAIRMAN**. What is the page and the report you are referring to?

Mr. **WILLIAMS**. Page 222 of volume 1 of the report of the comptroller for 1920.

Senator **HARRISON**. And what cities?

Mr. **WILLIAMS**. New York, Chicago, and St. Louis. Would you like to see the report, Mr. Chairman, showing those figures?

The **CHAIRMAN**. You may proceed. I will have it in a minute.

Mr. **WILLIAMS**. The total loans and discounts as of that date in the central reserve cities amounted to \$3,695,000,000, rediscounts and bills payable being about 24 per cent of loans.

Representative **MILLS**. What were those figures, the \$896,000,000 and the \$596,000,000?

Mr. **WILLIAMS**. Rediscounts and bills payable. Shall I proceed, Mr. Chairman?

The **CHAIRMAN**. Yes; go ahead.

Representative **SUMNERS**. It seems to me, before the witness begins, Mr. Chairman, that in giving these figures, if he desires to follow some system, that it would be well to have the statement of

the witness come uninterrupted by interrogation, and that the figures be incorporated in his statement in that manner.

The CHAIRMAN. Go ahead.

Mr. WILLIAMS. The total loans and discounts for the three central reserve cities of Chicago, New York, and St. Louis, as of the date mentioned, amounted to \$3,695,000,000, showing that an amount equal to 24 per cent of them was rediscounted or borrowed. The total assets, exclusive of rediscounts, were \$5,471,000,000, the ratio of borrowed money being 16 per cent of their assets, excluding rediscounts.

In the "country" banks the rediscounts and bills payable were \$596,000,000, out of a total of loans and discounts of \$5,853,000,000, or 10 per cent; the total assets exclusive of rediscounts were \$9,958,000,000 in the country banks, the ratio of borrowed money to total assets being 6 per cent.

On September 12, 1919, the national banks in the three central reserve cities of New York, Chicago, and St. Louis held \$497,000,000 of rediscounts and bills payable and the country banks \$437,000,000; the loans and discounts in the three central reserve cities of New York, Chicago, and St. Louis were \$3,144,000,000, rediscounts and bills payable being 16 per cent of total loans, excluding rediscounts. The country banks had in loans and discounts \$4,759,000,000, the amount of rediscounts and bills payable being only 9 per cent of total loans and discounts.

Of these rediscounts and bills payable, I should estimate about 90 per cent were gotten from the Federal reserve banks. This statement shows that in the autumn of 1920, although the "country" national banks were carrying \$2,158,000,000 more of loans and discounts than the national banks of New York, Chicago, and St. Louis, yet the banks in the three big cities were being accommodated principally by the Federal reserve banks, with \$300,000,000 more than the country banks, which had become so heavily loaded in their efforts to care for their communities.

Mr. Chairman, may I insert the tabulation in the record?

The CHAIRMAN. Without objection, it may go in.

(The tabulation referred to is as follows:)

Statement showing the borrowings, by rediscounts and bills payable, of the national banks in New York, Chicago, and St. Louis, as compared with the borrowings of the "country" national banks for Sept. 8, 1920, and Sept. 12, 1919.

[Report of Comptroller of the Currency for 1920, p. 222, Vol. I.]

[In millions.]

	Rediscounts and bills payable.	Total loans and discounts. ¹	Total assets, exclusive of rediscounts.	Ratio of rediscounts and bills payable to total assets.
Sept. 8, 1920:				<i>Per cent.</i>
Central reserve cities (New York, Chicago, St. Louis).	\$896	\$3,695, — 24 per cent, rediscounted....	\$5,471	16
Country banks.....	596	\$5,853, — 10 per cent, rediscounted....	9,958	6
Sept. 12, 1919:				
Central reserve cities (New York, Chicago, St. Louis).	497	\$3,144, — 16 per cent, rediscounted....	5,695	8.7
Country banks.....	437	\$4,759, — 9 per cent, rediscounted.....	9,167	4.7

¹ Nearly all with Federal reserve banks.

Mr. Chairman, shall I proceed now with my narrative?

The CHAIRMAN. Yes; unless there are some questions at this point.

Representative MILLS. You are just giving the figures for one month?

Mr. WILLIAMS. I gave them for September 8, 1920; and I also gave them for September 12, 1919. I think I gave all of them.

Shall I proceed now with my narrative, Mr. Chairman?

The CHAIRMAN. Yes.

Representative MILLS. Will you give those same figures for June, 1921?

Mr. WILLIAMS. I can get them for you.

Representative MILLS. Well, will you, and give the same percentages?

Mr. WILLIAMS. I can get them for you, if you desire them.

Representative MILLS. Will you get them, and give the same percentages?

Mr. WILLIAMS. Yes; if the commission desires them. Shall I proceed?

The CHAIRMAN. Yes.

Mr. WILLIAMS. I was about to read from a letter which I addressed to the Federal Reserve Board on January 28, 1920. I said in that letter:

Is it not a little disconcerting, not to say alarming, to find that the Federal reserve bank of New York had loaned or rediscounted for the ——— on December 31, 1919, an amount equal to nearly six times the capital of the Federal reserve bank of New York—about 250 per cent of the capital and surplus of the Federal reserve bank of New York—and that more than one-seventh of all the bills discounted for all members and all those purchased in the open market at the end of December, 1919, were for the benefit of the ———?

These figures also show that the Federal reserve bank of New York was lending to the ——— at the close of December, 1919, an amount in excess of the total loans and discounts made as of December 26, 1919, to all of their member banks by either the Federal reserve banks of St. Louis or Minneapolis or Kansas City or Richmond or Atlanta and about twice as much as the aggregate of all loans and discounts and purchased paper held at that time by the Federal reserve bank of Dallas.

The CHAIRMAN. Right there, Mr. Williams, would it not be fairer to compare loans and discounts with resources than to compare absolute figures with New York and absolute figures for other districts?

Mr. WILLIAMS. May I suggest, Mr. Chairman, that it might be easier for you to comment on the statement after it is concluded; perhaps some of your inquiries may be answered as I proceed. I shall be very glad, however, to answer any question that comes up.

The CHAIRMAN. I am asking you if it would not be fairer for you to make that comparison instead of the one that you are making.

Mr. WILLIAMS. I am making some other comparisons as I go along.

The CHAIRMAN. If that is your answer to the question, I am satisfied.

Mr. WILLIAMS (reading):

The ——— not only borrowed back the entire amount of its reserve balance, but is also borrowing from the New York reserve bank a further sum equal to about four times the total capital of the Federal reserve bank of New York. Frankly, are you not surprised that the officers of the reserve bank of New York should approve these transactions?

Governor, this is a concentration of the funds of the reserve system with one debtor bank, conspicuous for its speculative operations and promotions, which, in my judg-

ment, is not only not justified but distinctly dangerous, and I feel it my duty to register my strong dissent from a continuance of such conditions as these by writing you, as I am doing, as an ex officio member of the board.

Representative MILLS. Now, Mr. Chairman, I renew my motion to strike out that portion of the testimony which Mr. Williams has just read, as irrelevant and immaterial under the terms of the resolution appointing this commission.

Representative FUNK. Mr. Chairman, a number of times we have had complaints made here by people representing the agricultural interests that they have been discriminated against in the matter of accommodation by the Federal reserve banks. I think this statement is very pertinent in view of the complaints or charges which have been made.

The CHAIRMAN. I think if objection is made to this testimony it must be in the form of objection that the chairman can pass upon and decide and which can be appealed from, rather than in the form of a motion to strike out testimony.

Representative MILLS. Mr. Chairman, I did not object—although I knew perfectly well what Mr. Williams's testimony was going to be, because it appears elsewhere—at the time he started to give it, because I thought the commission should have an opportunity to know the nature of the testimony. In presenting my objection it seems to me there is no recourse left to me except a motion to strike out.

The CHAIRMAN. In order to bring the matter before the commission, I will put the matter to a vote, and in voting those who favor striking out the testimony will vote aye, and those who favor not striking out the testimony will vote no.

(The question was thereupon put by the chairman on viva voce vote.)

The CHAIRMAN. The motion is lost.

Representative MILLS. Then let me ask you, Mr. Williams, whether you are not giving absolute figures there, without any reference whatsoever to the assets of the Federal reserve banks in question, without any reference to the assets of the borrowing bank, and without any reference to the deposits carried by the New York banks with their Federal reserve bank, as compared with the deposits carried by the banks in other cities?

Mr. WILLIAMS. I will give some other figures later on, Mr. Mills.

Representative MILLS. But you have not to date, have you?

Mr. WILLIAMS. They are in this statement.

Representative MILLS. But you have not to date, have you; those are absolute figures that you have given?

Mr. WILLIAMS. Yes; in the paragraph which I have just given, I made a comparison between the capital of the Federal reserve bank in New York and the percentage of its capital and surplus which was borrowed by one institution.

Representative MILLS. Now, will you please explain to this commission what the basic line is?

Mr. WILLIAMS. I see several members of the Federal Reserve Board present here, including the governor. I should prefer that they answer that question; that that question be answered by members of the Federal Reserve Board.

Representative MILLS. I think I should have an answer to the question. The witness is appearing here as an expert, and he should be able to tell what the basic line is.

Mr. WILLIAMS. I do not know on what principle the basic line is now being figured at New York; the basic line has varied in different districts.

Representative MILLS. In what way has it varied?

Mr. WILLIAMS. I should prefer to have that come from the board members themselves. I am appearing here, not as a member of the board now.

Representative MILLS. You are appearing as an expert.

Mr. WILLIAMS. No; I do not understand that I am appearing here as an expert. I understand that I am appearing here as the former Comptroller of the Currency. I would prefer that the members of the Federal Reserve Board answer that question, rather than have me go into such details of their administration.

Representative MILLS. I am not asking you to pass on the administration; I am asking you to define what is meant by the basic line.

Mr. WILLIAMS. I do not know what the basic line is at the present time in each of the 12 reserve districts.

Representative MILLS. I am asking you what the term "basic line" means.

Mr. WILLIAMS. You ask me what the term "basic line" means?

Representative MILLS. Yes; what does the term "basic line" mean?

Mr. WILLIAMS. The term "basic line" as here applied means the "line" or amount of loans which the several Federal reserve banks regard as the "line of rediscount," which could be properly apportioned from their total resources to each member in each district.

Representative MILLS. In other words, the Federal Reserve Board attempts to define, generally speaking, what each member bank in a particular district is entitled to borrow from its Federal reserve bank?

Mr. WILLIAMS. In conjunction with the Federal reserve banks of the various districts.

Representative MILLS. Exactly.

Mr. WILLIAMS. Yes, sir.

Representative MILLS. Now, do you know whether in attempting to determine that variation, or the allocation to each particular bank—whether any formula was adopted?

Mr. WILLIAMS. I think there were several formulæ adopted. That is a matter of detail which I would prefer should be answered by the members of the Federal Reserve Board.

Representative MILLS. Do you, or do you not, know whether formulæ were adopted?

Mr. WILLIAMS. Yes; they were established on certain bases.

Representative MILLS. What was the basis for the establishment of those formulæ?

Mr. WILLIAMS. I would have to look up the record for that. The basis has been changed from time to time.

Representative MILLS. Generally speaking, what were the elements that entered into that basis?

Mr. WILLIAMS. I decline to answer that. The secretary of the board is present, and you can get that information from him, if you desire it.

Representative MILLS. I am trying to get it from you; I am not trying to tie you down to any particular percentage; but I am asking you what particular elements went into the formulæ that made the basic line?

Mr. WILLIAMS. I understand several elements entered into it. But I would desire not to discuss that, when the members of the board are present and can answer. It was not my duty to prepare those formulæ.

Senator ROBINSON. Were those formulæ in writing?

Mr. WILLIAMS. My recollection is they were prepared by the respective Federal banks with or without the approval of the board. Now, I assume that the board approved the formulæ in the several districts.

Senator ROBINSON. Were they reduced to writing, Mr. Williams?

Mr. WILLIAMS. Presumably they were, and they can be furnished to your commission.

Senator ROBINSON. Did the board keep minutes of their proceedings when they made these formulæ, or do you know about that?

Mr. WILLIAMS. The basic line was established in different Federal reserve districts and they varied.

Senator ROBINSON. You have not possession of the records of the minutes of those meetings where action was taken establishing the basic lines?

Mr. WILLIAMS. No; I have not.

Representative MILLS. Did they take into consideration different elements in different districts?

Mr. WILLIAMS. You can ask them that; I assume they did.

Representative MILLS. Do you mean to say you have no knowledge of it?

Mr. WILLIAMS. I assume they did.

Representative MILLS. Have you any knowledge of it?

Mr. WILLIAMS. I assume they did, but whether they did or not, those bases varied.

Representative MILLS. I am asking you whether you have any knowledge of it; that, it seems to me, you can answer by yes or no.

Mr. WILLIAMS. I do not know what they are at this time.

Representative MILLS. I am asking you whether you have any knowledge—

Mr. WILLIAMS (interposing). I had knowledge at the time it was desirable for me to have knowledge, in a general way. I did not follow the details of the basic lines in detail. I knew of it in a general way.

Representative MILLS. I will now ask you whether, in fixing the basic line for the various districts, the elements taken into consideration were the same?

Mr. WILLIAMS. I do not understand that they were the same. I think there were variations in the different districts. That is my impression.

Representative MILLS. What elements would normally be taken into consideration in fixing those basic lines?

Mr. WILLIAMS. I would prefer not to answer that question. The gentlemen familiar with the details are in the room, and can answer.

Representative MILLS. Let me ask you—I think it is important to know what the basic line is—

Mr. WILLIAMS (interposing). The governor and secretary of the Federal Reserve Board are present.

Representative MILLS. I would like to have Mr. Williams explain what the basic line is. He has told us, in a general way, just the method used in determining what proportion of the funds of the Federal reserve bank the member bank of a particular district is entitled to. Now, I would like to know what elements would be considered in determining—

Representative SUMNERS (interposing). Mr. Chairman, I submit that the question has been asked a half dozen times by Mr. Mills, and the witness has given the answer he desires to go into the record; and I submit that further time should not be taken up in this manner.

Senator ROBINSON. I make the further point that there is a record of this matter easily obtainable.

Representative MILLS. I withdraw the question, in view of the fact that the witness declines to answer it.

Senator HARRISON. He defined it.

Representative TEN Eyck. I desire to bring out this point: The witness is trying to define his position. If, later on, the board desires to justify what they have been doing, and bring to us the basis on which the basic line is determined, we would be glad to hear from them what the basic line is. But I believe what the witness is giving us today is his general idea of the basic line of the credit of the country.

Representative MILLS. Mr. Williams, is it not a fact that on November 15, 1920, the date to which you have referred, the banks to which you refer in New York—

Mr. WILLIAMS (interposing). May I interrupt you? I did not refer to that date.

Representative MILLS. Well, on the date to which you did refer.

Mr. WILLIAMS. All right.

Representative MILLS. The banks in New York had borrowed only 142 per cent of their basic line, whereas the member banks, not including the merely five largest borrowers in the case of the New York district, and of the Richmond district, had borrowed 120 per cent of their basic line?

Mr. WILLIAMS. You are wrong; you are discussing one date, and I am discussing another, as I understand it.

Representative MILLS. What is your date?

Mr. WILLIAMS. I am discussing December, 1919; you are discussing November, 1920.

Representative MILLS. You are right. Your letter to the board is dated what?

Mr. WILLIAMS. January 28, 1920.

Representative MILLS. And the letter that I am referring to is the letter dated January, 1921.

Mr. WILLIAMS. I do not know what you are referring to, Congressman.

Representative MILLS. You have had considerable correspondence with the board?

Mr. WILLIAMS. I have had a good many letters; yes, sir.

Representative MILLS. And you have made this same charge a year later?

Mr. WILLIAMS. Can I end the narrative I was making first of the autumn of 1919, before we get into 1920?

Representative MILLS. Yes, surely.

The CHAIRMAN. I would like to ask a question with reference to the basic line: At the time that you assumed that these basic lines

were approved by the Federal Reserve Board, do you know whether they were or not?

Mr. WILLIAMS. I do not recall the details, Congressman.

The CHAIRMAN. You were a member of the Federal Reserve Board at the time these basic lines were established?

Mr. WILLIAMS. I was.

The CHAIRMAN. But you do not know whether the basic lines were approved—

Mr. WILLIAMS (interposing). I recall that the basic lines as established were a subject of discussion; whether they were passed upon in the case of each district I do not know.

Representative MILLS. Will you refresh your recollection before you appear before the commission to-morrow and let us know?

Mr. WILLIAMS. I have not been asked to appear before the commission to-morrow. You can get that from the board.

Senator HARRISON. Probably the board could get it easier than you could.

Mr. WILLIAMS. They could. They have declined to give me information I have asked for, and reminded me that I am no longer a member of the board.

The CHAIRMAN. You were a member of the board at the time these basic lines were established?

Mr. WILLIAMS. Were established and discussed.

The CHAIRMAN. Very well. You may proceed.

Mr. WILLIAMS. To continue my letter to the Governor of the Federal Reserve Board of January 28, 1920 [reading]:

I trust you will find time to make a careful analysis of this situation. With such facts before us * * * as I have here undertaken to bring to your attention, our responsibility becomes serious and very real. I think it would be well to apprise the board of this situation.

That is the end of the quotation from my letter to the governor of the Federal Reserve Board.

I hear the board has tried to produce the impression that my figures were not correct, although they seem to have carefully avoided specific denials of them. I therefore beg leave now to present the following table of figures drawn from official statements of the Federal Reserve Board as published on pages 96, 97, and 98 of the Federal Reserve Bulletin of January, 1920.

I have a statement showing the total of all bills discounted and loans made, and also bills purchased by six Federal reserve banks; also showing rediscounts and bills taken from other reserve banks by these six reserve banks as of December 26, 1919.

This shows the Federal reserve banks of Richmond, Atlanta, St. Louis, Minneapolis, Kansas City, and Dallas.

The information called for is, in the first instance, the number of member banks in the district, December, 1919; the second item is the total bills discounted and loans made, including those discounted for other reserve banks; the third item is the bills bought in open market, including bankers' acceptances bought from other reserve banks; the fourth item is loans to other reserve banks through bills discounted or purchased from them of bankers' acceptances, included in items 2 and 3; and the fifth is the amount borrowed from other reserve banks.

In that total we find that the number of member banks in the Richmond district was 584; in the Atlanta district, 427; in the St.

Louis district, 536; in the Minneapolis district, 921; in the Kansas City district, 1,039; and in the Dallas district, 958.

The total bills discounted and loans made, including those discounted for other reserve banks, were in the Richmond district, \$109,000,000; in the Atlanta district, \$90,000,000; in the St. Louis district, \$78,000,000; in the Minneapolis district, \$70,000,000; in the Kansas City district, \$87,000,000; in the Dallas district, \$54,000,000.

Bills bought in open market, including bankers' acceptances bought from other reserve banks, in the Richmond district, \$16,000,000; in the Atlanta district, \$16,000,000; in the St. Louis district, \$37,000,000; in the Minneapolis district, \$14,000,000; in the Kansas City district, \$20,000,000; in the Dallas district, \$8,000,000.

Loans to other reserve banks through bills discounted or purchased from them of bankers' acceptances, included in items 2 and 3, in the Richmond district, \$5,000,000; in the Atlanta district, \$5,000,000; in the St. Louis district, \$29,000,000; none in the Minneapolis district; in the Kansas City district, \$10,000,000; in the Dallas district, \$6,000,000.

The fifth item, borrowed from other reserve banks, in the Richmond district, none; in the Atlanta district, none; in the St. Louis district, none; in the Minneapolis district, none; in the Kansas City district, \$13,000,000; in the Dallas district, none.

Representative MILLS. What is the date of that?

Mr. WILLIAMS. December 26, 1919. On the right of this table I have a column showing the amount loaned by the New York reserve bank as of December 26, 1919, to one banking institution in New York City, including its acceptances bought; that item at that time was about \$130,000,000.

I will leave this statement, Mr. Chairman, if you desire it for the record.

The CHAIRMAN. Without objection it may go into the record.

(The statement referred to is here printed in full, as follows:)

Statement showing total of all bills discounted and loans made and also bills purchased by six Federal Reserve banks; also showing rediscounts and bills taken from other reserve banks by these six reserve banks, as of Dec. 26, 1919.

[In millions of dollars.]

	Federal reserve bank of—					
	Richmond.	Atlanta.	St. Louis.	Minneapolis.	Kansas City.	Dallas.
1. Number of member banks in district December, 1919.....	584	427	536	921	1,039	958
2. Total bills discounted and loans made (including those discounted for other reserve banks).....	109	90	78	70	87	54
3. Bills bought in open market (including bankers' acceptances bought from other reserve banks).....	16	16	37	14	20	8
4. Loans to other reserve banks through bills discounted or purchased from them of bankers' acceptances included in 2 and 3.....	5	5	29	.....	10	6
5. Borrowed from other reserve banks.....	None.	None.	None.	None.	13	None.

Amount loaned by New York reserve bank December 26, 1919, to one banking institution in New York, including its acceptances bought, \$130,000,000.

Mr. WILLIAMS. The amount loaned, as I say, by the New York reserve bank to one institution was \$130,000,000.

The figures which I gave regarding the huge borrowings about the same date by the institution to which I have referred are added in a separate paragraph at the bottom of the above table.

The official reports show that the reserve bank of New York had loans and discounts outstanding, exclusive of acceptances at the time indicated, to the borrower to which I refer, amounting to over \$118,000,000.

This is more than twice as much as the Federal reserve bank of Dallas was lending on bills payable and rediscounts to all the banks in that district. In fact, it was \$64,000,000 more than the Dallas reserve bank was lending to all its member banks combined in that entire district, including the State of Texas and parts of Louisiana, Oklahoma, Arizona, and New Mexico.

It was \$48,000,000 more than the Federal reserve bank of Minneapolis was lending to all the member banks in that district.

It was \$40,000,000 more than the St. Louis bank was lending to the banks in that district, including the principal part of Missouri, the State of Arkansas, and parts of Illinois, Indiana, Kentucky, Tennessee, and Mississippi.

It was \$31,000,000 more than the Kansas City reserve bank was lending to the member banks in that district. It was \$28,000,000 more than the Federal reserve bank of Atlanta was lending to all of its member banks in Georgia, Florida, Alabama, and parts of Louisiana and Tennessee; and \$9,000,000 more than the Federal reserve bank of Richmond was lending to all of its member banks in Virginia, North Carolina, South Carolina, Maryland, District of Columbia, and parts of West Virginia.

A further analysis of the situation at that time shows that two of the Federal reserve banks in the East on December 26, 1919, had augmented their own resources by rediscounting with or selling acceptances to other reserve banks to the extent of over \$97,000,000.

The only bank in the West which at that time had rediscounted or sold acceptances to other reserve banks was the Kansas City bank.

The CHAIRMAN. What is the date of this statement?

Mr. WILLIAMS. December 26, 1919.

Representative MILLS. Of course, you do not know for what purposes the loan was made to that particular institution, do you?

Mr. WILLIAMS. To what institution?

Representative MILLS. You have referred to a loan of \$130,000,000 to one institution?

Mr. WILLIAMS. I have analyzed the investments of that institution to some extent.

Representative MILLS. You do not know the purposes of the loan?

Mr. WILLIAMS. I know what was done with the money to a large extent.

Representative MILLS. With that \$130,000,000?

Mr. WILLIAMS. I suppose it was used in their general funds. You can hardly separate the funds of an institution of that sort and say what was done with them. Suppose one-tenth of its assets are loaned for purely legitimate business, and that nine-tenths are loaned for speculative purposes, you can hardly segregate the assets and say that a certain amount of money borrowed was not used for speculation and was used for legitimate business.

Resuming, Mr. Chairman, the only bank in the West which at that time had rediscounted or sold acceptances to other reserve banks was the Kansas City bank, the amount being \$13,000,000, and the banks which furnished this money at that time to the eastern banks were the Federal reserve banks of Richmond, Atlanta, St. Louis, Kansas City, Dallas, and San Francisco, as well as the Federal reserve banks of Chicago and Cleveland. The Federal reserve bank of Kansas City had taken nearly \$10,000,000 of acceptances from other banks which nearly offset its \$13,000,000 of rediscounts with them. The New York reserve bank at that time was not furnishing funds to any other bank either by rediscounts or by the purchase of acceptances from them.

Representative SUMNERS. What was the character of business of that concern, Mr. Williams?

Mr. WILLIAMS. In the statement which I just read I gave it.

Representative SUMNERS. I withdraw the question. I was out of the room for a few minutes.

Senator HARRISON. Did he state?

Mr. WILLIAMS. I said:

Governor, this is a concentration of the funds of the reserve system with one debtor bank, conspicuous for its speculative operations and promotions, which, in my judgment, is not only not justified but distinctly dangerous, and I feel it my duty to register my strong dissent from a continuance of such conditions as these by writing you, as I am doing, as an ex officio member of the board.

Representative HARRISON. Do you know what per cent of those loans were all speculative?

Mr. WILLIAMS. Well, in communications which I imagine it will not be desirable to bring into a public hearing those facts were analyzed pretty thoroughly.

The CHAIRMAN. Did you propose any action on the part of the Federal Reserve Board?

Mr. WILLIAMS. Did I propose any action on the part of the Federal Reserve Board to remedy the situation?

The CHAIRMAN. To control the situation.

Mr. WILLIAMS. I did.

The CHAIRMAN. When?

Mr. WILLIAMS. At that time.

The CHAIRMAN. Did you make any motions at that time—

Mr. WILLIAMS (interposing). I communicated with the governor of the board.

The CHAIRMAN (continuing). Relating to any action on the part of the Federal Reserve Board?

Mr. WILLIAMS. I wrote the letter to the governor of the board and asked him to bring it before the board.

The CHAIRMAN. But you did not as a member of the board make any motion proposing any action by the board?

Mr. WILLIAMS. I several times urged that the matter be given attention, but I do not recall that I made a formal motion to that end, as I felt I had done all that could be incumbent upon me under the circumstances.

The CHAIRMAN. In what way do you think the Federal Reserve Board could have acted at that time to correct this situation within its legal powers?

Mr. WILLIAMS. I think it was well within its legal powers—I had urged the board to make an examination on its own account of that institution. And I did that repeatedly.

The CHAIRMAN. Had you made any examination of the bank?

Mr. WILLIAMS. I had not. It was not under my supervision, except as a member of the board indirectly.

The CHAIRMAN. This was not a national bank?

Mr. WILLIAMS. It was not.

Senator HARRISON. Well, did they make the examination?

Mr. WILLIAMS. They did not, as I understand it. They sent one or two of their men into the institution along with the State examining force, and they stayed there a few days and retired.

Representative MILLS. What do you contend that these figures show?

Mr. WILLIAMS. May I ask what your question is? What figures?

Representative MILLS. What do you contend that these figures show, is my question.

Mr. WILLIAMS. I will answer that. These figures show that this is a concentration, as I say in my letter:

This is a concentration of the funds of the reserve system with one debtor bank conspicuous for its speculative operations and promotions which, in my judgment, is not only not justified but distinctly dangerous.

Representative MILLS. Well, do they show that?

Mr. WILLIAMS. I think they do.

Representative MILLS. If you do not make any relative comparison, but simply take actual figures and make a comparison of New York City with Dallas, Tex.?

Mr. WILLIAMS. May I inquire, Congressman, whether you have seen my correspondence with the board with regard to this institution?

Representative MILLS. I have not.

Mr. WILLIAMS. Well, I think it would answer a good many questions that suggest themselves to you, if you care to look at it.

Representative MILLS. I am speaking of the general figures. I am not speaking of this particular institution. Do you think that in comparing what you contend is an undue concentration of money in New York City it is fair to take absolute figures and not compare relative figures in taking Dallas and New York City?

Mr. WILLIAMS. I think you will find my correspondence with the board does deal—

Representative MILLS (interposing). That is not before this committee.

Mr. WILLIAMS. Well, I imagine your committee can get the portion of the correspondence with reference to it. You can get that from the board.

Representative MILLS. Am I to understand that you do not care to answer that question?

Mr. WILLIAMS. May I inquire exactly what your question is, Congressman?

Representative MILLS. I ask you whether in comparing the amount of money loaned by the New York reserve bank with the amount of money loaned by the Dallas bank it is fair to take absolute figures rather than relative figures?

Mr. WILLIAMS. Well, please bear in mind that my communications were addressed to the board, which was in full possession of the absolute as well as the relative figures, and there could be no question of their not being informed on that point.

Representative MILLS. You are now testifying before a committee that has not got the relative figures, Mr. Williams.

Mr. WILLIAMS. Well, the committee can obtain them, if you desire them, I assume, Congressman.

Representative MILLS. But you simply want to give the absolute figures?

Mr. WILLIAMS. Well, as far as I am concerned, you can have any figures—or as far as I am advised, you have access to all of those figures. And the board in considering my correspondence had before it both the absolute and the relative figures.

Representative MILLS. Will you say this, Mr. Williams, that for this committee to get a correct picture of the situation it should have the relative figures as well as the absolute figures?

Mr. WILLIAMS. I think it would be well for the committee to get a great deal of information which it is not my province to lay before it.

Representative MILLS. All right.

Senator HARRISON. May I ask you this: I have forgotten just how the Federal reserve act reads. Does it sanction by law the Federal Reserve Board to rediscount paper that is purely for speculative purposes?

Mr. WILLIAMS. It can not.

Senator HARRISON. Without them acting in direct violation of the law?

Mr. WILLIAMS. Well, of course, the Federal reserve act provides that paper, business paper of a certain kind, is eligible for rediscount. It also provides that member banks may borrow from reserve banks upon the security of Government bonds. There is no provision of the Federal reserve act, however, as it stands at present, which would prevent a speculative bank, if it chose to do so, from borrowing \$10,000,000 of Liberty bonds from an individual and pledging those bonds as collateral with the Federal reserve bank and obtaining \$10,000,000 and loaning it to its president or the vice president of the borrowing bank for their own speculative operation.

Senator HARRISON. I just notice section 13 of the Federal reserve act. Is this the provision that you had in mind [reading]:

But such definition shall not include notes, drafts, or bills covering merely investments issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States.

Mr. WILLIAMS. I think that some of the questions which will naturally suggest themselves to yourself, Mr. Chairman, and other members of the committee, will be answered as I proceed.

Representative MILLS. Except I simply want to point out now to the chairman of the committee the dangers which arise from allowing this kind of testimony to go in. We now have your absolute assertion that \$130,000,000 were loaned for speculative purposes to a bank which is not named.

Mr. WILLIAMS. I did not say that that \$130,000,000 was loaned for speculative purposes.

Representative MILLS. Well, the inference is clear, and the bank is not named; and there is no means for this committee or anyone else ascertaining whether that statement is true.

Mr. WILLIAMS. Well, please let me correct you if you undertake to quote me. I did not say that that \$130,000,000 was borrowed for speculative purposes. I did say that the institution to which I referred had been conspicuous for its speculative operations.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. Proceed.

Representative MILLS. Isn't it also true that that particular institution to which you refer was one of the largest lenders for the purposes of exporting grain and other farm products to Europe at that time?

Mr. WILLIAMS. I do not know what amount it had in foreign business or in exporting corn or wheat or anything else. I don't know what the figures were.

Representative MILLS. You analyzed the figures, you said.

Mr. WILLIAMS. I did not say that I analyzed those figures. I analyzed—well, if you wish to have it, the analysis which I made is a matter of record, Congressman, and it is in the possession of the Federal Reserve Board, and as far as I am concerned, I have not the slightest objection to the Federal Reserve Board laying before this committee any communication which it has received from me at any time on any subject.

Representative MILLS. But you decline to state whether that particular institution is one of the largest lenders for the purpose of export trade?

Mr. WILLIAMS. I imagine that it is, and also engaged in many other activities.

Representative MILLS. Well, that answers my question.

Mr. WILLIAMS. A further analysis shows that at the end of December, 1919, the amount which the Federal reserve bank of New York was furnishing on loans and rediscounts and through the purchase of its acceptances to one banking institution in New York City, was about \$130,000,000.

This amount furnished by the Federal Reserve System to one New York institution exceeds by \$68,000,000 the total amount of loans and discounts plus "bills and acceptances purchased" in the open market, by the Federal reserve bank of Dallas. It exceeds by \$46,000,000 the bills discounted and acceptances and bills purchased by the reserve bank of Minneapolis; and is \$15,000,000 more than the aggregate of all loans and discounts and bills and acceptances held on December 26, 1919, by the Federal reserve bank of St. Louis. Advances made by the reserve bank of New York to that one institution on December 31, 1920, through rediscounts and acceptances, etc., also largely exceeded the total amount of money which was being loaned on December 26, 1919, to all of the member banks in their respective districts on rediscounts or on bills and acceptances purchased by the Federal reserve bank of Atlanta or Richmond.

I have also asserted, and the official figures will prove, that many millions of dollars of the funds of that particular debtor institution were being used and employed in loans to executive officials of the borrowing institution and to syndicate enterprises in which they were heavily interested.

Representative MILLS. Do you consider that relevant to the purposes of an agricultural inquiry?

Mr. WILLIAMS. It is not for me to say. I consider it relevant; but it is not for me to pass upon that, Mr. Congressman. It is for you and the committee to pass upon that.

Senator HARRISON. Mr. Chairman, it is certainly relevant. They are not lending for agricultural purposes. They are lending to executive officers in a bank which was conducting a speculative business.

Mr. WILLIAMS. The records show conclusively that the Federal reserve bank advanced money liberally and practically continuously, in flush times and hard times, to certain large financial institutions in New York City which were notorious for their speculative activities, and that these institutions loaned many millions of their funds to their own executive officers and other officials and to the syndicates and enterprises in which these officers were heavily interested. These loans which were in many cases classed as "demand loans" continued to be carried along at low or moderate rates of interest while other customers of the bank engaged in legitimate business had their loans peremptorily called and payment insisted upon to an extent which brought ruin and failure to some and crippled others.

Loans to their own officers and their special enterprises or syndicates were in some cases studiously camouflaged or concealed. These abuses were brought by me to the attention of the Federal Reserve Board, but, as far as I know, no remedial action was taken.

The CHAIRMAN. May I ask you a question there. Some of these banks were national banks, I take it?

Mr. WILLIAMS. The one that I have just been discussing, to which this large loan was made, was not a national bank.

The CHAIRMAN. Well, I supposed that you were now discussing the general situation with respect to loans made by New York banks.

Mr. WILLIAMS. Yes.

The CHAIRMAN. Some of these banks were national banks, were they?

Mr. WILLIAMS. They were.

The CHAIRMAN. And as such they were subject to examination?

Mr. WILLIAMS. They were.

The CHAIRMAN. Examination by you as comptroller?

Mr. WILLIAMS. They were.

The CHAIRMAN. Did you take any action as comptroller to correct the situation to which you have referred?

Mr. WILLIAMS. I did, earnestly.

The CHAIRMAN. In what way?

Mr. WILLIAMS. By having the examiners appear before the boards of directors of the banks, call their attention to the matters subject to criticism, and urge reform.

The CHAIRMAN. Well, you took no action except to urge reform upon these banks?

Mr. WILLIAMS. Well, I could not deny them credit. The Federal reserve bank had the right, if it cared to exercise it, to decline or to curtail the granting of credits to them if they could be found to be using the funds obtained for speculative purposes. That was not my function.

The CHAIRMAN. You think the Federal Reserve Board had the power, and it should have exercised it to restrain banks from engaging in lending money for speculative purposes?

Mr. WILLIAMS. I think, Mr. Chairman, that when the attention of the Federal Reserve Board is called to a dangerous situation, or let me say this: We will take a hypothetical case. If the Comptroller of the Currency should call the attention of the Federal Reserve Board to a bank that is borrowing excessively, whose operations are highly speculative, and whose loans to its own executive officers amount to millions of dollars, it seems to me that in a case of that sort it becomes the duty of the Federal Reserve Board when it is so advised by the Comptroller of the Currency, to take the matter up with the Federal reserve bank of the district and apply such remedies as may be in order.

The CHAIRMAN. Well, what remedies do you think would be in order—refusal to discount eligible paper to these banks?

Mr. WILLIAMS. I think that the Federal Reserve Board could certainly say to the bank, "Unless you restrain your speculative activities we will not continue to make advances to you."

The question came up several times in the board, and I was charged with inconsistency in urging that there be an amendment to the Federal reserve act which would enable the Federal reserve banks to help a big bank out of trouble if it should need aid and should not have a sufficient amount of eligible paper to put up for the advances which must be furnished. It was claimed that while I apparently took the position that there should be a restraining hand held upon member banks, yet I was in favor of letting down the bars under certain contingencies.

I do not want my position now to be misunderstood. It is my view that the banks should be restrained before they came to the breaking point; that speculative activity should be held under. But it is also my view that if a large bank, through the mismanagement of its officers, gets into a strained position and finds that it is loaded up with speculative securities and has not a sufficient amount of eligible paper to meet the demand upon it, there ought to be some way by which that bank can put up securities which are not eligible to obtain money from the reserve bank to enable it to avoid suspension.

The CHAIRMAN. If a bank gets into unsound circumstances through a matter of mismanagement or making bad loans, that is a matter with which the comptroller should deal, is it not?

Mr. WILLIAMS. The comptroller had no supervision over the bank which we were discussing here.

The CHAIRMAN. You have detailed some general conditions here and said that they were general conditions, and not now referring to any particular bank you said that these were general conditions which existed in the city of New York.

Mr. WILLIAMS. Excuse me, Congressman, I did not say they apply to all banks, because they do not. The great majority of banks in New York are well managed and well run. I am happy to testify to that.

The CHAIRMAN. Well, you have described certain general conditions.

Mr. WILLIAMS. No; they are not general. Those are special conditions.

The CHAIRMAN. You were referring to other banks than the particular bank to which you referred a moment ago.

Mr. WILLIAMS. To certain banks, not all the banks.

The CHAIRMAN. You said some of those banks were national banks.

Mr. WILLIAMS. Some of them.

The CHAIRMAN. Now, if those banks were national banks, and they were mismanaged and taking bad loans, then it was up to you as comptroller to deal with that situation, was it not?

Mr. WILLIAMS. Not in the way in which I have suggested. I could not extend them credit.

Representative MILLS. What were your functions and duties as comptroller?

Mr. WILLIAMS. In what respect?

Representative MILLS. In respect to the examination of banks.

Mr. WILLIAMS. My function as Comptroller of the Currency was to see that the banks were properly examined. That was one of the functions of the office, to see that the banks were properly examined by examiners.

Representative MILLS. And if you found improper conditions, what does the law charge you to do?

Mr. WILLIAMS. The comptroller has not the power to correct all unfavorable conditions with which he has to contend, and I have repeatedly in my annual reports asked Congress to enlarge the powers of the comptroller in certain respects so he can deal with those conditions.

Representative MILLS. Mr. Williams, you and I do not seem to be able to get a question answered. I asked you what your powers were, not what you thought they should be. Under the law, what power does the law give you to deal with bad conditions of a bank revealed by your own examination?

Mr. WILLIAMS. Well, what kind of conditions?

Representative MILLS. Assuming that a bank has speculated with its funds up to a point where you consider that its credit is impaired, what power does the law give you?

Mr. WILLIAMS. Well, do you mean the credit impaired, or its solvency impaired?

Representative MILLS. Well, its solvency impaired, let us say.

Mr. WILLIAMS. Well, if its solvency is impaired, if the bank is insolvent, the comptroller can appoint a receiver.

Representative MILLS. Well, now, assume that it has not reached the point of insolvency, but that you consider that through speculative activities it has impaired its solvency, though not actually reached the point where it is insolvent?

Mr. WILLIAMS. It is one of the functions of the comptroller's office to make a careful examination of the national banks, and after the examination to assemble the boards, if conditions warrant the assembling of the board of directors, and to call their attention to the weaknesses which exist in the bank and to the wrong methods which are being pursued and the violations of the banking act, if there are any.

Senator ROBINSON. Did you do that in connection with the national banks that were examined and found to be deficient?

Mr. WILLIAMS. I did.

Representative MILLS. And if they disregard that warning, what is the duty of the comptroller?

Mr. WILLIAMS. If they persistently disregard his admonitions, if the bank continues to violate the banking act, he can report the case to the Department of Justice, as I had occasion to do not very many months ago in the case of one particular national bank, and that case is now with the Department of Justice, and in that particular case the Department of Justice is now making its investigation with a view to receivership and the winding up of the affairs of the bank, if necessary.

Representative MILLS. Did you do it with the case of the New York bank to which you refer?

Mr. WILLIAMS. Did I do what?

Representative MILLS. Report the matter to the Department of Justice?

Mr. WILLIAMS. I did not, because I thought it could be handled otherwise. In a number of cases—I do not care to be too specific now—but in many cases of national banks—and we will not confine ourselves to New York—where we find that they have suffered actual loss, the comptroller calls upon the directors to charge them off.

Representative MILLS. Now you have referred to a bank which has made loans—

Mr. WILLIAMS (interposing). Let me say that the bank which I recently recommended to the Department of Justice to place in the hands of the receiver was not a bank in a large city.

Representative MILLS. May I ask you this question: You have referred to a bank which made loans to its officers. That was not the same bank to which you referred when you referred to the \$130,000,000, was it?

Mr. WILLIAMS. That is answered, if you will let me proceed with my narrative here.

Representative MILLS. Will you answer that question?

Mr. WILLIAMS. There are several banks which made loans to their officers which are referred to in this statement.

Representative MILLS. Is the bank that you referred to with reference to the loan of \$130,000,000 the same bank?

Mr. WILLIAMS. That is one of them.

Representative MILLS. That is one of them?

Mr. WILLIAMS. Yes; that is one of them.

The CHAIRMAN. How many times a year does the law require an examination of national banks?

Mr. WILLIAMS. Twice.

The CHAIRMAN. Were the banks of New York examined twice during the year 1920; that is, the national banks?

Mr. WILLIAMS. Not all of them. There was one large bank which was examined twice in New York during the year 1920, I think. That was the largest bank in the city. Its resources, I think, were approximately 20 per cent of the total. It is a difficult thing in New York—it has been a difficult thing, to examine all the banks twice in the conditions through which we have been passing in the last year or two. We have been making very thorough examinations of the banks. These examinations have lasted sometimes from one month to five months. And we have felt that it was best to concentrate the attention of the force upon the cases that most needed attention,

just as if there should be a fire, we would use the water for the house that is burning.

The CHAIRMAN. What proportion of the banks in New York City were examined twice during the year 1920?

Mr. WILLIAMS. I just stated that I think that one large bank was examined twice, and I think the proportion of that bank's resources to the total was about 20 per cent. But the examinations of the other banks were so complete and so thorough that they lasted sometimes from one to five months. And I will also add that in addition to the very thorough examinations which were made, that we called upon those banks in New York City to furnish one additional complete report of conditions, beyond what was called for, beyond what was required under the statute.

The CHAIRMAN. Were there any banks in New York that were not examined at all during 1920?

Mr. WILLIAMS. None that I recall.

The CHAIRMAN. You are now under the impression that all of the banks in New York were examined once during 1920?

Mr. WILLIAMS. Substantially—in New York City.

Senator ROBINSON. You mean, of course, national banks, do you not?

The CHAIRMAN. I mean national banks. I am referring to national banks.

Mr. WILLIAMS. Yes.

The CHAIRMAN. There was only one of the national banks in New York City that was examined twice?

Mr. WILLIAMS. Yes; there was only one of the national banks in New York City that was examined twice, and that bank represented about 20 per cent of the resources, if I recall, of all the banks.

Representative MILLS. Now, Mr. Williams, you assume to criticize the management of the Federal reserve bank in New York in the matter of making loans to member banks. I ask you whether, if the New York Federal reserve bank, providing paper eligible for discount is presented, would have the right to deny credit to a particular bank?

Mr. WILLIAMS. Would they have the right?

Representative MILLS. Yes.

Mr. WILLIAMS. Well, I want to say this, that banks all over the country, whether they have the right or not, are denying credit to customers who present eligible paper. Whether they have the right or not, they are doing it.

Representative MILLS. Well, assuming that the member bank—

Mr. WILLIAMS (interposing). I have no doubt that the banks in New York have refused eligible paper from time to time when presented. I don't recall any particular cases, but there is nothing in the law that requires a member bank to take every loan that is offered to it.

Representative MILLS. No; not assume—

Mr. WILLIAMS. It is supposed the bank will be run with some intelligence and discretion. The system would go to wreck and ruin on any other hypothesis.

Representative MILLS. Assuming that the member bank had not exceeded the ratio to which it was entitled, and presented to the Federal reserve bank eligible paper, would the Federal reserve bank be justified in refusing it?

Mr. WILLIAMS. It might certainly be justified in refusing it. It would be its bounden duty to refuse to take paper under certain conceivable conditions in that bank with which the Federal reserve bank could acquaint itself.

Representative MILLS. Well, now, let me ask you: I suppose you refer to the conditions which you have referred to, that a bank was engaged in a speculative activity. In so far as individual loans are concerned, the Federal reserve bank has no means of determining to what purpose the money advanced is going to be used, has it?

Mr. WILLIAMS. Oh, yes; it has.

Representative MILLS. How?

Mr. WILLIAMS. The small banks are called upon to state what the money is used for time and again in different parts of the country. The officers of the bank are called up to the reserve bank and are asked: "What are you going to do with this money?" Not only that, but they are sometimes not only required to leave with the bank the bills discounted, but to put up a great deal of additional collateral from time to time, which I think is a very questionable practice.

Representative MILLS. But do you not know that with the amount of business transacted daily by one of the large New York banks with the Federal Reserve Bank of New York City, that it is absolutely impossible, as a practical matter, to tag every cent that is loaned to a bank?

Mr. WILLIAMS. Well, there is a great deal of difference between tagging every cent that is loaned to a bank and familiarizing one's self with its operation.

Representative MILLS. I am not asking you that. I am asking you for specific loans. It seems to me that I am occasionally entitled to a direct answer.

Mr. WILLIAMS. Now, what is your question?

Representative MILLS. I am asking you whether, with reference to specific loans, taking into consideration the very many transactions during the course of the day in New York City, whether it is practical for the New York City Federal Reserve Bank to identify the purposes for which each particular loan is intended?

Mr. WILLIAMS. It may not be practical to identify the purposes for which each particular loan is intended, but I regard it as the duty of a reserve bank to inform itself in a general way in regard to the purposes for which the money which it hands out to member banks is used.

Representative MILLS. Well, now, you admit that in so far as the specific loans are concerned, that it is not a practical proposition—

Mr. WILLIAMS. It is practical for some specific loans.

Representative MILLS. But you contend that it is the duty of the Federal reserve bank in New York City to familiarize itself with the general condition of member banks?

Mr. WILLIAMS. I do.

Representative MILLS. Do you know that it was not done?

Mr. WILLIAMS. Well, I assume that if the New York Federal Reserve Bank, Mr. Mills—

Representative MILLS. Well now, Mr. Williams, I am not interested in your personal assumption. I am asking you a question, whether you know that it was not done?

Mr. WILLIAMS. It is my belief that it was not done.

Representative MILLS. It is your belief that it was not done?

Mr. WILLIAMS. Yes; that they did not familiarize themselves as prudence would have required them to do, with the purposes for which the money advanced by the Federal reserve bank was used.

Representative MILLS. That is an opinion of yours?

Mr. WILLIAMS. Yes, sir.

Representative MILLS. That is not a statement of fact?

Mr. WILLIAMS. The answer states precisely what it means. I think some of your questions may be answered if you will let me finish the narrative which I am making.

Representative MILLS. Go ahead.

Representative TEN EYCK. Mr. Williams, what recourse has a national bank against the reserve bank if the reserve bank refuses to loan or discount its loans?

Mr. WILLIAMS. Well, the national bank can apply to the Federal Reserve Board, and if any manifest injustice is done to them they can bring it up to the board.

Representative TEN EYCK. But if the Federal Reserve Board denies that any specific loan can not be had, on account of it being large, or for any other purpose whatever—if the Federal Reserve Board decides that they can not have it, what recourse has the national bank to force that loan?

Mr. WILLIAMS. It can not force it.

Representative MILLS. Let me ask one other question. What control has the Federal Reserve Board got over the action of the individual bank in so far as individual loans are concerned?

Mr. WILLIAMS. I think that my answer could be illustrated, if you will let me proceed further with the narrative.

Representative MILLS. I will not ask you another question if you will answer that one before you proceed.

Mr. WILLIAMS. What is that?

Representative MILLS. What control the Federal Reserve Board as a board has over the individual reserve bank in so far as individual loans are concerned?

Mr. WILLIAMS. If the Federal Reserve Board finds that the Federal reserve bank is in the hands of inefficient or incompetent men it can remove its officers or refuse to approve their salaries.

Representative MILLS. But short of that it does not attempt to control?

Mr. WILLIAMS. It can exercise a moral suasion which would be very effective.

Representative MILLS. But it does not attempt to control the individual loans of the individual banks?

Mr. WILLIAMS. Well, if the Federal Reserve Board should have knowledge of any rotten condition in any particular bank, and should find that that particular bank was being heavily favored by a reserve bank anywhere, I think it would be the duty of the reserve board to take action.

Senator ROBINSON. It could in any instance of that character refuse to discount paper?

Mr. WILLIAMS. Certainly.

Representative MILLS. The board itself could compel the refusal?

Mr. WILLIAMS. The board could say to the reserve bank: "We don't want you to loan any more money to a certain institution which we believe is in a highly extended or precarious position, until their methods are reformed. They are violating the Federal reserve act, and you should go slow." The board can say that if they wish to.

Representative MILLS. Yes; but supposing the Comptroller of the Currency has found that they have not violated the Federal reserve act, because I assume that he would have reported it to the Department of Justice if there had been any violation of law, could the Federal Reserve Board go to the New York bank, for instance, and say, "Do not discount paper of an individual member bank?"

Mr. WILLIAMS. Suppose that a member bank should be loaning all of its capital and all of its surplus to its president, and that he was engaged in highly speculative operations.

Representative MILLS. Yes.

Mr. WILLIAMS. And he should want to borrow more money, and the Federal reserve bank should be advised of those conditions, that the officers of the bank were sucking up its resources, I think it would be the duty of the Federal Reserve Board to call that bank to account and to require them to limit their loans and to collect them.

Representative MILLS. But under what authority of law can they require an individual reserve bank to limit its loans to a particular institution?

Mr. WILLIAMS. The reserve bank does not have to lend money ad libitum.

Representative MILLS. No; it does not, but on what authority of law can the Federal Reserve Board say to a Federal reserve bank, "You shall not lend any money?"

Mr. WILLIAMS. On the theory that it is in the hands of an incompetent management, and unless you handle this bank in the way it should be handled we will remove you.

Representative MILLS. In other words, if the Federal Reserve Board is satisfied that the officer of a particular reserve bank is incompetent, it has the authority to remove him?

Mr. WILLIAMS. It has, directly or indirectly.

Representative MILLS. But it has not got the authority under the Federal reserve act to say to any particular reserve bank, "You shall not discount paper of any"——

Mr. WILLIAMS (interposing). It has the common-sense authority to say to a bank that is running wide open to be careful and go slow. That does not have to be in the Constitution or the Federal reserve act.

Representative MILLS. Well, it is not in the Federal reserve act, is it?

Mr. WILLIAMS. Well, it is implied in the act, as I have interpreted the act.

Senator HARRISON. Do they not make suggestions sometimes about certain loans?

Mr. WILLIAMS. Well, about certain policies they do make suggestions; yes, sir.

The CHAIRMAN. Mr. Williams, you referred hypothetically to the existence of rotten conditions in the bank. How does the Federal reserve bank become cognizant of these conditions?

Mr. WILLIAMS. Well, I don't want to be too particular about a bank, but if the Federal Reserve Board should be advised that it is common talk that a bank somewhere in the West, we will say, is very much extended, and that its officers are speculating, and that it is in an unsafe condition and sucking up the funds of the Federal reserve system to an unwarranted extent, I think it would be the duty of the Federal Reserve Board to admonish the bank to be careful in regard to that member institution, whether it should be a State member bank or a national member bank.

The CHAIRMAN. Do you think the method of procedure by the Federal reserve bank for getting advice as to the condition of member banks is to listen to gossip on the streets, or do they get their information in some other way?

Mr. WILLIAMS. Well, there are some things that are pretty clear.

The CHAIRMAN. Well, isn't it a matter of fact that the Federal reserve banks get their information as to the condition of member banks through the reports of the comptroller?

Mr. WILLIAMS. Only as to national banks.

The CHAIRMAN. Only as to national banks?

Mr. WILLIAMS. Not as to State banks.

The CHAIRMAN. Then, if you do not make the examinations required by law in the city of New York of these national banks, the Federal reserve bank of New York would not be in a position to know about the conditions of these banks from your examination?

Mr. WILLIAMS. Oh, yes; the Federal reserve bank could.

The CHAIRMAN. Through your examination?

Mr. WILLIAMS. The copies of my examination, as you probably know, are filed with the Federal reserve bank of New York.

The CHAIRMAN. A copy of your examination?

Mr. WILLIAMS. Yes.

Representative MILLS. All of it?

Mr. WILLIAMS. When called for.

Representative MILLS. But the comptroller's examination does not get to them?

Mr. WILLIAMS. Whenever asked for.

Representative MILLS. But he does not furnish of his own accord the information which he obtains?

Mr. WILLIAMS. It is the custom to furnish them with the bulk of the report. There is a certain confidential section which is furnished to the Federal reserve bank when the Federal reserve bank asks for it.

Representative MILLS. What is there to inform the Federal reserve bank that such confidential section exists?

Mr. WILLIAMS. It does not exist in all examinations.

Representative MILLS. How does the Federal reserve bank know that it does exist in a particular case?

Mr. WILLIAMS. They can ask for it if they choose.

Representative MILLS. Is there any particular reason why the comptroller should not give complete information?

Mr. WILLIAMS. It has been the custom to give complete information whenever it is asked for.

Representative MILLS. Is there any reason why this should not be furnished, and why it should have to be asked for?

Mr. WILLIAMS. Well, I think perhaps there may be an argument in favor of not making that too public. I don't know whether the

reports of the comptroller which are sent to the Federal reserve banks are seen, except occasionally, by the principal officers of the Federal reserve banks. My understanding is that they are generally turned over to some underling. Some of that information is of very strictly confidential character, and it is thought best that it should be handled with extreme care.

Representative MILLS. Supposing that the information which is furnished the Federal reserve bank—

Mr. WILLIAMS (interposing). They are frequently matters of opinion of the examiner.

Representative MILLS. May I ask you this, Mr. Williams: Supposing the information furnished the Federal reserve bank does not disclose conditions that are in any way unusual, whereas the information which is furnished to the Comptroller of the Currency, and which he does not pass on, does furnish information which would put the Federal reserve bank on guard, who is to blame if the Federal reserve bank does not take action, the Comptroller of the Currency for his failure to furnish the information, or the bank for failure to ask for information which it does not know exists?

Mr. WILLIAMS. If a particular national bank under the supervision of the Comptroller of the Currency has occasion to ask for pretty large accommodations, we will say largely exceeding its basic lines, it seems to me that it behooves the Federal reserve bank in cases of that sort to ask the Comptroller of the Currency for the special information, and to get such additional information as would naturally suggest itself to an intelligent bank.

Representative MILLS. Well, let me ask you: Where the Comptroller of the Currency gets information which puts him on notice that conditions which he considers unsatisfactory exist in a certain bank which is a large borrower from the Federal reserve bank, would you or would you not consider it his duty to furnish that information to the Federal reserve bank?

Mr. WILLIAMS. He frequently does it.

Representative MILLS. Well, wouldn't you consider it good practice to do so?

Mr. WILLIAMS. Certainly.

Representative MILLS. And if he failed to do so could he afterwards claim that the Federal reserve bank had been negligent in not getting that information?

Mr. WILLIAMS. Well, the Comptroller of the Currency's reports furnished to the member banks are usually very complete and comprehensive.

Representative MILLS. I have assumed a case in which they were not.

Mr. WILLIAMS. Well, I think that your question answers itself. If the Comptroller of the Currency knows of a dangerous condition in a bank and fails to advise the reserve bank of those dangerous conditions, knowing that it is handing out money in large quantities to that particular bank, why he fails in his duty.

Representative MILLS. And do you consider that under those circumstances it would be his duty to disclose those confidential reports which are not normally furnished?

Mr. WILLIAMS. The report itself, Congressman—I don't know whether you have ever seen a report of the Comptroller of the Currency, a report of examinations, have you?

Representative MILLS. No.

Mr. WILLIAMS. Well, you will find that the reports which the comptroller gives to the member banks are sufficient, as a rule, to enable the member bank to form a very fair conclusion as to the condition of the bank.

Representative MILLS. I am assuming a case where the information generally furnished was not sufficient.

Mr. WILLIAMS. It ought to be.

Representative MILLS. But the confidential memorandum which he does not furnish unless asked for did disclose an unsatisfactory condition. Now, who would be to blame if that information was not given the Federal reserve bank?

Mr. WILLIAMS. The comptroller. I think I can answer that with a plain statement that it is the duty of the Comptroller of the Currency to furnish the member banks with such information as may enable them at all times to form an intelligent idea as to the condition of the member bank as far as the information in the possession of the comptroller goes.

May I finish this narrative? I think some of these questions may be answered as I go along.

The CHAIRMAN. I would like to ask one question or two if I may on these speculative propositions.

You refer to the fact that the member banks in New York loan large sums for speculative purposes. I have heard it stated that the country banks, some of them, kept quite large balances in New York which they directed loaned for speculative purposes. Is that correct?

Mr. WILLIAMS. I have never heard of it. When you say "for speculative purposes" you don't mean for investment for the country banks, do you?

The CHAIRMAN. What I am getting at is that I understand that the country banks keep large balances in New York which they direct to be loaned on call. Am I correct about that?

Mr. WILLIAMS. You are.

The CHAIRMAN. Do you think the same rule ought to be applied to these same country banks with reference to these speculative loans that you suggest should be applied in New York?

Mr. WILLIAMS. Unquestionably.

The CHAIRMAN. How would you go about applying the rule as to the country bank?

Mr. WILLIAMS. We try to do it as each bank is examined.

May I proceed? I think that some of these questions may be answered if I may proceed.

The CHAIRMAN. Did you find when you examined the banks in the fall of 1919 that both city and country banks were loaning large sums on call?

Mr. WILLIAMS. I did.

The CHAIRMAN. Did you take any action at that time as comptroller?

Mr. WILLIAMS. I certainly did. I think my annual report deals with that subject in extenso.

The CHAIRMAN. You recommended some action by Congress in that respect? Is that what I am to understand?

Mr. WILLIAMS. Well, the conditions we will set forth in the report quite elaborately. I shall come to that presently.

The CHAIRMAN. Very well.

Mr. WILLIAMS. Loans to their own officers and their special enterprises or syndicates were in some cases studiously camouflaged or concealed. These abuses were brought by me to the attention of the Federal Reserve Board, but, as far as I know, no remedial action was taken. In this connection I quote as an illustration the following extract from my letter to the governor of the Federal Reserve Board under date of January 12, 1921, in regard to a loan of about \$6,000,000 made by two banks, heavy debtors of the reserve system, to a speculative syndicate in which the presidents of the two banks were heavily interested. In that letter I said:

Our examining force is constantly discovering new means and methods whereby the officers and directors of banks seek to camouflage or conceal their heavy borrowings. Among these devices which we have recently encountered are:

First. Such "family" corporations as the _____ through the instrumentality of which _____ borrowed about \$10,000,000 from the _____ in addition to other large loans obtained directly and indirectly.

Second. Dummy loans such as that by which director _____ obtained, in the name of _____ (his employee) some \$3,500,000 from that bank.

Third. Private "syndicate" loans such as the _____ syndicate loan in which the president of the _____ had an interest of about one-fourth, and an officer of the _____ smaller interest, and to which syndicate the _____ loaned \$3,547,897, and the _____ loaned \$2,350,000, the interest of the bank officials in neither case being disclosed to the lending bank, until it developed as a result of investigation by the national bank examiner.

The CHAIRMAN. May I ask you there whether you think the power of the Federal reserve bank to rediscount paper ought to be used for the purpose of compelling compliance with the law on the part of national banks, or whether that is the duty of the comptroller?

Mr. WILLIAMS. I do.

The CHAIRMAN. You think that the power of the Federal reserve bank should be used for that purpose?

Mr. WILLIAMS. I do.

The CHAIRMAN. That it ought to be used to compel good management on the part of the banks?

Mr. WILLIAMS. I do. [Continuing reading:]

I feel confident that these secret methods by which the officers of the banks make use of the funds of the institution can be no more approved by you than they can be by this bureau.

Senator ROBINSON. Well, in connection with the question just asked by the chairman, may I point out paragraph (h) of section 11 of the Federal reserve act defining the powers and duties of the Federal Reserve Board. It is as follows [reading]:

To suspend, for the violation of any of the provisions of this act, the operations of any Federal reserve bank, to take possession thereof, administer the same during the period of suspension, and when deemed advisable, to liquidate or reorganize such bank.

By that section it is given the power to absolutely suspend all operations of a Federal reserve bank for any violation of the Federal reserve act.

Mr. WILLIAMS. Absolutely.

The CHAIRMAN. Yes; but not a member bank.

Senator ROBINSON. No; but it is given certain powers over the member banks specifically. By paragraph (a) the Federal Reserve Board is charged with the duty of examining the accounts and making report upon the same of the member banks. It is given certain further powers in connection with loans to member banks, and it is

given general supervision over all Federal reserve banks, which, of course, implies supervision over the dealings of the Federal reserve banks with the member banks; otherwise that power would be nugatory and of no effect.

Mr. WILLIAMS. They have the complete power of examination of all member banks, National or State.

Senator ROBINSON. And they have the power to suspend a Federal reserve bank for an unlawful transaction with a member bank.

Mr. WILLIAMS. Yes.

Representative MILLS. Do you contend that any Federal reserve bank is violating the provisions of this act?

Mr. WILLIAMS. I have not made that complaint.

The official record shows (p. 531, Federal Reserve Bulletin, May, 1920) that in the month of January, 1920, at the very time that the Federal Reserve Bank of New York was making huge loans with such prodigality to certain big institutions in New York City for speculative purposes the New York Reserve Bank was itself, during that month, borrowing heavily from at least seven other Federal reserve banks by rediscounts and the sale of purchased bills. Its total borrowings for the month of January, 1920, exceeded \$175,000,000.

The CHAIRMAN. May I ask if that includes bills purchased by other Federal reserve banks at their own request on their own account?

Mr. WILLIAMS. I don't know what that amounted to, Mr. Congressman.

The CHAIRMAN. But that figure would include such bills?

Mr. WILLIAMS. I presume that \$175,000,000 of acceptances and bills discounted by the Federal Reserve Bank of New York, as shown in the official bulletin, would include paper of that character.

Representative FUNK. Just a moment there, Mr. Williams. Am I to understand that due to the fact that the New York Federal Reserve Bank borrowed money from other Federal reserve banks, that because of that fact these other Federal reserve banks would be limited in their ability to take care of their customers?

Mr. WILLIAMS. Obviously I think it would be fair to assume—at least we should hope that it would be fair to assume—that if a Federal reserve bank is lending money to the Federal Reserve Bank of New York it is because it can spare the money at the time and that it is not cribbing or cramping its own member banks. I am not expressing an opinion on that particular feature of the case now.

Representative SUMNERS. Well, now, Mr. Williams, if as a matter of fact the other banks of the system had \$175,000,000 to spare and New York could use it, what bad effect upon the country as a whole would have resulted from that transaction?

Mr. WILLIAMS. Not necessarily any ill effect.

Representative SUMNERS. Now, then, what conclusions ought the commission to draw from the statement of that fact? What does it bear on? What does it suggest?

Mr. WILLIAMS. It gives this information, that the New York reserve bank not only lends at times to the other banks, but also that it borrows and is the beneficiary of the advances made by other Federal reserve banks.

Representative SUMNERS. Is that a matter to be indorsed, a matter to be permitted in the future?

Mr. WILLIAMS. I think it is in accordance with the purposes of the system that one bank that needs money should borrow from the other banks—or that one bank that has a surplus of money should lend money to the banks that need it.

Representative SUMNERS. What I am trying to get at now is this: The statement is made to the commission I assume for the purpose of enlightening the commission with reference to the matters under investigation, and I was trying to find out just what that is supposed to—

Mr. WILLIAMS. I am simply trying to bring out the fact that the Federal reserve bank in New York, while at times loaning largely to other banks, also had occasion to borrow from other banks.

Representative SUMNERS. That is not peculiar to the banks of New York, is it?

Mr. WILLIAMS. Not necessarily.

Representative SUMNERS. I believe that at this particular time the New York bank is loaning rather extensively to the very banks that it perhaps was borrowing from at that time.

Mr. WILLIAMS. Quite possible.

Representative SUMNERS. Now if as a matter of fact, however, the banks that were loaning to New York—assuming that those loans were used for speculative purposes—thereby denying their own communities the money which their legitimate industries require, they themselves would be subject to criticism.

Mr. WILLIAMS. Unquestionably.

Representative SUMNERS. Yes.

Representative MILLS. May I ask you: Those figures do not necessarily show borrowings entirely, do they?

Mr. WILLIAMS. These are bills discounted and purchased paper, as I understand them. And acceptances.

Representative MILLS. Well, let us assume, for instance, that deposits in large amounts were being withdrawn from the New York bank or banks, isn't it conceivable that in order to meet the drain on its reserve fund it would transfer acceptances to other banks?

Mr. WILLIAMS. It would, naturally.

Representative MILLS. So that that figure which you give may not necessarily represent money borrowed entirely by the New York bank for the purposes of rediscounting New York paper?

Mr. WILLIAMS. Not necessarily.

Representative MILLS. It may represent—

Mr. WILLIAMS (interposing). It may be money borrowed by member banks to meet the withdrawing of deposits, as you suggest.

Its total borrowings for the month of January, 1920, exceeded \$175,000,000, and the banks from which it was thus getting money included the Federal reserve banks of Atlanta, St. Louis, Dallas, San Francisco, Chicago, and Cleveland, and Boston, and shortly before from Richmond.

I will now invite your attention to certain testimony given by Gov. Harding before the Banking and Currency Committee of the House of Representatives on June 1 in regard to the amount of agricultural and live-stock paper held by the 12 Federal reserve banks.

Congressman Wingo in making inquiry concerning credits granted to the farmers through the Federal reserve banks concluded a statement with the following question [reading]:

So that the fact your Federal reserve note volume went up does not indicate that the farmer had an increase in loan privileges?

Gov. HARDING. There are some other figures that enter into it.

Mr. WINGO. What are those figures?

Representative MILLS. What page are you reading from?

Mr. WILLIAMS. Gov. Harding's testimony on June 1. It is page 18, Congressman, the middle of the page.

Shall I proceed?

Representative MILLS. Yes.

Mr. WILLIAMS (reading):

So that the fact your Federal reserve note volume went up does not indicate that the farmer had an increase in loan privileges?

Gov. HARDING. There are some other figures that enter into it.

Mr. WINGO. What are those figures?

Gov. HARDING. The paper that can be identified as farm paper, held by the Federal reserve banks on the 30th of April, this year, \$230,000,000 as against \$106,000,000 on April 30, 1920.

Mr. KING. Does that include the packers' credits in Chicago?

Gov. HARDING. Oh, no. The packers' credits are entirely separate.

Mr. WINGO. Do you contend it is a fact that the farmers this year had bigger credits than last year?

Gov. HARDING. I do.

Mr. WINGO. Does not that indicate that last year when we were facing this extraordinary situation, you granted less credits than you admit now the farmers were entitled to?

Gov. HARDING. No; it does not. The Joint Committee on Agriculture wanted to know about this and we looked it up. The credit is always bigger than we can prove, because all we claim as agricultural and live-stock credits are the credits over 90 days. Now I have that in my head very clearly. In 1920, up to the 14th of December, the 12 Federal reserve banks had discounted \$1,981,000,000 of agricultural and live-stock paper—known to be such because it had a maturity date longer than 90 days—as against \$721,000,000 in the year 1919, which does not show any curtailment of farm credits.

May I ask you to follow me, Congressman, and if I make any mistake, please correct me, because I have not read this since written by the stenographer.

(Continuing reading:)

Mr. BRAND. How much at the same time did you let other folks have?

Gov. HARDING. What was the question?

Mr. BRAND. What were your loans to other people at the same time?

Gov. HARDING. The loans to other people were curtailed in many cases.

Mr. WINGO. Do you mean to say the manufacturers and merchants had a curtailment in their loans last year?

Gov. HARDING. Not until very late in the year.

Mr. WINGO. I say, in April, May, June, and July the manufacturer and merchant had a very large increase in credits, made necessary by the fact business was dead and they were being compelled to carry inventories and pay rolls and had to have money; they were not getting money in from their business and had to have it from the banks.

Gov. HARDING. They did not have a very large increase of credits to the Federal reserve banks.

Mr. WINGO. They got the volume that was denied to the farmer.

The CHAIRMAN. They were largely the denial of credit by the member banks.

That is the end of the quotation.

I do not know where Gov. Harding got his figures. The official figures set forth in the Federal Reserve Bulletin report that the total amount of "bills discounted" and "acceptances" bought by all the Federal reserve banks for the 12 months of the calendar year 1920 which had a maturity of over 90 days aggregated only \$351,864,000 instead of \$1,981,000,000 as stated by Gov. Harding in his testimony on page 18. The official bulletins also show that the total amount

of bills discounted and acceptances bought having a maturity of "over 90 days," which were discounted or bought by all the Federal reserve banks in the calendar year 1919, amounted to \$129,717,000 instead of \$721,000,000 as stated by Gov. Harding on page 18 of his testimony.

Perhaps Gov. Harding may have some explanation for this apparent discrepancy of a billion or two, and if he has I presume he will furnish it to your committee.

Representative MILLS. But in any event, according to your figures, the credit granted to farmers was almost twice as much in 1920 as it was in 1919?

Mr. WILLIAMS. I am discussing that later, Congressman.

Representative MILLS. Isn't that true?

Mr. WILLIAMS. It was much larger.

Three or four times during his testimony on June 1, Gov. Harding drilled into the committee the fact that "agricultural" and "live stock" paper held by the Federal reserve banks had increased from \$106,000,000 in April, 1920, to \$230,000,000 in April, 1921. Incidentally, let me observe that as the "agricultural and live stock paper" held by the Federal reserve banks in December, 1920, was over \$246,000,000, the fact that in April the amount outstanding was \$230,000,000 indicates a contraction of \$16,000,000 in agricultural and cattle paper between December, 1920, and April, 1921.

Representative MILLS. Wait a minute, you are going too fast there, Mr. Williams.

Mr. WILLIAMS. Let me finish my statement.

Representative MILLS. Let me have those figures again, will you please?

Mr. WILLIAMS. I will give you this statement again. Incidentally, let me observe that as the "agricultural and live stock paper" held by the Federal reserve banks in December, 1920, was over \$246,000,000, the fact that in April the amount outstanding was \$230,000,000 indicates a contraction of \$16,000,000 in agricultural and cattle paper between December, 1920, and April, 1921, at the very time that the farmers urgently needed additional help for the planting of their new crops.

Representative MILLS. But in June of this year we find that it has gone up to \$157,875,000 for agricultural paper and \$76,258,000 for live stock.

Mr. WILLIAMS. I haven't those figures.

Representative MILLS. So that in June, 1921, we find that there is a larger amount outstanding in the way of agricultural credits than at any other time since January, 1920.

Mr. WILLIAMS. Well, I was just calling attention to the fact that from December, 1920, to April, 1921, there was a shrinkage of \$16,000,000.

Representative MILLS. And from April to June there is a very material increase.

Mr. WILLIAMS. There is another comparison, however, which is far more important, and that is the proportion of "agricultural" and "cattle" paper to the total amount of bills discounted and purchases by the Federal reserve banks. On page 17 of his testimony I note the following statement [reading]:

Mr. WINGO. You have already denied that; but I am talking about what the banker did down there. I am trying to get down to the fact and to place the responsibility and to draw out the facts. Now, it is a fact—and if you do not know it, I think if you will just sit down and take isolated banks, you will find the loans to the farmers were actually curtailed. A great many banks did not think of coming to the Federal reserve bank for rediscounts and those that did come came with limited demands; yet at the same time the volume of the Federal reserve notes increased. Now who got the credits that were denied to the actual farmers?

Gov. HARDING. The farmers got them.

Mr. WINGO. I have just called attention to the fact that they did not get them.

Gov. HARDING. I think there is 43 per cent of the population of the country that is classed as farm population. Some farmers did not get credits, but other farmers were dealt with more liberally by the banks.

Mr. WINGO. You say this farmer got that which that farmer was denied [indicating]?

Gov. HARDING. It is possible.

Mr. WINGO. I have not been able to find any bank in the United States in the cotton and wheat belt where they were granted an extraordinary line of credits over and above what was customary; but, on the contrary, I find they adopted that policy of curtailment of loans all through the cotton and wheat belt.

Gov. HARDING. There are about 30,000 banks in the United States. I know some of them are skin-flints and some are very liberal.

Mr. WINGO. I am talking about the wheat belt and cotton belt. The farmers out there were not given even the normal credits. You say other farmers were given what those farmers were denied?

Gov. HARDING. Yes.

Mr. WINGO. Now, do not the records of the banks show that a good many people—you had the Federal reserve notes going up in volume and had the wholesale prices going down, trade was stopped, and were not a good many merchants given additional credits for carrying over their inventories because there was not any trade and money was not coming-in? I know personally of cases where that is true.

Gov. HARDING. Possibly.

Mr. WINGO. Did not the merchants get that volume, and was not that responsible for the curtailment of credits to the farmers?

Gov. HARDING. All I can tell you of the increase of Federal reserve notes is that we can tell what the increase was by districts.

Mr. WINGO. What I am getting at is that this volume of Federal reserve notes increased and wholesale prices went down. I am not talking about it as a banking proposition, but looking at it from the standpoint of this committee. It indicated that the farmer was denied these credits. Just leave out who was to blame for it; just admit your contention that the banker did not want to make his customer mad—and there is a lot in that—it is a fact that a good many merchants and manufacturers in that dull time—and I am not criticizing them—got credits and that swelled the volume of notes when, at the very same time wholesale prices were going down and the farmer was denied credits and his produce was tumbling in price, too.

Now, gentlemen, Gov. Harding boasts of the liberality shown by the Federal reserve banks to the purchasers of agricultural and cattle paper which amounted, he says, in April, 1921, to \$231,000,000. I ask you to consider that this aggregate amount of agricultural and cattle paper apparently made by the class of population which Gov. Harding says represents about 43 per cent of total population, is some millions of dollars less than the amount of money which the Federal reserve system has from time to time handed out, I might say, almost casually, to two certain banking institutions in one of our large cities. The records show that in January, 1920, one Federal reserve bank was lending to one banking institution in New York City, conspicuous for its speculative activities, more than twice as much as all the Federal reserve banks held, at that time, of "agricultural" and "live stock" paper. [See p. 307. of the Bulletin for March, 1920.]

Representative MILLS. What date was that?

Mr. WILLIAMS. January, 1920.

The CHAIRMAN. I did not hear your statement at the beginning, Mr. Williams. Do I understand you to say that the agricultural paper held by the Federal reserve banks diminished during the year 1920?

Mr. WILLIAMS. Oh, no; it increased.

The CHAIRMAN. Very largely increased, did it not?

Mr. WILLIAMS. Yes, yes.

The CHAIRMAN. Would that indicate a disposition on the part of the Federal reserve banks to curtail loans to agriculture?

Mr. WILLIAMS. Well, the proportion of it was pitifully small compared with the total amount of loans.

The CHAIRMAN. On that question, do you think that the figures with reference to rediscounts of agricultural and live stock paper represents fairly the amount of credit that was extended to agriculture?

Mr. WILLIAMS. Well, I would prefer that you should get that information from the reserve banks, the Federal reserve banks.

The CHAIRMAN. I am asking these questions of you now. You were a member.

Mr. WILLIAMS. I do not say that it represents by any means the maximum amount that was credited to farmers and agriculturalists by member banks.

The CHAIRMAN. Then it would be hardly fair to make a comparison on the basis of those figures, would it?

Mr. WILLIAMS. Well, I am discussing the proportion of the resources of the Federal reserve bank system which were employed in loans on 90-day paper to farmers and cattle raisers.

The CHAIRMAN. But you say that those figures do not represent the actual amount of loans which were given to agriculture?

Mr. WILLIAMS. I do not know what proportion of their funds was loaned on agricultural paper by the member banks. What I said was, or what I intended to say was, that the money obtained by member banks from the Federal reserve banks on agriculture and cattle paper by no means represents the total amount of money loaned by all the banks of the country to farmers.

The CHAIRMAN. Are you under the impression in general that in proportion to actual reserve deposits or in proportion to basic lines the accommodation extended by member banks in the country was less than the accommodation extended by the city banks to their borrowers—

Mr. WILLIAMS. Well, an hour or two ago I read into the record a table—

The CHAIRMAN (continuing). During 1920?

Mr. WILLIAMS. I read into the record a table, Congressman, an hour or two ago, which showed that the loans and rediscounts obtained by the central reserve city banks was far in excess—I think I showed that, although the total amount of money loaned by the country national banks was very much more than the total amount of loans made by the central reserve city banks, yet the paper rediscounted or borrowed by the central reserve city banks was about \$300,000,000 more than the bills payable and rediscounts of the country banks.

Representative MILLS. Well, now, Mr. Williams, have you made any estimate on the proportion of agricultural credit made by the reserve banks other than in the central reserve cities to their total credits?

Mr. WILLIAMS. I am discussing here, Congressman, matters bearing upon the statements which were made before the Banking and Currency Committee on June 1 of this year by Gov. Harding, of the Reserve Board.

Representative MILLS. Yes; and you are injecting some new matter of your own.

Mr. WILLIAMS. I was confining myself to that general subject, Congressman. I am dealing with the statements which were made before the committee on June 1 and matters pertinent thereto.

Representative MILLS. But you just read into the record your figures as to one or two New York banks and pointed out that their loans exceeded the total amounts granted by these other banks.

Mr. WILLIAMS. The statement I made in the record in that connection was this: The records show that in January, 1920, one Federal reserve bank was lending to one banking institution in New York City, conspicuous for its speculative activities, more than twice as much as all the 12 Federal reserve banks held at that time of "agricultural" and "live-stock" paper. (P. 307 of the Bulletin for March, 1920.

Representative MILLS. Yes; now, I am asking you whether you have made any study of the proportion of agricultural credits out of total credits granted by the banks of Richmond, Chicago, St. Louis, Minneapolis, Kansas City, Dallas, and San Francisco at any time?

Mr. WILLIAMS. I have not a detailed statement here which would give you that information. I have studied the subject generally, and I should be very glad to lay before you a statement showing the total amount of agricultural and cattle paper rediscounted by the 12 Federal reserve banks for each month of the calendar year 1920, if you wish it.

Representative MILLS. Are you familiar with the figures given by Gov. Harding in his speech of last September?

Mr. WILLIAMS. I am not familiar with that speech.

Representative MILLS. Well, in that speech Gov. Harding gave the following figures, as of September 3, 1920: That of the total bills discounted by the Federal Reserve Bank of Richmond, 27 per cent was the estimated amount granted in support of agricultural products.

Mr. WILLIAMS. Naturally. It is an agricultural district.

Representative MILLS. Atlanta, 23 per cent; Chicago, 48.3 per cent; St. Louis, 22 per cent; Minneapolis, 65.6 per cent; Kansas City, 59.8 per cent; Dallas, 50 per cent; San Francisco, 58.7 per cent.

Mr. WILLIAMS. If the \$230,000,000 of agricultural and cattle paper which Gov. Harding referred to so frequently in his testimony on June 1, is any index at all of the total amount of money advanced to agriculturists and cattle raisers by the banks of the country, there is abundant ground for their lamentable complaints of discrimination and contraction.

The CHAIRMAN. You just said that there is a fair basis for—

Mr. WILLIAMS. I have not expressed an opinion on that.

The CHAIRMAN. I would like to have you do so.

Mr. WILLIAMS. I don't know what the proportions are. Congressman Mills has just read certain percentages. I don't know what the actual figures were or what the proportions were at that time. I am not familiar with the speech. I don't know that I have ever seen it, and I therefore can not discuss it.

The CHAIRMAN. You know whether these figures of rediscounts of agricultural paper represent fairly the amount of credit given to the agricultural sections of the country, or whether they do not?

Mr. WILLIAMS. Well, I have given you Gov. Harding's statement, in exact words, in regard to that.

The CHAIRMAN. I am asking you. I am not asking Gov. Harding. I will ask him when we get him on the stand. I am asking you now.

Mr. WILLIAMS. I will tell you very frankly that the banks of the country have loaned many times that amount themselves, but the point is that while the banks have accommodated the farmers—the member banks have accommodated the farmers—they have been unable, it appears, to get back from the reserve banks, anything like the proportion of rediscounts that the big banks in the central reserve cities have obtained and which is shown in the tables in this record.

The CHAIRMAN. What particular time are you referring to in making that statement? I ask that question because the situation changes very rapidly.

Mr. WILLIAMS. I do not recall the date. I am looking it up. It is in the record, Congressman, and you can refer to it there.

Shall I proceed?

The CHAIRMAN. Are you under the impression, Mr. Williams, that the loans and discounts of the Federal Reserve Bank for New York now are higher than they were in December, 1919?

Mr. WILLIAMS. That the loans of the New York Reserve Bank are higher now?

The CHAIRMAN. Yes.

Mr. WILLIAMS. Why, I notice that there has been a contraction of a billion dollars in the loans of the Federal reserve system in the last 12 months. I imagine that the reserve bank of New York has also greatly contracted.

The CHAIRMAN. Are you under the impression that the rediscounts of the country banks have contracted since December, 1919—

Mr. WILLIAMS. I shall give you as I proceed, Congressman, some definite figures on that subject. I would rather not give impressions in a desultory way, if it is agreeable to you.

Representative TEN Eyck. Mr. Williams, have you information as regards the percentage of discounts in April, 1920, on agricultural paper that actually went to the farmer direct—discounting loans on their products owned by the farmer, and the amount that went to the merchants and dealers that dealt in farm products?

Mr. WILLIAMS. I have not those at hand, Congressman. They could be obtained. I assume the Federal Reserve Board could obtain them. I am not able now to obtain information from the Federal Reserve Board. I have been notified that not being a member of the board they would not supply me that data.

Representative TEN Eyck. It would be very interesting to see how the farmer was protected in comparison with dealers who dealt in his products.

Mr. WILLIAMS. I showed you a few minutes ago—I think I showed the percentage of their total loans which were rediscounted by the national banks in three big central reserve cities was over 24 per cent, and that the total percentage of their loans rediscounted by all the country banks was only about 10 per cent.

The CHAIRMAN. As of what date?

Mr. WILLIAMS. I think it was some date in 1920. I think it was September 8, 1920. It is in the record, though.

Representative MILLS. Do you propose to give the figures for 1921 showing the contraction?

Mr. WILLIAMS. Yes.

Representative MILLS. You do?

Mr. WILLIAMS. Yes, if you will let me proceed.

Representative MILLS. Now, before you leave Gov. Harding's testimony, it seems to me that you might include just one other thing. I refer you to page 11 of the testimony of Gov. Harding before the committee. Gov. Harding had referred to agricultural paper discounted on April 30, 1921, of \$231,000,000, as compared with \$66,000,000 on April 30, 1919. The chairman asked him [reading]:

The CHAIRMAN. Have you anything to show what the same class of loans is in the member banks in that same connection?

Mr. WILLIAMS. Is that the top of the page?

Representative MILLS. That is the middle of page 11 of Gov. Harding's testimony. [Continuing reading:]

Gov. HARDING. No, we have not. But this just gives an indication, don't you see? We know this; we know that 40 per cent of the member banks are not rediscounting at the Federal reserve banks at all, and the 60 per cent which are rediscounting at the Federal reserve banks are rediscounting amounts sufficient to make up the percentage of rediscounts to total loans of all member banks to about 15 per cent.

From which one can make some sort of an estimate of the difference.

Mr. WILLIAMS. I don't know whether his figures are correct or not. I have not studied them.

Representative MILLS. But as long as you have read part of his figures into the record I think it would be well to have that read into the record also.

Mr. WILLIAMS. Well, the whole testimony is available, Congressman. It is published in an official document and is available to every one.

Representative SUMNERS. May I ask a question?

The CHAIRMAN. I think we ought to recess at this time.

Mr. WILLIAMS. May I finish just one further statement, Congressman?

The CHAIRMAN. Yes.

Representative SUMNERS. I can ask the question I have in mind when we resume our session this afternoon. I will defer it until that time.

Mr. WILLIAMS. If the \$230,000,000 of agricultural and cattle paper which Gov. Harding referred so frequently to in his testimony on June 1 is any index at all of the total amount of money advanced to agriculturists and cattle raisers by the banks of the country, there is abundant ground for their lamentable complaints of discrimination and contraction. The total of \$230,000,000 which he boasts that the reserve banks were lending a month or two ago on "agricultural" and "cattle paper" was about what this country spent in five days for war purposes during the latter part of 1918, and is less than our people paid in taxes on an average every three weeks last year.

The Congressional Record of Monday, July 25, 1921, tells us that the value of all farm property in the United States in 1920 was over \$77,000,000,000, including live stock valued at about eight billions, farm implements and machinery at more than three and a half billion.

The value of our farm products is estimated anywhere from ten to twenty billion dollars per annum. These figures show how pitifully small by comparison is the amount doled out on "agricultural and cattle paper" by the Federal reserve system, whose total loans and discounts at the beginning of this year amounted to approximately \$3,000,000,000, or more than 12 times as much as the maximum amount of "agricultural" and "live-stock" paper ever held by all the Federal reserve banks at any time, as shown by the Federal reserve official bulletins.

I submit the following tables for insertion in the record. Will we take up those tables when we resume the hearing this afternoon, Congressman?

The CHAIRMAN. If you will. The commission will now take a recess until 2 o'clock.

(Thereupon, at 12.30 o'clock p. m., a recess was taken until 2 o'clock p. m. of the same day, Tuesday, August 2, 1921.)

AFTER RECESS.

The committee resumed its session at 2 o'clock p. m., pursuant to the taking of recess.

The CHAIRMAN. Mr. Williams, you may proceed, if you will, please.

Mr. WILLIAMS. Mr. Chairman and gentlemen, at the point at which I left off this morning I was about to insert certain tables. I will now present them. Here is a table showing the total amount of agricultural paper and live-stock paper held by all Federal reserve banks on the last Friday of each month for the years 1920 and 1919, by months, showing the aggregate for each year.

Representative MILLS. If you are putting that in the record, let me inquire where those figures were obtained?

Mr. WILLIAMS. They were obtained from the Federal Reserve Bulletin.

Representative MILLS. You do not include the figures for 1921?

Mr. WILLIAMS. I am coming to those.

I will now insert a table showing, separately, the amount of agricultural paper and live-stock paper held by the Federal reserve banks on the last Friday of the first five months for the years 1920 and 1921, by months. As compiled from the Federal Reserve Bulletin, I give the first five months as the only ones accessible to me for 1921.

The CHAIRMAN. Without objection, the tables will be inserted in the record.

(The tables submitted by Mr. Williams are here printed in full as follows:)

Total amount of agricultural live-stock State paper held by all Federal reserve banks on the last Friday of each month for the years 1920 and 1919 (being paper with over 90 day maturity).

Month.	Total agricultural and live-stock State paper.		Month.	Total agricultural and live-stock State paper.	
	1920	1919		1920	1919
January.....	\$56,800,000	\$58,900,000	July.....	\$202,500,000	\$63,500,000
February.....	67,000,000	63,800,000	August.....	216,200,000	57,800,000
March.....	74,600,000	67,200,000	September.....	224,300,000	60,100,000
April.....	77,000,000	66,700,000	October.....	240,600,000	55,400,000
May.....	140,600,000	58,900,000	November.....	241,500,000	52,500,000
June.....	167,900,000	68,200,000	December.....	246,900,000	51,000,000

Table showing separately amounts of agricultural and live-stock paper held by the 12 Federal reserve banks on the last Friday of each month for first five months of the years 1920 and 1921 (being paper with over 90-day maturity).

[In millions of dollars.]

	Agricultural paper.		Live-stock paper.			Agricultural paper.		Live-stock paper.	
	1921	1920	1921	1920		1921	1920	1921	1920
January.....	140.8	23.2	88.2	33.6	April.....	149.2	44.3	81.1	61.9
February.....	126.6	30.1	83.6	37.0	May.....	152.7	63.5	76.7	77.1
March.....	140.9	29.3	81.6	45.3					

Mr. WILLIAMS. I will now read from page 18 of Gov. Harding's testimony before the Banking and Currency Committee on June 1, 1920:

In 1920, up to the 14th of December the 12 Federal reserve banks had discounted \$1,981,000,000 of agricultural and live-stock paper, known to be such because it had a maturity date longer than 90 days, as against \$791,000,000 for the year 1918, which does not show any curtailment of farm credits.

I now submit a table showing the total amount of bills discounted and acceptances bought by each Federal reserve bank, in even thousands, during the years 1919 and 1920, having "a maturity of over 90 days." These figures are given by quarters. The total, according to these figures, for the year 1920 would be \$351,884,000, and for 1919, \$125,717,000.

Representative MILLS. Where were those figures obtained?

Mr. WILLIAMS. Compiled from the Federal Reserve Bulletin.

I will now submit a table showing the total amount of bills discounted and acceptances bought by each Federal reserve bank during the years 1920 and 1919. These figures were obtained from the Federal Reserve Board: For January, February, and March, 1920, from page 531 of the Bulletin for 1920; for April, May, and June, 1920, from page 871 of the Bulletin for 1920; for July, August, and September, from page 1232 of the Bulletin for 1920; and for October, November, and December, from page 234 of the Bulletin for 1921.

Please note that it appears from these figures—as to the reliability of which I can only say that they came from the Federal Reserve Bulletin; I have no means of checking them otherwise—that the total amount of paper appears to have been \$351,000,000 for 1920.

The total amount of bills discounted and acceptances bought by each Federal reserve bank for the years of 1919 and 1920 shows, for the year 1920, of all paper discounted and acceptances bought, \$38,535,000,000. That is the total of all paper bought and acceptances discounted, as compared with \$351,000,000 of agricultural and cattle paper.

I think it is only fair, however, that we should call attention to the fact, and should emphasize it, that the average maturity of the loans and discounts and acceptances was very much shorter than for agricultural and cattle paper, and that would make the comparison for all bills discounted and acceptances naturally very much larger. But inasmuch as Gov. Harding has given those figures, I thought it proper to give the figures which I have here from the Bulletin, and I give them to you for what they are worth.

The CHAIRMAN. That would involve the question of the volume of the credit?

Mr. WILLIAMS. Exactly.

(The last two tables submitted by Mr. Williams are here printed in full as follows:)

Amount of bills discounted and acceptances bought by each Federal reserve bank (in even thousands) during the years 1919 and 1920 having a maturity of over 90 days.

	1920	1919
Three months ending Mar. 31.....	\$41,596,000	\$26,726,000
Three months ending June 30.....	123,479,000	46,098,000
Three months ending Sept. 30.....	80,628,000	19,005,000
Three months ending Dec. 31.....	106,181,000	33,888,000
	351,884,000	125,717,000

Total amount of bills discounted and acceptances bought by each Federal reserve bank during the years 1920 and 1919.

	1920	1919
January, February, March (p. 531, Bulletin 1920).....	\$20,635,000,000	\$16,941,000,000
April, May, June (p. 871, Bulletin 1920).....	19,509,000,000	20,196,000,000
July, August, September (p. 1232, Bulletin 1920).....	22,733,000,000	21,018,000,000
October, November, December (p. 234, Bulletin 1921).....	25,658,000,000	23,842,000,000
	88,535,000,000	81,997,000,000

Mr. WILLIAMS. On page 6 of the printed copy of his testimony on June 1 before the Banking and Currency Committee of the House of Representatives, Gov. Harding said [reading]:

The effect of advanced discount rates of the Federal reserve banks was merely to slow down the rate of expansion. There was no curtailment of credit on the part of the Federal reserve banks, nor was there any contraction of the currency. As a matter of fact, the loans and invested assets of the Federal reserve banks increased from the middle of January, 1920, until the 5th of November, 1920, a steady and gradual increase all the way along by about \$400,000,000.

That statement is misleading. In the first place, there was a curtailment of credit on the part of the Federal reserve banks in many directions and there was not "from the middle of January, 1920, until the 5th of November, 1920, a steady and gradual increase all the way along by about \$400,000,000."

On the contrary, the official records show that on January 31, 1920, the total amount of loans, rediscounts, and acceptances held by the 12 reserve banks amounted to two thousand seven hundred and thirty-six million dollars, and that this increased to two thousand nine hundred and eighty-nine million on February 28, 1920. During the month of March, when the demand for credit, especially among the small banks, was particularly active, the total amount of discounts, bills payable, and acceptances held by the 12 Federal reserve banks was reduced to two thousand eight hundred and sixty-eight million. This advanced to two thousand nine hundred and forty-two at the end of April and by the end of May was reported at two thousand nine hundred and thirty-nine million. On June 30, the total had been contracted to two thousand eight hundred and fifteen million, contrary to Gov. Harding's statement that there was a continuous increase. On July 31, the amount reported was two thousand eight hundred and thirty-seven, which was increased on

August 31 to two thousand nine hundred and seventy-four. On September 30 the figures were three thousand and six million, and on October 31 stood at three thousand one hundred million, shrinking one hundred and twenty-five million by November 30, and on December 30, the amount was two thousand nine hundred and seventy-nine million, which was just ten million less than was reported on February 28, 1920, 10 months before.

There has been so much loose talking about the expansion of credit during the year 1920 that it seems to me desirable that we should have the correct figures before us. The above figures do not include United States Government bonds held for investment by the Federal reserve banks in which the fluctuations were not large one way or the other. United States securities held January 30, 1920, were three hundred and four million, as compared with two hundred and eighty-seven million on December 30, 1920.

It should also be understood that some of the banks to which the largest credits were given employed the funds not altogether in domestic trade and commerce, but some of the funds obtained from the reserve bank were sent to the uttermost parts of the world and a large part of them have not gotten back.

A statement published in December last under the auspices of the chamber of commerce of the State of New York estimated that the frozen credits and orders for goods canceled or held up in our dealings with foreign countries amounted to approximately \$1,000,000,000. The losses on those transactions have been enormous. This one billion is exclusive of the huge amount of canceled orders and congealed credits and accounts in our domestic trade.

Representative MILLS. But the fact is, is it not, that with some slight fluctuations, the total earning assets of the Federal reserve banks increased from approximately \$3,000,000,000 in January, 1920, to a maximum of \$3,303,000,000 in November, 1920?

Mr. WILLIAMS. I will give you the figures here which I have drawn from the Official Bulletin.

Representative MILLS. Well, I have the official figures here, by months—

Mr. WILLIAMS. I will read them out by months as I have them. I have shown you that there was no material change in the amount of United States Government bonds held. Now, I will read the figures as to:

Bills discounted and bought, and acceptances.

Nov. 30, 1919	\$2, 715, 000, 000
Dec. 31, 1919	2, 768, 000, 000
Jan. 31, 1920	2, 736, 000, 000
Feb. 28, 1920	2, 989, 000, 000
Mar. 31, 1920	2, 868, 000, 000
Apr. 30, 1920	2, 942, 000, 000
May 31, 1920	2, 939, 000, 000
June 30, 1920	2, 815, 000, 000
July 31, 1920	2, 837, 000, 000
Aug. 31, 1920	2, 974, 000, 000
Sept. 30, 1920	3, 006, 000, 000
Oct. 31, 1920	3, 100, 000, 000
Nov. 30, 1920	2, 975, 000, 000
December, 1920	2, 979, 000, 000

I think that is about December 30.

Representative MILLS. You question the correctness of Gov. Harding's statement? Now, is it not a fact that the loans and invested assets of the Federal reserve banks reached their maximum along in January, 1920?

Mr. WILLIAMS. Well, they were pretty close to their maximum in February, 1920—

Representative MILLS. I should say, November, 1920.

Mr. WILLIAMS. I say, in February, 1920, there was \$2,989,000,000.

Representative MILLS. And that got up to—

Mr. WILLIAMS. And they were contracted to \$2,868,000,000 in March. They got up to \$2,942,000,000 in April, \$2,939,000,000 in May, and went back in June to \$2,815,000,000.

Representative MILLS. And by November they had gotten up to \$3,300,000,000?

Mr. WILLIAMS. Well, I am speaking now of the bills discounted and acceptances bought. There was very little variation, as I have shown you, in the war obligations held.

Representative MILLS. But you question the accuracy of his statement?

Mr. WILLIAMS. Yes; I said that his statement, which I read, I would regard as misleading, in asserting that there was "a steady and gradual increase all the way along by about \$400,000,000."

Representative MILLS. He says, "loans and invested assets." Now, as a matter of fact, the official figures which I have before me show that his statement is absolutely correct, that they did reach their maximum in November, 1920, and that they did show an increase of \$400,000,000 during the months specified.

Mr. WILLIAMS. The statements which I have just given you show that they went up and down all during that period.

Representative MILLS. You have got individual items, whereas he was dealing with the total.

Mr. WILLIAMS. No; I was giving you the total, as I understand it, from the Federal Reserve Bulletin, exclusive of Government bonds, and I have shown you that in Government bonds there was very little variation one way or the other. In fact, there was a reduction, I think.

Representative MILLS. Well, that would tend to make his statement stronger, would it not?

Mr. WILLIAMS. No; I do not understand it so.

The CHAIRMAN. I do not think I quite got the gist of your statement. Do I understand that what you are claiming is that the loans and discounts based on Government paper decreased during this period from January 1, 1920, to January 1, 1921?

Mr. WILLIAMS. United States securities held on January 30, 1920, were \$304,000,000 as compared with \$287,000,000 on January 1, 1921, or say, December 30, 1920.

The CHAIRMAN. And during that period there was—

Mr. WILLIAMS. There was very little variation one way or the other; it was negligible.

Now, here are the figures of the Federal reserve system as reported July 20, 1921, compared with July 23, 1920. In that period gold reserves rose from \$1,983,271,000 in 1920 to \$2,508,298,000 in 1921. There was a contraction during that period in the bills discounted and

bills bought, according to the reports available to me from \$2,823,450,000 to \$1,710,056,000. The Federal reserve notes outstanding July 23, 1920, were \$3,118,205,000, and on July 20, 1921, were reported at \$2,564,613,000.

Representative MILLS. When has that contraction taken place?

Mr. WILLIAMS. During these 12 months.

Representative MILLS. Oh, no; Mr. Williams.

Mr. WILLIAMS. I say, it has taken place in this period.

Representative MILLS. Oh, yes; but when did the contraction really begin? Will you give the figures for January, 1921, and for January, 1920?

Mr. WILLIAMS. I will be very glad to have them put into the record. I have not got them here.

Representative MILLS. Do you not know, as a matter of fact, that the real contraction has taken place—

Mr. WILLIAMS. I read you the figures showing the amount outstanding at the end of each month.

Representative MILLS. Yes; but has not the real contraction taken place since the first of this year?

Mr. WILLIAMS. The heaviest part of it; yes.

Representative MILLS. And not during the year 1920?

Mr. WILLIAMS. Principally in 1921.

Representative MILLS. Is it not a fact that during the whole of 1920 there was an increase in the amount of Federal reserve notes in circulation?

Mr. WILLIAMS. But an increase in the amount of Federal reserve notes in circulation is not necessarily a criterion of the expansion of the currency. I would like to make that plain. Federal reserve notes are very frequently issued against gold.

Representative MILLS. But you gave the Federal reserve notes circulation as of July, 1920, and as of July, 1921?

Mr. WILLIAMS. Yes.

Representative MILLS. Now, I will ask you whether that circulation did not reach its maximum in January, 1921?

Mr. WILLIAMS. I have not the figures available. You can put them in the record, whatever the facts may justify. I do not recall that.

The amount of Federal reserve notes outstanding is no criterion as to the amount of money in circulation, for Federal reserve notes are largely issued in exchange for gold retired from circulation.

The following figures indicate, to some extent, the contraction of credit which has taken place since December 31, 1919, as far as the national banks of the country are concerned:

On December 31, 1919, deposits in national banks were \$17,866,000,000.

On April 28, 1921, deposits in the national banks were \$14,851,000,000, a shrinkage of \$3,015,000,000 in that period.

Representative SUMNERS. Mr. Williams, where did that money go?

Mr. WILLIAMS. That is quite a large question.

Representative SUMNERS. I will not interrupt you if you do not care to discuss that now.

Mr. WILLIAMS. The banks were unable to meet this shrinkage by a reduction in their loans, for we find that on December 31, 1919, loans and discounts were \$11,786,000,000, and on April 28, 1921,

loans and discounts were \$11,367,000,000, a reduction of only \$419,000,000.

The banks obviously needed help from the Federal reserve banks to enable them to meet such a decline as took place in their deposit but the 12 reserve banks now tell us that on December 26, 1919, their bills discounted and bought in the market amounted to \$2,779,000,000, and on July 20, 1921, \$1,710,000,000, showing that they have within this period contracted credits, \$1,069,000,000.

Representative SUMNERS. Mr. Williams, when you say that they have contracted credits, do you mean that credit was desired and was arbitrarily denied, or that the credit was not desired?

Mr. WILLIAMS. Well, the letters which come to me and information which I receive from many different directions, indicate that there was a great deal of credit that was desired and was denied.

Representative SUMNERS. Are you going to deal with that feature later?

Mr. WILLIAMS. Probably.

Representative MILLS. Have you any objection to the figures going into the record at this time as to some of the intervening dates?

Mr. WILLIAMS. I am not a member of this committee, Congressman, and it is not my business to pass upon that.

The CHAIRMAN. If Mr. Mills desires to put in the intervening figures showing what the situation is from month to month, I do not think there should be any objection.

Mr. WILLIAMS. I certainly have none.

The CHAIRMAN. Certainly. What we wish is the facts.

Representative MILLS. I have them from month to month. It seems to me this would be the appropriate place, and I would like to read into the record the following figures:

On the 15th of January, 1920, the total loans and earning assets of the Federal reserve banks amounted to about \$3,000,000,000. This was increased, until the—

Mr. WILLIAMS. May I suggest that if we are making a record it would be better, instead of saying "about" to give the exact figures I have endeavored to give the exact figures, which I have gotten from the Federal Reserve Bulletin.

Representative MILLS. I have only the approximate amounts here, and it appears that they are the approximate amounts.

Senator ROBINSON. Where were these figures obtained?

Representative MILLS. These figures were obtained from the governor of the Federal Reserve Board. It may be more appropriate to wait until the governor appears.

On the 5th of November they amounted to \$3,400,000,000.

On January 15, 1920, the circulation of Federal reserve notes outstanding was \$2,800,000,000, approximately. They increased until it reached the peak on December 24, 1920, of \$3,400,000,000.

Representative SUMNERS. Those are excerpts from a statement made by the governor of the Federal Reserve Board?

Representative MILLS. Yes; from a statement.

I will present the detailed figures, which I have here, Mr. Chairman, to be inserted at this point. The statement is as follows:

Resources and liabilities of the Federal reserve banks at close of business July 6, 1921.

[In thousands of dollars.]

Federal reserve bank of.....	Boston.	New York.	Philadel- phia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.	Total.
RESOURCES.													
Gold and gold certificates.....	7,821	288,815	1,798	6,020	2,708	4,586	20,578	2,798	8,377	2,110	8,674	19,678	338,967
Gold settlement fund, Federal Reserve Board.....	55,562	32,943	57,397	58,446	20,066	9,471	71,396	17,192	7,734	35,608	3,212	33,965	408,146
Total gold held by banks.....	63,573	286,758	59,196	64,475	22,744	14,057	91,973	19,990	16,111	37,803	11,986	53,638	742,103
Gold with Federal reserve agents.....	181,044	509,298	134,428	185,604	38,028	59,832	230,213	48,572	20,081	33,607	14,781	142,892	1,598,265
Gold redemption fund.....	15,655	36,000	9,631	4,514	8,283	5,589	35,292	3,820	3,258	8,317	2,661	9,418	137,438
Total gold reserves.....	260,072	832,056	203,249	254,593	69,025	79,478	357,478	72,382	39,400	74,727	29,428	205,918	2,477,806
Legal tender notes, silver, etc.....	16,525	72,921	3,118	6,233	4,424	7,008	16,803	12,699	903	3,967	5,772	3,032	153,405
Total reserves.....	276,597	904,977	206,367	260,826	73,449	86,486	374,281	85,081	40,303	78,694	35,200	208,950	2,631,211
Bills discounted: ¹													
Secured by United States Govern- ment obligations.....	31,904	212,999	84,043	54,259	29,658	35,063	106,366	32,556	7,757	24,181	10,470	45,121	674,377
All other.....	53,935	236,970	39,317	98,005	74,280	65,734	218,535	54,597	65,977	55,319	49,674	114,623	1,126,986
Bills bought in open market.....	7,905	11,616	3,390	1,228	2,036	962	2,306	104	.....	.....	.....	1,459	31,136
Total bills on hand.....	93,744	461,585	126,750	153,492	105,974	101,779	327,207	87,257	73,734	79,520	60,254	161,203	1,832,499
United States bonds and notes.....	555	3,270	1,627	843	1,233	10,142	4,490	1,133	145	8,368	3,979	305	36,610
United States certificates of indebted- ness:													
One-year certificates (Pittman Act).....	18,936	52,776	26,780	21,799	7,260	14,564	36,112	11,568	5,480	8,320	2,400	9,880	215,875
All other.....	36	9,531	612	13	.....	1	55	225	51	26	.....	1	10,551
Total earning assets.....	113,271	527,162	155,769	176,147	114,467	126,486	367,864	100,203	79,410	96,734	66,633	171,389	2,095,535
Bank premises.....	3,716	5,375	529	2,174	2,051	752	3,878	627	657	2,659	1,883	500	24,861
5 per cent redemption fund against Federal reserve bank notes.....	772	1,864	700	1,239	363	511	1,786	523	275	916	236	494	9,679
Uncollected items.....	50,190	141,927	45,878	50,808	43,379	19,280	66,642	28,078	15,119	38,728	21,848	34,385	557,162
All other resources.....	377	2,587	259	777	447	680	1,890	495	111	491	2,554	2,420	18,088
Total resources.....	444,923	1,583,892	409,502	491,971	234,156	234,195	816,341	215,907	135,875	218,222	128,354	418,198	5,331,536

¹ Includes bills discounted for other Federal reserve banks, viz, Boston, \$10,450; New York, \$31,018; total, \$41,465.

Resources and liabilities of the Federal reserve banks at close of business July 6, 1921—Continued.

Federal reserve bank of.....	Boston.	New York.	Philadel- phia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.	Total.
LIABILITIES.													
Capital paid in.....	7,911	26,896	8,613	11,047	5,322	4,097	14,259	4,512	3,553	4,346	4,222	7,325	102,103
Surplus.....	16,342	50,318	17,564	22,263	11,026	8,708	30,536	9,114	7,303	9,330	7,113	15,217	213,842
Reserved for Government franchise tax.....	2,272	17,100	2,737	1,633	1,679	2,584	8,011	982	1,335	1,587	.....	2,145	42,065
Deposits:													
Government.....	2,006	7,409	1,923	3,652	856	1,873	6,622	1,623	1,844	2,615	1,867	1,734	31,026
Member bank—reserve account.....	109,740	651,727	100,065	136,991	54,176	43,807	229,515	60,952	41,929	71,455	42,312	109,048	1,651,757
All other.....	1,122	11,907	1,210	775	469	355	2,253	783	605	529	378	6,965	27,371
Total deposits.....	112,868	671,043	103,218	141,118	55,501	46,035	238,390	63,258	44,378	74,599	44,557	117,787	1,713,152
Federal reserve notes in actual circula- tion.....	254,169	684,615	224,513	254,854	120,202	149,636	454,379	104,739	59,613	78,633	45,398	241,165	2,671,916
Federal reserve bank notes in circula- tion—net liability.....	9,500	28,096	9,827	16,133	5,606	9,438	17,450	6,370	5,364	14,518	4,362	6,630	133,303
Deferred availability items.....	40,901	93,662	42,370	43,711	33,828	12,977	50,190	25,975	13,087	33,956	21,569	26,229	438,455
All other liabilities.....	951	3,162	660	912	992	720	3,126	857	1,242	1,253	1,133	1,710	16,718
Total liabilities.....	444,923	1,583,892	400,502	491,971	234,156	234,195	816,341	215,907	135,875	218,222	128,354	418,198	5,331,536
MEMORANDA.													
Ratio of total reserves to deposit and Federal reserve note liabilities com- bined, per cent.....	75.4	66.8	63.0	65.8	41.8	44.2	51.0	50.6	38.8	51.4	39.1	58.2	60.0
Contingent liability as indorser on dis- counted paper rediscounted with other Federal reserve banks.....	.....	.....	.....	.....	19,875	.....	.....	.....	11,140	.....	10,450	.....	41,465
Contingent liability on bills purchased for foreign correspondents.....	2,336	40,658	2,560	2,624	1,568	1,152	3,808	1,504	864	1,536	812	1,472	60,914
FEDERAL RESERVE NOTES OUTSTANDING AND IN ACTUAL CIRCULATION.													
Outstanding.....	268,401	833,937	242,295	275,821	126,748	158,577	491,648	125,056	61,392	86,144	49,079	295,726	3,014,824
Held by banks.....	14,232	149,322	17,782	20,967	6,546	8,941	37,269	20,317	1,779	7,511	3,681	54,561	342,908
In actual circulation.....	254,169	684,615	224,513	254,854	120,202	149,636	454,379	104,739	59,613	78,633	45,398	241,165	2,671,916

Distribution of bills and United States certificates of indebtedness by maturities.

	Within 15 days.	16 to 30 days.	31 to 60 days.	61 to 90 days.	Over 90 days.	Total.
Bills discounted.....	1,049,879	169,610	280,130	223,550	78,194	1,801,363
Bills bought in open market.....	19,311	6,708	5,434	1,683	.....	31,136
United States certificates of indebtedness.....	4,228	4,700	20,959	39,482	157,057	226,426

Resources and liabilities of the Federal reserve banks at close of business July 9, 1920.

[In thousands of dollars.]

Federal reserve bank of.....	Boston.	New York.	Philadel- phia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.	Total.
RESOURCES.													
Gold and gold certificates.....	11,600	82,217	1,156	10,117	2,398	8,067	24,250	3,488	7,207	496	5,311	12,620	168,929
Gold settlement, Federal Reserve Board.....	36,716	83,980	45,320	60,057	19,940	4,220	62,924	8,951	4,812	25,832	5,971	44,087	403,760
Gold with foreign agencies.....	8,142	40,932	8,922	9,146	5,465	4,015	13,272	5,242	3,011	5,363	2,900	5,131	111,581
Total gold held by banks.....	56,458	207,129	55,398	79,320	27,803	16,302	100,446	17,681	15,030	31,683	14,182	61,788	683,220
Gold with Federal reserve agents.....	119,620	281,827	91,790	149,550	43,029	50,566	167,547	46,374	32,278	36,795	25,555	100,171	1,145,102
Gold redemption fund.....	17,285	35,979	15,452	1,921	5,963	6,278	32,629	5,217	22	8,589	8,589	9,411	142,994
Total gold reserves.....	193,363	524,935	162,640	230,791	76,795	73,146	300,622	69,272	47,330	72,726	48,326	171,370	1,971,316
Legal-tender notes, silver, etc.....	6,900	106,846	222	1,580	101	1,366	8,632	7,331	170	1,630	1,342	757	136,877
Total reserves.....	200,263	631,781	162,862	232,371	76,896	74,512	309,254	76,603	47,500	74,356	49,668	172,127	2,108,193
Bills discounted: ¹													
Secured by Government war obligations.....	93,045	544,229	146,759	114,910	45,488	52,959	118,917	49,243	8,031	47,092	26,110	49,567	1,296,350
All other.....	73,123	303,454	39,662	63,432	58,344	61,611	319,503	59,053	70,418	62,590	50,763	103,290	1,265,243
Bills bought in open market.....	35,910	154,181	11,429	50,900	6,220	4,297	54,457	3,288	2,612	2,616	655	46,146	372,591
Total bills on hand.....	202,078	1,001,864	197,850	229,142	110,052	118,867	492,877	111,564	81,061	112,298	77,528	199,003	2,934,184
United States Government bonds.....	560	1,457	1,386	833	1,233	114	4,477	1,153	116	8,866	3,966	2,632	26,793
United States Victory notes.....	5	50	10	10	3	3	3	3	3	1	1	1	69
United States certificates of indebtedness.....	21,695	79,214	31,776	23,322	12,260	15,664	39,642	17,239	8,492	12,940	8,365	11,333	281,942
Total earning assets.....	224,338	1,082,585	231,012	253,307	123,545	134,648	536,996	129,956	89,669	134,105	89,859	212,968	3,242,988
Bank premises.....	1,476	3,763	592	1,155	752	590	2,116	866	556	730	906	232	13,734
Uncollected items and other deductions from gross deposits.....	68,718	161,762	64,658	81,273	60,554	29,481	113,467	46,256	24,402	61,825	44,650	40,301	797,347
5 per cent redemption fund against Federal reserve bank notes.....	1,072	3,100	1,300	871	451	573	1,820	523	416	916	586	665	12,293
All other resources.....	282	1,422	194	145	187	100	461	282	51	201	171	326	3,822
Total resources.....	496,149	1,884,413	460,618	569,122	262,385	239,904	964,114	254,486	162,594	272,133	185,840	426,619	6,178,377

¹Includes bills discounted for other Federal reserve banks, viz: Boston, \$35,994; New York, \$36,096; Philadelphia, \$54,494; total, \$126,584.

²Includes bankers' acceptances bought from other Federal reserve banks without their indorsement: Boston, \$4,918; New York, \$10,014; San Francisco, \$10,008; total, \$24,940.

Resources and liabilities of the Federal reserve banks at close of business July 9, 1920—Continued.

Federal reserve bank of.....	Boston.	New York.	Philadel- phia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.	Total.
LIABILITIES.													
Capital paid in.....	7,532	24,675	8,326	10,161	4,873	3,788	13,290	4,257	3,279	4,312	3,757	6,389	94,639
Surplus.....	12,351	51,308	13,069	13,712	8,067	7,050	23,917	5,884	5,178	8,395	4,152	11,662	164,745
Government deposits.....	52	612	3,691	295	3,404	882	750	1,011	410	1,281	1,060	2,471	15,919
Due to members—reserve account.....	118,186	738,232	106,197	143,114	59,876	49,837	261,308	63,598	46,169	82,481	57,343	113,363	1,839,704
Deferred availability items.....	52,560	113,276	52,646	59,395	47,219	23,334	73,863	39,233	18,599	58,143	27,986	28,180	594,434
Other deposits, including foreign gov- ernment credits.....	2,658	23,974	3,434	2,949	1,673	1,265	5,799	1,841	1,212	2,229	1,132	6,993	55,159
Total gross deposits.....	173,456	876,094	165,968	205,753	112,172	75,318	341,720	105,683	66,390	144,134	87,521	151,007	2,505,216
Federal reserve notes in actual circula- tion.....	287,332	871,467	252,418	320,621	126,380	141,362	547,917	128,639	79,116	98,651	82,074	244,971	3,180,948
Federal reserve bank notes in circula- tion—net liability.....	13,784	37,487	19,409	17,108	9,987	11,359	32,031	8,820	7,512	15,088	7,121	10,581	190,287
All other liabilities.....	1,694	23,382	1,428	1,767	906	1,027	5,239	1,203	1,119	1,553	1,215	2,009	42,542
Total liabilities.....	496,149	1,884,413	490,618	569,122	262,385	239,904	964,114	254,486	162,594	272,133	185,840	426,619	6,178,377
Ratio of total reserves to net deposit and Federal reserve note liabilities combined, per cent.....	51.1	39.8	46.0	52.2	43.2	39.8	39.8	40.7	39.2	41.1	39.8	48.4	43.1
MEMORANDA.													
Contingent liability as indorser on dis- counted paper rediscounted with other Federal reserve banks.....					24,972	5,507	31,672	25,013	15,653	12,767	11,000		126,584
Contingent liability on bills purchased for foreign correspondents.....	1,168	6,089	1,280	1,312	784	576	1,904	752	432	768	416	736	16,217
FEDERAL RESERVE NOTES OUTSTAND- ING AND IN ACTUAL CIRCULATION.													
Outstanding.....	297,607	993,186	265,498	332,587	132,009	145,770	594,022	146,458	80,249	103,682	86,125	276,695	3,454,488
Held by banks.....	10,275	121,719	13,090	11,966	5,629	4,408	46,705	17,819	1,133	5,031	4,051	31,724	273,540
In actual circulation.....	287,332	871,467	252,418	320,621	126,380	141,362	547,917	128,639	79,116	98,651	82,074	244,971	3,180,948

Distribution of bills and United States certificates of indebtedness by maturities.

	Within 15 days.	16 to 30 days.	31 to 60 days.	61 to 90 days.	Over 90 days.	Total.
Bills discounted.....	1,437,411	285,693	486,003	272,743	79,143	2,561,593
Bills bought in open market.....	105,303	67,968	163,173	36,147		372,591
United States certificates of indebtedness.....	26,705	6,600	19,400	36,533	192,704	281,942

The CHAIRMAN. Proceed, Mr. Williams.

Mr. WILLIAMS. At this point may I refer to the suggestion which I understood Congressman Mills to make at the morning session? If I misunderstood him, I hope he will correct me. I understood him to say that it was not the duty or function of the Federal reserve bank in New York to inquire of the borrowing banks there what they did with their money which they borrowed—

Representative MILLS. Oh, no; I did not say that. I suggested that, in view of the great number of transactions carried on through the course of the day between the Federal reserve banks and one of these large New York banks, as a practical matter, it was almost impossible for them to ascertain in each individual case for what purpose the money so obtained would be used.

Mr. WILLIAMS. I have in my hand a circular sent out by the Federal reserve bank of Richmond under date of July 23, 1921, in which, under the head of "Advances on the new cotton crop," there appears to be a reference to a ruling of the board. This statement is printed in capitals, and says [reading]:

Under a ruling of the board embodied in its announcement Federal reserve banks are authorized in the present urgent and abnormal situation to discount for their member banks paper owned and indorsed by nonmember banks when offered and indorsed by the member banks. Such paper must be in the form of notes, drafts, or bills of exchange issued or drawn under the terms of the Federal reserve act and the regulations of the board "for the harvesting and orderly marketing of the coming cotton crop," and must be accompanied by a signed statement by the maker or drawer, either on the paper itself or on an attached slip, that the proceeds have been used or are to be used for harvesting or marketing the new cotton crop.

That seems to be a very specific requirement.

Representative MILLS. What are you reading?

Mr. WILLIAMS. This is a circular issued by the governor of the Federal reserve banks of the Richmond district.

The CHAIRMAN. I think we might put in that whole circular.

Mr. WILLIAMS. The next paragraph says [reading]:

The Federal reserve bank of Richmond reserves the right and the authority now, as heretofore, to determine the limit of credit which may be reasonably and with prudence and safety extended to any bank under any conditions and to determine the acceptability of the paper offered.

I understood the suggestion to be made at the morning meeting that paper offered in New York should be or is almost automatically taken if it is eligible.

Representative MILLS. You entirely misunderstood me, if you got any such impression from what I said.

Mr. WILLIAMS. I am glad to be corrected.

Representative MILLS. I said that I assumed that the New York bank would and does follow sound banking practice in that matter.

Mr. WILLIAMS. What I have quoted is from a reserve bank circular dated July 23, 1921.

The CHAIRMAN. I suggest that the entire circular be inserted in the record, and in order that the record may be complete, I have here a copy of the Federal Reserve Board's statement which is referred to in the Richmond bank's statement, and I would like to have that inserted also.

(The circular of July 23, 1921, submitted by Mr. Williams and the statement of the Federal Reserve Board submitted by the chairman are here printed in full, as follows:)

FEDERAL RESERVE BANK OF RICHMOND.

FINANCING THE NEW COTTON CROP.

JULY 23, 1921.

To the members of the Federal reserve bank of Richmond:

A conference was held in Washington on July 19, between the Federal Reserve Board and the governors of the Federal reserve banks of Richmond, Atlanta, St. Louis, Kansas City, and Dallas to review the credit situation in the districts served by these banks and determine what further credit assistance would be needed and could reasonably be extended in harvesting and marketing the growing cotton crop. We inclose a copy of the announcement of the board at the conclusion of the conference.

As the outcome of this conference, we are issuing this general letter to our members, defining the attitude of this bank toward cotton loans and cotton paper, with special reference to the growing crop, involving probably further extension of credit both for the making and the orderly marketing of the crop.

MAKING AND HARVESTING THE CROP.

It is the opinion of this bank that whatever additional advances may be legitimately needed for cultivating and harvesting the crop should be freely made by member banks, in their discretion and with protection. Paper created for the purpose is eligible for discount under the act, and it would be poor business policy to withhold credit for these purposes. Acceptable paper of this nature, offered with specific explanation of the purpose for which it was created, will be taken in addition to a line of credit already granted.

MARKETING.

Notes, drafts, and bills of exchange secured by staple agricultural products, or other goods, wares, or merchandise, when drawn for agricultural, industrial, or commercial purposes, but not for investment or speculative purposes, are eligible for discount under the act.

Under this provision it has always been the position of the Federal reserve bank of Richmond, governed by the regulations of the board, that notes secured by proper warehouse receipts for cotton, the warehouses being responsible and independent of the owner of the product, are eligible for discount when drawn under the conditions above quoted and running not longer than 90 days from the date of discount.

The provisions of the act are sufficiently broad and liberal for the orderly marketing of cotton or other agricultural products, and the resources of the Federal reserve banks are ample and available when used for that purpose.

When, however, having discounted paper secured by staple agricultural products, or other goods, wares, or merchandise, it becomes evident that the purpose of the owners is to hold them off the market indefinitely, or for a predetermined price, there being a market to take them, then such paper ceases to be eligible for discount by Federal reserve banks, although it may still be a proper investment for member banks.

RENEWING PAPER.

Federal reserve banks may not, therefore, under the law become parties to any understanding or agreement to renew paper or to carry it beyond the time specified by the act. At the same time, all paper is not necessarily ineligible because it is renewal paper.

LINES OF CREDIT.

Under the act Federal reserve banks are not limited in the amount of eligible paper which they may discount for a member bank except as to the limit of paper bearing the signature or indorsement of any one borrower (which is well known to members); the "line" is left to the discretion, judgment, experience, and prudence of the Federal reserve bank. There is, therefore, no fixed line for any member bank, but section 4 of the act requires that the board of directors of Federal reserve banks "shall administer the affairs of the bank fairly and impartially and without discrimination

in favor of or against any member bank or banks, and shall, subject to the provision of the law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advances, and accommodations as may be safely and reasonably made, with due regard for the claims and demands of other member banks."

The endeavor has always been made to extend accommodation to a member bank according to the measure of its necessities, and the application of this policy in this district will be illustrated further on in this letter.

The inquiry is occasionally made whether a certain class of discounted paper can be omitted from a bank's regular line. As stated above, and as will be hereafter shown, there is no "regular line" for any bank, but under the act all "discounts, advances, and accommodations" to a bank must be taken into account "with due regard for the claims and demands of other member banks."

No paper may be discounted without the indorsement of a member bank. It is liable for all paper discounted in any event, and that liability must be taken into account, as well as its equitable share of the resources of the reserve bank.

In order to measure the relative amount of accommodation extended to each member bank, and for the equitable application of graduated or progressive discount rates, provided for in section 14 of the act, as amended, a "basic line" was fixed. This line was determined upon the only fair and logical basis; that is, upon the lending power contributed to the Federal reserve bank by the reserve deposit and capital subscription of each member bank. Even under that definition, no limit to the amount of advances to any bank was fixed. It was simply provided that a graduated rate when applied should be applied to the amount loaned beyond this "basic line."

The Federal reserve bank of Richmond has never applied the progressive rate, the application thereof being left to each reserve bank, subject to review and determination by the board. The "basic line" has only been used by this bank as a yardstick, to show a borrowing bank what "line" it might be legitimately entitled to receive and what relative proportion of the reserve bank's resources it was using. The discount rate of this bank has never been above 6 per cent.

Judgment, experience, and knowledge of the conditions surrounding a bank, and the reserve position of the Federal reserve bank itself, therefore, determine the line which may be safely and reasonably given any bank, with due regard to the claim of other banks.

ALLEGED CREDIT RESTRICTION IN THE COTTON STATES.

Criticisms of the credit policy of Federal reserve banks are still current and even rampant. They are possibly most frequent in the South, and more liberal credit has been urged for southern agricultural interests. The five reserve banks in the cotton States are lending their members \$457,000,000, which is 26 per cent of the loans of the entire reserve system. The total loans of these five reserve banks to their members exceed their reserve deposits by \$192,000,000, whereas the reserve deposits of the other seven reserve banks exceed their loans by \$118,000,000.

If loans to farmers are restricted, it is not done by the reserve banks, nor is it the result of any policy adopted by the reserve banks. The act and the regulations of the board define the character and terms of paper which may be taken by reserve banks. They lend the money to their members, and they discount the classes of eligible paper offered by their members. The greater portion of the money loaned in this district is tied up with agriculture in one way or another.

The two cotton States of this district are North and South Carolina. Virginia grows very little cotton. This bank is lending to members in North Carolina \$25,000,000, which is 411.7 per cent of their reserve deposits. It is lending to South Carolina members \$21,000,000, which is 525.5 per cent of their reserve deposits. In addition to this the member banks of these two States are borrowing \$13,000,000 from other banks, which obtain the funds from the Federal reserve banks. Measure this by the situation with the seven reserve banks outside of the cotton States, which have reserve deposits exceeding their loans by \$118,000,000. The volume of loans to these two cotton States, \$46,000,000 directly by the Federal reserve bank of Richmond and \$13,000,000 from other banks, can be further gauged by the statement that it is more than half the maximum amount which all the national banks of the country ever borrowed at any one time prior to 1914, or before the Federal reserve banks were established. This bank is lending to some of its member banks ten to fifteen times the amount of their reserve deposits in order to meet their apparent necessities.

ADVANCES ON THE NEW COTTON CROP.

Under the conditions hereinbefore set forth, and under the terms of the Federal reserve act and the regulations of the board, the Federal reserve bank of Richmond will make further advances for making and gathering the growing crop, and will discount for its members eligible paper secured by warehouse receipts for new cotton at 80 per cent of the market value at the time loans are made, to be kept good, and will discount acceptable trade acceptances of mills for cotton purchased and intended for consumption and bankers' acceptances based on new cotton and made under the regulations.

Under a ruling of the board embodied in its announcement, Federal reserve banks are authorized in the present urgent and abnormal situation to discount for their member banks paper owned and indorsed by nonmember banks when offered and indorsed by the member banks. Such paper must be in the form of notes, drafts, or bills of exchange, issued or drawn under the terms of the Federal reserve act and the regulations of the Board "for the harvesting and orderly marketing of the coming cotton crop," and must be accompanied by a signed statement by the maker or drawer, either on the paper itself or on an attached slip, that the proceeds have been used or are to be used for harvesting or marketing the new cotton crop.

The Federal reserve bank of Richmond reserves the right and the authority now, as heretofore, to determine the limit of credit which may be reasonably and with prudence and safety extended to any bank under any conditions, and to determine the acceptability of the paper offered.

The reserve banks of the cotton States can adequately provide for the gathering and orderly marketing of the new crop with the full cooperation of all member banks. To make this aid thoroughly effective, member banks will be compelled to take measures to provide for the small cotton producer, both in completing his crop and in order that he may not suffer by having to sell his cotton immediately upon gathering it should there not be a satisfactory market at the time. The proceeds of such advances on new cotton should be used to liquidate current indebtedness where possible in order to give vitality to credit. It should be obvious that business can not move and be kept moving unless cotton is sold as the market will take it.

Respectfully,

GEORGE J. SEAY, *Governor.*

Borrowings of member banks, by States.

	Borrowings, Dec. 31, 1920.	Borrowings, June 30, 1921.	Reserve de- posits, June 30, 1921.	Ratio of bor- rowings to reserve de- posits, June 30, 1921.
				<i>Per cent.</i>
Maryland.....	\$29,417,000.00	\$27,177,594.14	\$14,263,499.03	190.5
West Virginia.....	1,186,000.00	5,291,021.18	7,063,883.45	74.9
District of Columbia.....	4,852,000.00	3,252,780.31	6,683,612.05	18.7
Virginia.....	43,316,000.00	43,648,131.13	14,544,562.92	300.1
North Carolina.....	27,870,000.00	25,506,184.03	6,194,559.26	411.7
South Carolina.....	23,877,000.00	21,248,579.59	4,043,402.51	525.5
Total.....	130,518,000.00	126,123,260.38	52,793,519.22	238.9

Number of banks borrowing June 30, 1921, 393.

Number of banks not borrowing June 30, 1921, 225.

Total bills discounted by Federal reserve banks July 13, 1921.

	Bills dis- counted.	Reserve deposits.
Richmond.....	\$122,429,000	\$52,027,000
Atlanta.....	100,821,000	43,696,000
St. Louis.....	81,608,000	58,792,000
Kansas City.....	78,366,000	67,946,000
Dallas.....	74,426,000	42,960,000
	457,650,000	265,421,000

*Forecast of the growing cotton crop by the Department of Agriculture, July 1, 1921,
by districts.*

	Bales.
Richmond.....	1, 416, 000
Atlanta.....	1, 841, 000
St. Louis.....	1, 517, 000
Kansas City.....	555, 000
Dallas.....	3, 017, 000
San Francisco.....	81, 000
	<hr/>
Total estimated crop.....	8, 433, 000

FEDERAL RESERVE BOARD—STATEMENT FOR THE PRESS.

[For release in morning papers, Wednesday, July 20, 1921.]

In view of the vital importance of the problems incident to the harvesting and marketing of the coming cotton crop, the Federal Reserve Board to-day held a conference with the governors of the Federal reserve banks of Richmond, Atlanta, St. Louis, Kansas City, and Dallas, the banks located in or brought in closest touch with the member banks in the cotton States, for the purpose of reviewing the credit situation in these States and determining what further credit will be needed to facilitate the harvesting and orderly marketing of this crop.

At the present time the five reserve banks in question are lending to their members \$457,000,000, or more than 26 per cent of the loans of the entire system, the Richmond bank borrowing from other reserve banks \$20,000,000, and the Dallas bank borrowing \$16,000,000 for that purpose. The total loans of these five reserve banks to their members exceed their reserve deposits by \$192,000,000, whereas the reserve deposits of the other seven reserve banks exceed their loans to their members by \$118,000,000.

The amount now loaned by these reserve banks to their members is four and one-half times the amount borrowed at any one time by all the national banks of the country prior to 1914, or before the establishment of the Federal reserve system.

The Federal Reserve Board and the governors of the Federal reserve banks announce that the Federal reserve banks, in addition to credits already extended, are able and stand ready to extend further credit for the purpose of harvesting and marketing the coming crop, in whatever amount may legitimately be required, either directly to their member banks or under a ruling now issued by the Federal Reserve Board, indirectly to nonmember banks acting through the agency and with the indorsement of a member bank. These loans will be made by the Federal reserve banks upon notes, drafts, and bills of exchange issued or drawn in accordance with the terms of the Federal reserve act and the regulations of the Federal Reserve Board, for the harvesting orderly marketing of the coming cotton crop.

In order, however, that these rediscount facilities of the Federal reserve banks may be made fully effective, it will be necessary that member banks in the cotton States place their loaning facilities freely at the disposal of cotton producers and dealers in their respective localities with the knowledge and assurance that the Federal Reserve Board and the Federal reserve banks recognize the urgency of rendering all proper assistance to these important interests during such abnormal times.

Mr. Meyer, managing director of the War Finance Corporation, who attended the conference, reviewed the activities of the War Finance Corporation in making loans for financing cotton for immediate and future export. Gov. Strong, of the Federal Reserve Bank of New York, and representatives of certain New York member banks, were also invited to the conference to discuss the necessity or advisability of having various commercial banks through the country establish a fund for the purpose of making loans upon cotton. In view of the conclusions reached by the conference as to the ability of the Federal reserve banks effectively to take care of all of the legitimate requirements of the cotton interests, it was felt that the establishment of such a fund at this time is neither necessary nor advisable. Gov. Strong stated, however, that he had received assurances from a number of important banking institutions in New York City that if the facilities now offered by the Federal reserve banks and the War Finance Corporation should prove to be inadequate, they will cooperate in the establishment of a cotton-loan fund in whatever amount the situation might demand.

WASHINGTON, D. C., July 19, 1921.

Mr. WILLIAMS. Mr. Chairman, I should like at this point to read a portion of a press statement which I gave out as Comptroller of the Currency on July 31, 1920:

Those inclined to pessimistic views as to our financial situation probably do not know, or do not appreciate, the immensely significant fact that our Federal reserve banks have at this time an unused lending power of \$750,000,000, and that if occasion required the board could, by waiving reserve requirements on deposit and notes only 10 per cent, increase the unused lending power to two and one-half billion dollars, which is twenty-five times as much as all the national banks of the country (which constitute a large majority of the membership of the reserve system) were ever borrowing at any one time on bills payable and rediscounts prior to 1913, the maximum of such borrowings at any time up to 1913 having been only \$100,000,000.

In the face of such figures and facts as these the fear expressed in some sections that there may not be money enough available to move the crops seems manifestly absurd. It will be recalled that in 1913, before the establishment of the Federal reserve system, the stringency and uneasiness which prevailed at crop-moving time was instantly relieved by the announcement of Secretary McAdoo that the Government was prepared to deposit \$50,000,000 of cash in the banks in the South and West to help move crops. The Federal reserve banks can at this time, as I have shown above, based upon their present gold reserve, supply fifteen times as much as the \$50,000,000, which was so effective in 1913, wholly without waiving or reducing their reserve requirements.

It is also reassuring to know that this unused lending power of the Federal reserve banks is twice as great as the aggregate amount of all the emergency currency issued in 1914 upon the outbreak of the European war, involving the greatest financial crisis in the world's history. Such figures as these ought to be sufficient to allay fears entertained by pessimists as to the financial condition of the country at this time.

With a sane settlement of present labor troubles and the restoration of the old-time efficiency of labor, and the stabilization which it is hoped the forthcoming rate decision of the Interstate Commerce Commission, together with more scientific administration and less stock juggling in railroad management will bring about, the business outlook for this country will be extremely bright.

I will also add that there is not and has not been, in my judgment, the least justification for the excessive and burdensome interest rates, running up to 10, 12, and 15 per cent and higher, which have been exacted by some of the banks in New York City, the principal financial center of our country. New York is the only city of consequence in the world where such interest rates exist and are tolerated. They do not prevail in London or Paris, Berlin or Rome, Peking, Hongkong, or Tokyo, or in any of the leading cities of our own country, San Francisco, St. Louis, Kansas City, New Orleans, Atlanta, Dallas, Chicago, Minneapolis, Cleveland, Richmond, Baltimore, Philadelphia, or Boston.

These excessive interest rates and the publicity given them have increased the uneasiness in financial circles and have been a contributing cause rather than a consequence of the upsetting of security values, and of the excessive and unjust rates which corporations and others have been required to pay for money in recent months. The banks which have charged their customers these excessive rates—at times as high as 15 per cent or more—have themselves at the same time been liberally accommodated with millions of dollars by the Federal reserve banks at average rates of considerably less than 6 per cent.

Upon the publication of that statement, a portion of which I have read, I was informed that the Federal Reserve Board received a communication from some officer of the Federal reserve bank of New York protesting against my press statement. The following correspondence ensued:

Here is a letter which Gov. Harding, of the Federal Reserve Board, addressed to Mr. Jay, chairman of the board of the Federal Reserve Bank of New York, and furnished me a copy:

AUGUST 4, 1920.

DEAR MR. JAY: Your letter of the 3d instant, relating to the statement recently made by the Comptroller of the Currency, was brought to the attention of the Federal Reserve Board at the meeting this morning. The comptroller does not agree with the views expressed in your letter. He stated that his statement was made entirely upon his own responsibility and that it was not shown to any member of the board

before publication. He takes the position that he was making merely a statement of fact and that there is nothing in his statement to justify the conclusions that the board is contemplating reducing reserve requirements.

A representative of the Wall Street Journal telephoned me about 2 o'clock yesterday afternoon and stated that a rumor was current in financial circles in New York that the board was about to reduce reserve requirements to 30 per cent. I answered the inquiry in the following words: "The board has not considered such a proposition at all."

As the rates of interest charged on call loans, you may remember that the board some time ago replied to a Senate resolution on this subject and attached to its letter a memorandum prepared at its request in your office. The minutes of the board show that the draft of the reply and the memorandum were considered by the board at a meeting at which the comptroller was present, and there is no record of any objection on his part. It is not clear, however, from the comptroller's statement that his reference was made entirely to call loans.

In accordance with his request a copy of your letter has been sent to the comptroller.

Very truly, yours,

_____, Governor.

Mr. PIERRE JAY,
Chairman Federal Reserve Bank,
New York City.

Here is a letter which was addressed by me on the same date to Gov. Harding:

AUGUST 4, 1920.

MY DEAR GOVERNOR: I thank you for bringing to my attention Mr. Jay's letter to you of yesterday.

As neither the action of the Federal Reserve Board nor the comptroller's office are subject to review by reserve bank directors, I am sure you will excuse me from commenting upon Mr. Jay's letter further than to note his obvious embarrassment in blowing hot and cold with the same breath, and to express some regret that he should apparently feel it incumbent to maintain, so consistently, an attitude of petulant and ill-advised criticism towards this bureau.

Sincerely, yours,

JOHN SKELTON WILLIAMS.

Hon. W. P. G. HARDING,
Governor Federal Reserve Board.

TREASURY DEPARTMENT,
Washington, August 4, 1920.

MY DEAR GOVERNOR: Since my note to you of this afternoon I have had the pleasure of receiving from you a copy of your letter of even date to Mr. Jay.

In your letter to Mr. Jay you say, inter alia:

You may remember that the board some time ago replied to a Senate resolution on this subject (interest rates) and attached to its answer a memorandum prepared at its request in your office. The minutes of the board show that the draft of the reply and memorandum were considered by the board at a meeting at which the comptroller was present, and there is no record of any objection on his part."

I think you will also recall, Governor, that the board, in transmitting to the Senate the "memorandum" which you referred to as having been prepared in Mr. Jay's office, was scrupulously careful not to adopt, as its own, the conclusions and arguments of the Jay memorandum, and I am also sure that you will remember that my own position as to high interest rates in New York City for many months past has been an entirely consistent one.

In my letter to you of this afternoon I spoke of Mr. Jay blowing hot and cold with the same breath. As an illustration of this I invite your attention to the two following paragraphs from Mr. Jay's letter to you of August 3. In referring to my press statement Mr. Jay said:

"The effect of this is to create an impression that there is an abundance of credit and to embarrass the efforts of this bank and its member banks who are intelligently and discriminately cooperating with us to bring about a reduction of the less needed credits."

Mr. Jay there charges my statement as being too optimistic. A few paragraphs later he tacks and says that the effect of my statement is not "to decrease but rather to increase uneasiness," his language being as follows:

"At a time like the present, when prices are falling and we are entering a season when credit usually is somewhat tense, such a presentation to the public temper by one of the highest financial officials of the Government, however much he seeks to allay uneasiness of showing the immense potential lending power of the Federal Reserve System, does not tend, in my opinion, to decrease but rather to increase uneasiness."

Personally the subject hardly seems to me to be worthy of further attention from the board, but, as Mr. Jay's letter was read at to-day's meeting, perhaps it may be well for you to submit to the board, for its information, this letter, with my note of this afternoon.

Sincerely, yours,

JOHN SKELTON WILLIAMS.

Hon. W. P. G. HARDING,
Governor Federal Reserve Board.

AUGUST 6, 1920.

Mr. PIERRE JAY,
Chairman Federal Reserve Bank, New York, N. Y.

DEAR MR. JAY: Gov. Harding brought to my attention day before yesterday a letter just received from you in which you indulge in what seems to me quite unwarranted criticism of my press statement of Saturday.

Upon receiving from Gov. Harding a copy of your letter, I wrote him a note, of which I beg leave to hand you, with this, a copy. On being furnished by him subsequently with a copy of his reply to you of August 4, I sent the governor another note of which I also hand you, with this, a copy for your information.

As I am entirely satisfied as to the timeliness and complete propriety of my published statement, it is needless to discuss it. But I think it may be in order for me to state that my own views on the subject are confirmed by numerous voluntary expressions of commendation which this office has received from various directions, from men of soundest judgment.

For example, the president of one of the largest national banks in the country—whose bank is not a hundred miles from your office—in indorsing strongly my press statement, also said emphatically that the banks in exacting the interest rates which I criticized were pursuing a "short-sighted policy, based on ignorance"—rather stronger language than that used by me. Another man whose large experience embraces the presidency of a New York national bank, wrote:

That circular letter you are giving to the press under yesterday's date is fine, very fine. Splendid. I congratulate you in doing just the right thing at the right time.

I will add in conclusion that a member of the board in referring to your extraordinary proposal that "some agreement may be reached with the comptroller whereby further statements of this nature may be avoided" humorously suggested that perhaps you will have your counsel prepare such a contract or agreement and send it on.

I may also add that it has not been many days since you wrote Washington another letter of what I regarded as cavilling criticism of my recent address before the Maine bankers, concerning which address a national bank director and a leading manufacturer wrote me on August 2, 1920:

"I have read your speech to the Maine bankers and I am taking the liberty of writing you a few lines to show you how much I appreciate same.

"I think it is the clearest explanation of the present situation that I have seen from any source," etc.

Again regretting the carping attitude toward this bureau evinced by your communication, usually conveyed indirectly, I remain,

Yours, very truly,

JOHN SKELTON WILLIAMS.

Here is a letter which I wrote to Gov. Harding on August 9, 1920, which I should like to place in the record.

Representative MILLS. These are very illuminating, these letters, but what have they got to do with agricultural credits?

Mr. WILLIAMS. Do you address your question to me?

Representative MILLS. Yes.

Mr. WILLIAMS. That is a question for the commission to determine.

Representative MILLS. No; I want it for my own information. I do not see their relevancy.

Mr. WILLIAMS. That is not a question for me to determine; I am not a member of the commission.

Representative MILLS. Will you point out for me the connection?

Mr. WILLIAMS. If you can not see it I can not point it out.

Representative MILLS. Can you see it?

Mr. WILLIAMS. I think they are pertinent to the subject we are discussing, but I can not vote on the commission.

Representative MILLS. I wish you would enlighten me.

Mr. WILLIAMS. If you can not see it, I am sure I can not enlighten you.

Representative MILLS. You obviously see the connection, or else you would not read the letters.

Mr. WILLIAMS. I think I will let them speak for themselves.

Representative MILLS. You decline to enlighten me?

Mr. WILLIAMS. Unless you can see it, I think it would be hopeless.

Representative MILLS. Then we will concede it is hopeless, and proceed.

Mr. WILLIAMS (reading):

TREASURY DEPARTMENT,
Washington, August 9, 1920.

Hon. W. P. G. HARDING,
Governor, Federal Reserve Board.

MY DEAR GOVERNOR: I inclose with this a blank form which I mailed on the 5th instant to national banks in New York City, requesting information in regard to loans, interest rates, bank balances, etc.

I respectfully suggest that, in my judgment, it would be well if the Federal Reserve Board would request similar information as of the same date, July 31, 1920, from the member State banks and trust companies in New York City, in order that we may obtain a correct picture of the New York banking situation as of one date.

Personally I think it is wrong, under the circumstances, for New York banks and trust companies to be permitted to borrow hundreds of millions of dollars from the Federal reserve bank at average rates of 6 per cent per annum or less and then loan that same money to their customers and the public at rates sometimes two or three times as high as those charged by the New York reserve bank. It may be claimed that the New York banks are permitted by the New York State law to charge, 15, 20, or 25 per cent for money. That may be true, but the Federal reserve bank of New York has the right to say that it will decline to loan at 5 per cent or 6 per cent to member banks for the purpose of enabling them to extort 15 per cent or 25 per cent from the unfortunate borrowers of the same funds.

Representative MILLS. You are referring to call money rates, I take it?

Mr. WILLIAMS. Yes.

Representative MILLS. Just wait a minute, Mr. Williams. Let me ask you what effect the denial of credit to a bank or trust company by the Federal Reserve Board would have by way of lowering call money rates?

Mr. WILLIAMS. I think it would put the rates down to 6 per cent.

Representative MILLS. How?

Mr. WILLIAMS. I think that if the member banks could not get funds from the reserve bank while charging their customers 30 per cent, and could get accommodation when holding their rates down to 6 per cent, they would very gladly charge the lower rates.

Representative MILLS. Do not interest rates increase in proportion with the scarcity of funds available.

Mr. WILLIAMS. No; they do not in other States where usury laws are observed.

Representative MILLS. In other words, the more money there is the higher the interest rates?

Mr. WILLIAMS. No.

Representative MILLS. Are you under the impression that a bank that was charging 15 per cent on call loans would charge 6 per cent if it could not obtain any money from the Federal reserve bank otherwise?

Mr. WILLIAMS. I do; I am sure of it.

Representative MILLS. In other words, the less money it had to be loaned the lower its interest rates would be?

Mr. WILLIAMS. No, that is not logical.

Representative MILLS. Well, it does not seem to me it is logical, and yet why is not that the very thing you are suggesting?

Mr. WILLIAMS. It is contrary to the practice in other parts of the country.

Representative MILLS. You are suggesting that if we restrict the credit of the bank it will automatically lower rates?

Mr. WILLIAMS. Decent interest rates are maintained in other States of the Union where they do not have the same freedom to charge excessive rates that they have in New York State. That is the experience of the other States of the Union.

Representative MILLS. It would seem to me that the more you restrict the credit of a bank the more it would be inclined to raise its interest rates. Must not that follow?

Mr. WILLIAMS. I have recommended to Congress, in my annual report as Comptroller of the Currency, legislation which would prevent a member bank from charging a customer more than so much in excess of the rate which it pays to its reserve bank. I think that is a fair and right principle and ought to be followed.

Representative MILLS. Let us assume that a given trust company should loan a certain amount of money on call loans, and that you diminish the credit of that institution with your Federal reserve bank—

Mr. WILLIAMS. How do you mean "diminish the credit?"

Representative MILLS. That you do not allow them to discount their paper.

Mr. WILLIAMS. Then they would not charge these high rates.

Senator ROBINSON. It means that in order to get the credit they would accept a lower rate of interest?

Mr. WILLIAMS. Yes, sir.

Senator ROBINSON. They could well afford to do so.

Mr. WILLIAMS. These banks that were charging 15, 25, and 30 per cent were getting the money at 3, 4, and 5 per cent.

Representative MILLS. That is, assuming, of course, that they were getting the money that was loaned on call entirely from the Federal reserve bank.

Mr. WILLIAMS. Not at all. It means assuming they were getting it from their depositors who deposited it with them, and their correspondents who deposited it with them.

Representative MILLS. I can not escape the conclusion that restricting credit would have the very opposite effect.

Mr. WILLIAMS. It may be illuminating to you to know that in the other States where they do not have that privilege that they have in New York they maintain fairer rates of interest.

Representative MILLS. Is it not this true, that the tighter the money market the higher the interest rate?

Mr. WILLIAMS. Not necessarily.

Representative MILLS. All right.

The CHAIRMAN. May I ask you a question there? Is it your idea, then, that the supply and demand of money on the call market has no effect whatever upon the interest rate?

Mr. WILLIAMS. It ought not to have the effect of putting the rate up to above 10 per cent.

The CHAIRMAN. As a matter of fact, does it not?

Mr. WILLIAMS. It does, because in New York there is no law to prevent it, and the regulations of the Federal reserve system do not prevent it. I recommended the other day an amendment to the Federal reserve act which would prevent it.

The CHAIRMAN. Well, let us get at what the facts are, if we can. If they need correcting, then we will be glad to have you recommend a method of correcting them. As a matter of fact, under the laws of the State of New York, the call money rate is established by the supply of money and the demand for it? Is that correct?

Mr. WILLIAMS. To a certain extent. Public opinion has something to do with it. I might mention, incidentally, that since my statement which I have just read, of July 31, 1920, was put out I do not think the call rate in New York has gone above 10 per cent at any time. Prior to that it was ranging around, sometimes, 15, 20, 25, and 30 per cent. I think the force of public opinion has cut down interest rates. There was no reason why they should have gone above 10 per cent, anyhow.

Representative MILLS. You attribute that entirely to your circular?

Mr. WILLIAMS. No, I do not. You may give as much credit as you please to my statement.

The CHAIRMAN. I am simply trying to get at the facts.

Mr. WILLIAMS. I recommended to Congress when I was Comptroller of the Currency that there should be a limitation upon the rate of interest which a borrowing bank should be permitted to charge; whether it is 1 per cent or 2 per cent above the rate which they pay I am not prepared to express an opinion on at the moment, but certainly a bank receiving large accommodations from the Federal reserve system should not be permitted to charge 15, 20, 25, and 30 per cent.

The CHAIRMAN. Let me ask you this question. Do you think it would tend to curb speculation on the stock market if the rates for money were kept at a low point?

Mr. WILLIAMS. What do you mean by a "low point?"

The CHAIRMAN. Well, we will say about 4 or 5 per cent, or 6 per cent.

Mr. WILLIAMS. The interest rate is not the only factor that controls speculation. We saw a year ago—

The CHAIRMAN. I understand that, but let me have an answer to that question, whether you think the maintenance of a low rate of interest for call money would have the effect of lessening speculation.

Mr. WILLIAMS. Why, that question answers itself. You do not have to ask me that question, with all due respect, Congressman. The maintenance of a low rate can not diminish speculation.

The CHAIRMAN. Then do you think that—

Mr. WILLIAMS. I think that a decent rate should be maintained, whether speculation is rife or not. I think there are other necessary

elements that enter into speculation besides the interest rate. I have called the attention of the public, in the last few months, to an instance where as much as 200 per cent was charged—the equivalent of 200 per cent was charged in New York.

Representative MILLS. Did you tell the public all the circumstances surrounding that loan?

Mr. WILLIAMS. They can get them if they want them, from the Federal Reserve Board or anyone else.

Representative MILLS. You did not tell them though?

Mr. WILLIAMS. I told them the salient facts.

Representative MILLS. As I remember it, in your Augusta speech you described that loan as having been made for industrial purposes, did you not?

Mr. WILLIAMS. No; I do not think I did. It was to the head of an industrial corporation. It was a personal loan, as I understand it.

Representative MILLS. Did not that raise the inference that it was intended as an industrial loan?

Mr. WILLIAMS. Not necessarily at all, as I see it.

Representative MILLS. Do you not think it would have been fairer to the public, perhaps—

Mr. WILLIAMS. I think I did say—did I not say that it was upon stock collateral?

(Mr. Williams stated explicitly in his Augusta speech as to this loan: "That loan was secured by collateral." The speech is included in this record.)

Representative MILLS. No, no; I read your statement very carefully.

Mr. WILLIAMS. Do you think that loan was justified?

Representative MILLS. No; I think it was bad business on both sides, if you want to know my opinion.

Mr. WILLIAMS. I agree with you.

Representative MILLS. But I think it would have been fairer to the public if you had told them all the facts, instead of leading them to believe that a bank was holding up an industrial corporation. That is the point I mean to make.

Mr. WILLIAMS. We differ on that.

Senator HARRISON. But we are glad the witness and the Congressman have gotten together on something.

Representative SUMNERS. I want to ask you a question when Mr. Mills is through.

Representative MILLS. Go ahead, while I look this up.

Representative SUMNERS. When the interest rate is running along about 15 to 30 per cent is not that rate availed of more by those who are speculators and are willing to take a gambler's chance than by the people who need the money for the ordinary commercial necessities of a community?

Mr. WILLIAMS. I think that kind of speculation should be curbed—

Representative SUMNERS. The point I am making, however—

Mr. WILLIAMS. But, unfortunately, the high rates were not paid only by speculators, as I understand the situation. I understand that some very excessive rates and commissions of one kind or another were during that period charged to others than those you would class as speculators.

Representative TEN EYCK. Let me understand if this is your idea, that there should be fixed by law a rate of interest to be charged on call loans, the same as we in New York State now have a maximum rate of interest that savings banks may charge for loans on mortgages, which is 6 per cent.

Mr. WILLIAMS. I think there should be a limit on the maximum which may be charged on call loans. In most of the States of the Union there is that limit.

Representative TEN EYCK. New York State has that limit on mortgages now?

Mr. WILLIAMS. Yes; and I think it ought to apply to loans of other character. I do, unquestionably.

Senator HARRISON. It might be interesting to you to know that there is pending in the Senate legislation affecting the War Finance Corporation, which provides that the amount to be charged by a bank on an amount advanced by the War Finance Corporation shall be fixed at 2 per cent more than the War Finance Corporation charges for its loan to the bank.

Mr. WILLIAMS. I think that is very wise.

Senator ROBINSON. Does anybody here think that a Government agency should fix a rate of interest at which money may be procured through the Federal reserve system and leave the borrowers of that money to charge any rate that the exigencies of the situation may enable them to collect? Upon what theory would you give that power to any organization—lending it money at, say, 6 per cent, and permitting it to loan it at 30 per cent? What theory does that rest on?

Mr. WILLIAMS. I can say, none.

Senator ROBINSON. It seems to me a reasonable suggestion that if the Government is going to fix, for the protection of a member bank, a low rate of interest at which it may have its paper discounted and procure money to loan to others, there should be some protection to the borrowing public.

Mr. WILLIAMS. This loan that he [Representative Mills] spoke of nearly broke the back of the poor man who had to pay it. A few weeks after that, as I am informed, he had to make adjustments at a very great sacrifice to himself.

Senator ROBINSON. Does any legitimate business interests pay 20 per cent interest?

Mr. WILLIAMS. It ought not to.

Representative MILLS. This is the statement you made: "Charged its customer, the head of a large manufacturing corporation, the equivalent of about 200 per cent per annum interest."

Mr. WILLIAMS. That does not say they charged the manufacturing corporation, but this customer.

Representative MILLS. Does not that statement raise very squarely the inference that this was a loan for manufacturing purposes?

Mr. WILLIAMS. By no means. If it had intended that it would have said "manufacturing company." On the contrary, I said, "the head of a manufacturing company."

Representative MILLS. Do you not think the insertion of the words "head of a large manufacturing company" is misleading?

Mr. WILLIAMS. No; I do not. I think it conveyed precisely the idea that was intended to be conveyed, that it was the head of the company and not the corporation.

Representative MILLS. Do you not think it would have been a little fairer and have given a more correct picture if you had stated it was a loan for a highly speculative purpose?

Mr. WILLIAMS. I do not understand it was such. My understanding was that it was stock of his own corporation which this poor man was forced to hypothecate.

Representative MILLS. You do not understand that he was speculating at all at the time?

Mr. WILLIAMS. I had never met the man.

Representative MILLS. Don't you know the facts?

Mr. WILLIAMS. I knew nothing about his speculations; I knew that he was borrowing on the stock of his own corporation, and the equivalent of the rate of 200 per cent per annum appears to have been exacted of him.

Representative MILLS. You do not know the particulars of the transaction?

Mr. WILLIAMS. What particulars?

Representative MILLS. Surrounding this particular loan?

Mr. WILLIAMS. I know some of them; I gave the salient facts. I do not know what particulars you refer to.

Representative MILLS. You do not know that it was a speculative loan?

Mr. WILLIAMS. I do not know that it was any more a speculative loan than many other loans where large owners in corporations are forced to borrow. I do not know the man that borrowed the money. I have never met him, and know nothing about him except what I see in the press. But I do know the details of that loan, and I stated the details correctly in my address, as I understood them.

The CHAIRMAN. What was the amount of this loan you have just been referring to?

Mr. WILLIAMS. I think if the Congressman will read precisely what I said he will get the facts.

The CHAIRMAN. The matter has come up, but I would like to have the facts in the record just as they are.

Mr. WILLIAMS. I think if you will read from my address the unvarnished facts will appear.

The CHAIRMAN. Mr. Mills, will you read the copy of that part of Mr. Williams's speech which refers to this transaction, so that we may have the whole thing in the record?

Representative MILLS (reading):

I have before me one case where a bank which was borrowing several million dollars from the Federal reserve bank at 6 per cent charged its customer, the head of a large manufacturing corporation, the equivalent of about 200 per cent per annum interest on the net amount of money which the bank itself advanced to the borrower.

Mr. WILLIAMS. I regard that as a fair statement of that case.

The CHAIRMAN. Was any part of this loan sold by the bank to any other bank, do you know?

Mr. WILLIAMS. As I understand it, Mr. Chairman, that particular loan was for about a million dollars, and about one-half of it was passed on, without the indorsement of the bank, to other banks or lenders, leaving about one-half with the particular bank to which I refer. And as its share of the commission which was exacted that particular bank, as I understand it, collected about \$250,000 from the maker of the note, so that it was required to pay over to him

only about \$250,000 net, for \$500,000 notes that were paid in full in six months.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes; proceed, Mr. Williams.

Representative MILLS. May I just proceed with this one particular case one step further? Do you know, as a matter of fact, what rate of interest was actually charged in this particular case?

Mr. WILLIAMS. You mean within a fraction of 1 per cent?

Representative MILLS. No; not within a fraction of 1 per cent.

Mr. WILLIAMS. It was about the equivalent of 200 per cent on the amount loaned; on the amount of \$250,000, as I understand it. In other words, the customer—

Representative MILLS (interposing). Is it not a fact that—

Mr. WILLIAMS (interposing). Let me state this, to make it clear: I understand, without looking up the records—my recollection is that the money was used for about six months; was paid within six months, and that the bank collected about \$250,000 for interest and commission, and the customer had the use of about \$250,000. Two hundred and fifty thousand dollars on \$250,000 is, obviously, 100 per cent for one year; for six months it would be 200 per cent per annum.

Representative MILLS. Would you be inclined to disagree with the statement if I stated that the commission was 25 per cent—the commission charged by the bank to the customer, and by means of parceling out the loan the bank actually received 200 per cent on that part of the loan which it took, so that the rate charged the customer was not 200 per cent, but 25 per cent, and that you have been misled in your statement of the facts by accepting the profits of the particular bank?

Mr. WILLIAMS. No; I do not think I have been misled.

Senator HARRISON. Where did you get your facts from?

Mr. WILLIAMS. From the sworn statement of the bank.

Senator HARRISON. And you do not know where the Congressman got his facts from?

Mr. WILLIAMS. No, sir.

Representative MILLS. Would you be willing to check up on this?

Mr. WILLIAMS. I am not Comptroller of the Currency, I am very pleased to say.

Representative MILLS. But you are very sure that the 200 per cent represents the interest charged and not the profit to the bank?

Mr. WILLIAMS. Perhaps I can make that clear in a few remarks, if you wish me to take up the time in doing so. My recollection is that there were a number of notes given, aggregating \$1,000,000; that the bank which made those loans passed on approximately \$500,000 of the notes, which were in smaller denominations, I assume, to a number of other banks, without its indorsement—without its indorsing them—not liable in any way for them. My recollection is that the banks which took these loans got 6 per cent per annum interest, and, if I remember correctly, approximately 3 per cent commission. The bank, on the residue of the \$500,000, which the bank retained itself, got about \$250,000 for interest and commission, making about 200 per cent per annum, for six months.

Representative MILLS. Exactly. So that my statement is correct, that the bank—what we may call the lending bank—made a profit of

200 per cent, but the borrower paid 25 per cent for a loan of \$1,000,000?

Mr. WILLIAMS. No; not by any means. The borrower paid on the \$500,000, if I remember correctly; he paid 6 per cent per annum interest and 3 per cent commission—

Representative MILLS (interposing). As a matter of fact, he wanted \$1,000,000, and he paid \$250,000 to get it; is that not so?

Mr. WILLIAMS. Approximately so, I understand.

Representative MILLS. Which is 25 per cent.

Mr. WILLIAMS. Yes; flat, plus 6 per cent per annum interest, and, as I understand, equal to between 60 per cent and 70 per cent on the whole amount gotten by the borrower for six months, or 200 per cent on the net amount the bank loaned on its own account—

Representative MILLS (interposing). And thereafter the bank parceled out the loan to other banks?

Mr. WILLIAMS. The bank, I think, parceled out the loan. I do not know whether before or after or during the time of the loan.

Representative MILLS. But it parceled it out?

Mr. WILLIAMS. The bank, without risk to itself, parceled it out.

Representative MILLS. I am not defending the bank, but I am bringing out the fact that he did not pay but 25 per cent, and not 200 per cent.

Mr. WILLIAMS. I do not understand it that way.

The CHAIRMAN. You may proceed, Mr. Williams.

Mr. WILLIAMS. Shall I resume where I left off?

The CHAIRMAN. Yes.

Mr. WILLIAMS. I am reading a letter addressed to Gov. Harding under date of August 9, 1920 a portion of which I read a while ago. Continuing, that letter says:

You and I both know that commercial banks in many parts of the country have been seduced by these unnatural interest rates in New York City into sending funds away from home to be loaned in Wall Street at these exorbitant rates. One effect of this has been to cripple and cramp their merchants at home at the same time that further funds are accumulated in New York for use in oil speculations and unnecessary promotions, as well as for the use, sometimes, of those who may have a legitimate need for the funds and are required to pay the exorbitant rates.

I am afraid that these excessive interest rates are exercising a tendency to drag us back to the old unscientific and abnormal conditions that existed before the Federal reserve banks went into operation. I believe it lies within the power of the Federal Reserve Board to keep the interest rates in New York City down to a basis of about 6 per cent. I think there are very few banks in New York which would not willingly put out all the call money they had to loan at 6 per cent, instead of 12 per cent or more, if they thought that by charging higher rates they would shut themselves off from accommodations by the Federal reserve bank.

For the Federal Reserve Board to request from the member State banks and trust companies in New York City the same information which the comptroller's office has asked for from national banks may not be a popular move—with the banks—but I believe that it would be a right move, and a wise and helpful move, and would be the means of getting to the board much information on loans and interest rates which, in my judgment, it ought to have and which it does not now possess. At any rate I feel it my duty to submit to you and the board for earnest consideration this suggestion.

Faithfully yours,

JOHN SKELTON WILLIAMS.

P. S.—I note from yesterday's New York World that it has been suggested that the New York State superintendent of banks should institute a somewhat similar inquiry as to the profiteering of some of the trust companies, etc.

J. S. W.

Mr. Chairman and gentlemen, I should like now to read into the record a memorandum which I submitted for the minutes of the Federal Reserve Board under date of August 26, 1920. I do not recall whether this memorandum, as requested by me, was inserted in the records of the board, or not. I assume and hope that it was recorded. If it is not in the records of the board, I assume also that it was probably left off by mutual consent. But I think—it is my impression that this memorandum did go into the records and minutes of the board. Anyhow, it was presented. [Reading:]

Memorandum for minutes of Federal Reserve Board, August 26, 1920.

Mr. Williams stated that he thought it would be beneficial to the general situation, and would also be a relief to holders of Liberty bonds who are complaining of the serious shrinkage which has taken place in this premier security, if the Federal reserve banks should put into effect without further delay a $4\frac{1}{2}$ per cent interest rate to apply to loans on Liberty bonds made prior to the time when the reduced rate should become effective, along lines which were suggested by Gov. Harding some weeks ago. The subject was discussed informally, but no motion was made.

Mr. Williams also said he thought the time was very near when the board should revise and reduce from 7 per cent to 6 per cent the discount rates in New York and the other districts which the 7 per cent rate now exists in. He said he thought that the credit situation could be adequately controlled by the exercise of wisdom and judgment by the officers of the reserve banks with a 6 per cent rate; and that in his opinion the continuance of the 7 per cent rate was harmful for many reasons.

Mr. Williams called attention to the drastic liquidation which has already taken place in the past six or eight months in leading commodities including cotton, wheat, corn, rice, silk, wool, leather, etc.; the shrinkage in some cases amounting to over 50 per cent. He also stated that prices of standard securities, including United States Government bonds, high-class railroad bonds and shares, and other securities, had this summer reached the lowest level they had touched in half a century, and expressed the view that such additional liquidation as is needed could be brought about without the exaction of interest rates as high as those which have prevailed.

Mr. Chairman, if there is no objection, I should like to read into the record this one-page press statement which I gave out under date of September 11, 1920, in regard to interest rates in New York. I can either leave this statement or read it.

The CHAIRMAN. I think you had better read it.

Mr. WILLIAMS (reading):

SEPTEMBER 11, 1920.

STATEMENT BY THE COMPTROLLER OF THE CURRENCY.

A leading New York paper, in its financial column to-day, criticizes the statements made this week by Senator Owen relative to the excessive interest rates which have been charged by certain banks in New York City during the past year, and says that bankers "point out that when Senator Owen charges that \$500,000,000 has been loaned at rates up to 30 per cent he is speaking without the record." Continuing, the press article says:

"That high figure obtained on the stock exchange for about 10 minutes one afternoon the middle of last November and probably as much as \$1,000,000 was loaned at that rate."

That criticism by the unnamed "bankers" is misleading, and in justice to Senator Owen it is proper to say that the Senator's public statements on this subject, as printed in the press dispatches which have been brought to my attention are substantially correct, and in view of actual facts are moderate and conservative.

During the past year the burdensome and oppressive interest rates to which the Senator refers have been exacted, not in "one or two possible insignificant instances," as one New York paper expressed it, and not, as to the "high figure," as another paper expressed it, "for about 10 minutes one afternoon the middle of last November," but in thousands of instances, at numerous times, and upon call loans aggregating hundreds of millions of dollars.

The information on this subject called for as of August 5, from all of the New York City banks, has been supplied by nearly all of them and is now being compiled: but in anticipation of a more complete statement which will be available later, it may be interesting to the public to know that the amount of demand loans, upon which two or three of the banks, only—exclusive of various others which were charging the same rates—were exacting 20 per cent or more per annum interest, in some instance as high as 25 and 30 per cent, was on November 13, 1919, about \$50,000,000; on November 14, 1919, about \$40,000,000. The new call loans at the rate of 25 per cent per annum made by one of these banks at the end of 1919, on December 29, 30, and 31 aggregated about \$20,000,000. On January 2, 1920, these same two or three banks were lending at 18 per cent, 20 per cent, and 25 per cent interest about \$75,000,000; on January 3, 4, and 5, at 18 per cent interest from \$60,000,000 to \$70,000,000; on February 6, 1920, at 20 per cent and 25 per cent interest, over \$40,000,000; on February 9, 1920, at 20 per cent interest, about \$40,000,000.

As late as the end of June it appears that interest as high as 14 per cent per annum was being demanded by these banks on millions of dollars of call loans.

These illustrations are from the official records of only two or three of the thirty odd national banks in New York City, but they are sufficient, I think, to show the unfairness and incorrectness of the criticisms of Senator Owen's just condemnation of the excessive interest rates which for some time past have been a distinctly disturbing factor in the business and financial situation.

I am pleased to confirm the statement I made some time ago that although the aggregate amount upon which unjust and oppressive interest rates have at times been exacted by some banks is very large, a majority of the national banks in New York City have made a comparatively small proportion of their loans at these indefensible rates.

Senator CAPPER. Mr. Williams, you have given us some very interesting facts as to the excessive rates charged in New York to the big business interests. Have you any information as to the rates charged agricultural and live-stock interests throughout the West?

Mr. WILLIAMS. Senator Capper, I made quite an exhaustive study of usury throughout the South, West, and Northwest about six years ago as Comptroller of the Currency, and presented the facts which I developed in one of my annual reports as Comptroller of the Currency. I have not made any other similar study in the last year or two.

Senator CAPPER. Did the fact that the New York business interests were paying high rates for money tend to deprive the farmers and stockmen of the West of money?

Mr. WILLIAMS. Unquestionably.

Senator CAPPER. The game was too fast for them, as I see it.

Mr. WILLIAMS. Yes, sir.

Now, Mr. Chairman and gentlemen, I should like to read into the record—I do not want to tire you—but I should like to read into the record two press statements which were given out by me as Comptroller of the Currency, one under date of October 18, 1920, and the other under date of October 22, 1920, relating to the high interest rates in New York City. Shall I read them?

The **CHAIRMAN.** I think it better to have whatever goes in read.

Mr. WILLIAMS. All right. They are public statements which I have given out; there is nothing private about them. [Reading:]

OFFICE OF COMPTROLLER OF CURRENCY,
Monday, October 18, 1920.

The Comptroller of the Currency gave out this statement:

"NEW YORK CALL MONEY RATES HIGHEST IN THE WORLD.

"UNJUSTIFIABLE INTEREST EXACTED ON DEMAND LOANS AGGREGATING BILLIONS AN ACTIVE CONTRIBUTING CAUSE OF EXORBITANT RATES FOR NEW CAPITAL CHARGED CITIES, RAILROADS, INDUSTRIAL, AND OTHER PUBLIC AND PRIVATE ENTERPRISES, AND FOR THE HUGE SHRINKAGE DURING THE PAST YEAR IN ALL SECURITY VALUES—'RENEWAL' RATES FIXED DAILY BY SMALL 'COTERIE' OF STOCK EXCHANGE BROKERS GOVERN INTEREST CHARGED ON BROKERS LOANS IN NEARLY ALL NEW YORK BANKS.

"In a statement given to the press on July 31, 1921, I expressed the opinion that there was no justification for the excessive and burdensome interest rates 'running up to 10, 12, and 15 per cent and higher, which had been exacted by some of the banks in New York City, the principal financial center of our country.'

"It is no part of my business to discuss now the morality or the ethics of these transactions. It is my imperative duty to take close cognizance of them so far as they may have effect on the general banking and commercial interest of the country. I realize clearly the inestimable and indisputable value to our own country and the world of the great money center popularly known as 'Wall Street'; and have no purpose or wish to stir prejudice against it, or to do or say anything to impair its usefulness, or to injure any institution or individual connected with its activities. I do intend, strictly in the line of official duty, to put before the public and the newspapers facts of which both are uninformed and to point out evils already existing and dangers threatened because of those facts.

"In the statement of July 31 I called attention to the fact that New York was the only city of consequence in the world where such interest rates existed or are tolerated, and I expressed the belief that the exaction of these rates, and the publicity given them, had increased the uneasiness in financial circles and had been an active contributing factor rather than a consequence in the upsetting of security values, and that they had operated to force railroads and industrial corporations to pay burdensome and costly rates in providing fresh capital for the industries and business of the country. I also pointed out that the banks which had been charging their customers these excessive rates, 'at times as high as 15 per cent or more, have themselves at the same time been liberally accommodated with millions of dollars by the Federal reserve banks at average rates of considerably less than 6 per cent.'

"This press statement was vigorously attacked in the columns of the New York papers in interviews with various anonymous bankers and financiers, who refused, however, to permit their names to be used. One leading journal, for example, quoted bankers as saying:

"It is unfair to attempt to defame the whole New York banking community just because of one or two possible insignificant instances of abuse.'

"Another leading New York paper declared that the high rates quoted on the stock exchange applied only to 'a small amount of money, relatively speaking.'

"The investigation which I have made since my public statement on this subject completely confirms the views expressed and proves that they were, if anything, too conservative.

"In order that the public might be fully informed, and know the exact facts in regard to the money situation in New York, the national banks in New York City were requested by the Comptroller of the Currency, under date of August 5, 1920, to furnish, under oath, a report of the number and amount of all demand loans secured by bonds and stocks made monthly by them between October 1, 1919, and July 31, 1920, upon which they had exacted interest in excess of 6 per cent per annum. The banks, generally, including the largest bank in New York City, complied with the request, but three banks demurred, claiming that it would be impracticable for them to furnish the data called for as to various loans made by them at excessive interest rates by months as requested. They were, thereupon, requested to furnish information as to the loans made by them for about eight days in each month since October 1, 1919, these eight days including, generally, the high money periods in each month. It should be understood, therefore, that in the statement which follows, three of the larger banks have included only a portion, and not all, of their loans made at the high rates.

"The banks were requested, in submitting their statements, to count as a new loan each change in the interest rate on their existing call loans. If a loan, for example, should be made for \$100,000 to a brokerage firm by a certain bank at 10 per cent, and

the rate changed five times in 30 days, this loan would be regarded as six loans with an aggregation of \$600,000. Therefore, these demand loans embraced in this statement should be considered as running from one day upward. It should also be explained that, in the case of one of the three banks which reported its loans for only a portion of the period, call loans are included which were made by this one bank for outside banks as well as for itself. These outside loans sometimes amounted to more and sometimes to less than the call loans made by the bank for its own account.

"The sworn reports to this office show that during the period from October 1, 1919, to August 1, 1920, there were made by the national banks in New York City more than 4,000 loans at rates of 15 per cent, 20 per cent, 25 per cent, and 30 per cent per annum, and that the amount of these loans, including only a portion of those made during this period at the above rates in three of the largest banks, aggregate^d over \$600,000,000.

"The records also show that the total loans outstanding upon which interest at 15 to 30 per cent was being charged by a portion of these banks on 42 different days, for which reports were received from them, aggregated over \$1,100,000,000. It will be remembered that in my statement of July 31 the banks were charged with making loans at 10 per cent, 12 per cent, and 15 per cent. The actual facts, therefore, in view of the loans made at 15 per cent, 20 per cent, and 30 per cent, indicate that my statement was extremely conservative.

"The records also show that the amount of loans made during the same period at rates in excess of 10 per cent and up to but not including 15 per cent amounted to over \$1,400,000,000, there being over 11,000 of such loans.

"In addition to the above the aggregate of the loans upon which a portion of the banks reported that they were charging, on 81 different days, interest in excess of 10 per cent, and up to but not including 15 per cent, was about \$900,000,000. The 'brokers' or 'street' loans upon which the New York banks, during the period referred to, were charging more than 8 per cent per annum and up to 10 per cent, reach in the aggregate some billions of dollars additional in amount and tens of thousands in number.

"It should be understood that these loans—except in the case of one bank—represent the money loaned by the banks for their own account, and the figures do not include the loans made for their correspondent banks.

"As a result of persistent inquiries among the banks, brokers, and stock-exchange authorities, this office is now, for the first time, able to inform the public as to how the so-called 'renewal' rate is made from day to day in the New York call-money market, and the extent to which this money rate is observed by the New York banks in making their charges on ordinary Wall Street or brokers' loans.

"Under the New York banking law, it is lawful for a lender to charge any rate of interest which may be agreed upon with the borrower on a demand loan for \$5,000 or more secured by stocks, bonds, or other securities. This provision of the New York statute enables lenders to escape penalties for usury which exist in most of the other States.

"From information furnished this office, through different sources, it appears that every business day a coterie of brokers, members of the New York Stock Exchange, get together for consultation on the floor of the exchange, or by telephone, and determine what, in its view, is the proper rate for the renewal of all street or brokers' call loans for that day. As soon as the rate is agreed upon the president of the stock exchange is notified, and the rate is posted on the floor of the stock exchange at, say, 11 o'clock.

"This rate is then sent over the 'ticker' to all the banks in New York City and these banks thereupon mark up or down, as the case may be, the rate of interest upon practically all their Wall Street or so-called brokers' loans. Some banks take the precaution to notify their customers by card, sent by mail or otherwise, of the change in interest rate on their loans, while other banks do not. They claim that the posting of the renewal rate on the floor of the stock exchange serves automatically to raise or lower the rate of interest on this character of loans, held by all the New York banks, for themselves or their out-of-town correspondents, and their customers are charged the rate so posted, unless they make special arrangements with the bank to the contrary, or pay the loan.

"In the questionnaire sent by the Comptroller of the Currency to all the national banks, under date of August 5, 1920, each bank was asked the following question:

"Has it been the practice of your bank, during the past six months, to mark up or down, from day to day, according to the fluctuations of the New York call money market, the interest rates on demand or call loans, secured by bonds or stocks, made to borrowers who are not depositors in your bank?"

"In reply to that question every national bank in New York City, with two or three exceptions answered 'Yes,' and two of these stated that they, too, under certain conditions also charged the 'call money' rate

"It is fair to say, however, that nearly all of these banks, with a few prominent exceptions, stated that it had not been customary with them, in making advances in rates, to increase the rates on demand or call loans made to their own regular customers who kept deposit accounts with their banks and that these regular customers were treated differently from the ordinary brokers or Wall Street borrowers. It is also worthy of note that demand loans, secured by stocks and bonds, made by banks to their own officers and to the officers of other banks, are also generally exempted from the high interest rates.

"It is also fair to state that the reports in this office show that despite the huge volume of loans made at fancy rates, less than one-half of the national banks in New York City reported that the demand loans made for their own accounts at rates of 15 per cent or more aggregated for each bank over \$10,000,000 between October 1, 1919, and July 31, 1920.

"In their reports to this office of September 8, 1920, the national banks of New York City reported that they were lending on demand, on bond and stock collateral, over \$348,000,000.

"The national banks in New York City also reported that on August 1, 1920, the amount of money which they were loaning on demand, on bond and stock collateral, in New York City for account of customers and correspondents was \$524,000,000.

"It is fair to assume that the trust companies and State banks in New York City were lending on demand on stocks and bonds as much as the national banks.

"The stock exchange authorities state that the posting of the 'renewal' rate on the floor of the stock exchange does not make it compulsory with the banks to charge such 'renewal' rate. Attention, however, must be called to the fact that nearly every national bank in New York City has admitted that when the rate is posted, the rates changed on 'brokers' or 'street' loans are changed to conform to the prevailing call-money rate and the only alternative for a borrower is to pay his loan or be charged the posted or current rate. As nearly every bank in New York charges the so-called 'renewal' rate on what are known as Wall street or 'brokers' loans, it would be vain, obviously, for a borrower to hope to obtain the money in New York at a lower rate by shifting his loan to some other bank.

"Despite the statement of the banks generally that the interest rates on brokers' loans are raised or lowered simultaneously with the fluctuations in the New York call money market, many instances of apparent discrimination were developed which show wide differences in the rates charged on demand loans equally well secured. For example, when the 'renewal' rate for a certain day within the last 12 months was posted on the stock exchange at 16 per cent, the report of one particular New York bank showed that on that date this bank was charging on loans for itself and correspondents 7 per cent on \$4,900,000; 8 per cent, 9 per cent, 14 per cent, and 15 per cent on \$1,428,000; 18 per cent on \$750,000; 20 per cent on \$42,100,000; 25 per cent on \$3,550,000; 30 per cent on \$900,000.

"The coterie of brokers who fix the 'renewal' rate, which appears to have such binding force upon the banks in New York City in the case of brokers' loans does not limit its activities to loans, but these brokers also execute orders for stocks and bonds on the floor of the exchanges. Inquiry of the stock exchange as to the number of brokers who are usually concerned in the fixing of the money rate, brought the reply that there were, as a rule, 'four to eight or more,' the stock exchange being usually represented by either the president or 'one or more' of its governors, in the consultations where the rate is fixed.

"On November 10, a year ago, this brokers' committee announced that the renewal rate on call loans would be 12 per cent. The following day, November 11, they raised it to 14 per cent. On November 13 the rate was raised to 16 per cent; November 14 it dropped to 14 per cent; on November 21 it was made 8 per cent, although other loans were made as low as 6 per cent. On December 18 it was 6 per cent; December 23 it was raised to 10 per cent; on the 29th to 12 per cent; on the 30th to 15 per cent and remained at that rate until January 5, when it was lowered to 10 per cent. On January 31 the renewal rate was 12 per cent, the next day, February 1, it was advanced to 18 per cent, dropped to 14 per cent on February 2; advanced to 17 per cent on February 5, and remained at 17 per cent until February 9, when it was reduced to 14 per cent. On February 17 it was 6 per cent, raised again on February 26 to 10 per cent and continued at 10 per cent until March 4, when it was reduced to 9 per cent. On April 16 the renewal rate was again 10 per cent. In May the highest renewal rate was 9 per cent. In June the rate was 9 per cent from the 25th to the 30th. July opened with a 10 per cent renewal rate. It was lowered during the month, but returned again

to 9 per cent on the 16th, 17th, and 27th. It is gratifying to note that since the publication of the comptroller's statement of July 31 regarding excessive interest rates, the 'renewal' rate does not appear to have been advanced again as high as 10 per cent.

"It seems clear from the figures submitted that the amount of demand or call loans in the national and State banks and trust companies in New York City, plus the loans placed by them for their correspondent banks, which are affected by the rate fixed by this committee of the stock exchange, probably exceeds \$1,000,000,000. As I pointed out in a previous statement, on this basis an advance in the 'renewal' rate from 6 per cent to 18 per cent for one day would add \$360,000 to the net profits of the lending banks for that day. In the first part of January of this year, for example, the 15 per cent 'renewal' rate exacted for six successive days meant, on this basis, a net interest profit of about \$3,000,000 or more for those six days.

"The raising or lowering of the 'renewal' rate on the exchange is frequently accompanied by upward or downward movements in stocks and securities; and those responsible for the fixing of the rate therefore have the opportunity, whether exercised or not, of profiting largely by operations on the stock market, which is often and directly affected by the call money situation. I do not, of course, undertake to say that this informal 'money committee' does take improper advantage of their foreknowledge; but there are critics who severely censure the existing arrangements. Certainly all prudent and thinking business men will agree that there is danger in the concentration of such opportunity and power in the hands of a few persons. Temptations to use this power for individual profit must arise, and human nature is not changed by high position in the financial world.

"Mr. Lincoln's axiom that God never made a man good enough to be intrusted with unlimited power over another man may be supplemented with the suggestion that no four, or six, or eight men are strong and pure enough to be intrusted with unlimited power over the finances of a great country without direct responsibility and accounting for their acts to the public or some other potent and intelligent authority. Power to fix money rates for all, or nearly all, of the banks in New York City, and to change them daily, is a grip on the heart of our commerce. It permits such interferences as fallible human judgment, whim, or interest may direct with the natural and orderly movements of money, the lifeblood of business. Many of us complain bitterly when we fear that the two Houses of Congress, State legislatures, or State or Federal administrators, acting in the open, and after debate and public hearings, have interfered with natural laws of trade. We condemn radical writers and speakers who advocate such interferences and regard them as public enemies. Yet the matter of arbitrarily fixing money rates at the money center, possibly reversing the natural and healthy flow, and affecting, directly or indirectly, billions of dollars of security values and other property, is left to a small and varying number of private citizens without official responsibility, deciding in a moment and in secret.

"The evils and dangers of such methods could be recited indefinitely. They reach to the remotest corners of the Union and its possessions, and touch harmfully every class of people. The direct tendency is to reverse one of the fundamental purposes of the Federal reserve act, which is to promote orderly distribution of money through the country to meet the needs of commerce and agriculture. Excessive interest rates offered in New York artificially draw money away from outside communities through their banks, and often leave legitimate enterprises starved or pinched, while feeding speculative movements which may be adding nothing to real industrial or commercial wealth.

"I reiterate the statement previously made that the excessive rates on call money, arbitrarily fixed and tolerated in New York, in my opinion have been a potent influence in depressing seriously the prices of all investment bonds and standard shares, the shrinkage in which in the past 12 months has amounted, including the depreciation in Liberty bonds, to several billion dollars.

"It is no part of the function of a Government official to moralize on speculative operations. My attention is demanded when such operations produce conditions retarding the development of the country and endangering the stability of its business. Corporations, individuals, and investors generally are drawn away from legitimate investments in new enterprises and in the shares and bonds of existing enterprises by the prospect of 10 per cent to 20 per cent interest.

"The effect of these rates is seen when the general managers or executives of railroads or other large corporations visit New York to raise money necessary for the redemption of retiring loans or for the extension and promotion of new business. The bankers and bond houses solemnly point to the high rates paid for 'call money' and corporations whose credit abundantly justified a 5 per cent or 6 per cent interest basis, have been forced to pay 7 per cent or 8 per cent or 10 per cent on loans for one year, three years, or five to ten years; and are sometimes persuaded by the bankers

through whom they obtain the funds that they are doing well to get money even on such terms, because money on call has been advanced often artificially to 12 per cent or 15 per cent or 20 per cent, for a few days at a time.

"The sophistical argument that a high rate for call loans is a justification for a long-time loan at 8 per cent, 10 per cent, or 12 per cent by a strong and solvent corporation is transparent, but many excellent corporations have, during the past 12 months, been forced to accept loans at exorbitant rates of interest for terms of years which will inevitably, in some cases, prove a serious embarrassment and handicap in their future operations.

"The same cause that cripples and hampers a great railroad system or a municipal government also deprives and injures or ruins a country storekeeper, a small farmer, or the owner of a large or little manufacturing enterprise.

"The argument that these high money rates prevent panics by enticing call money from banks and others in the interior to New York will not bear analysis. The facts are that much of the money drawn from the interior and loaned on call in New York at fancy rates would, but for the temptation of the high rates and the fear which they instill as to the future of the security market, be used by investors and banks and corporations who have those idle funds in the purchase of standard railroad and other bonds; which would thus furnish funds to the New York market normally and naturally.

"The high rates for call money in New York have thus shut off a large part of the investment demand for securities, which during the past 12 months, largely because of these disturbing conditions, have been forced down to the lowest prices reached in 40 years.

"It is my belief that if the call money rates in New York had been maintained at 6 per cent, or at the maximum rates which are charged in other money centers, as I believe could have been done with a reasonable degree of cooperation upon the part of the New York banks, the unprecedented shrinkage in security prices in the past 12 months would not have taken place and the apparent loss of billions of dollars in values would have been avoided.

"My hope for the present is that, with the public in possession of the facts, sentiment will be strong enough to bring about reforms. Money rates should not be raised or lowered or manipulated arbitrarily or in secret. New York bankers and financiers have tremendous responsibilities to the general public, and all can be induced to realize and respect them, as some honestly and conscientiously do now. Bankers throughout the country should have impressed upon them that they owe direct and distinct duties to their customers and communities, in preference to earning excessive and questionable profits for stockholders, and themselves by pouring money into New York for interest exactions, which inevitably must injure or destroy somebody. The best banking is the broadest and most foreseeing—that based on the conviction that the real, permanent, stable profit in business is in building up, encouraging, and developing in their respective spheres, not in starving the productive elements of communities in the hope of grabbing large profits from the speculative.

"Reports showing the extent to which, as referred to in my statement of July 31, banks in New York City and elsewhere have during the past year been obtaining funds from the Federal reserve banks at rates varying from 4½ to 6 per cent and have loaned these funds in New York at the excessive rates referred to, running in some instances as high as 20 per cent, 25 per cent, and 30 per cent, are now being compiled. A statement concerning these transactions will be made later."

OCTOBER 22, 1920.

BILION DOLLARS OF NEW YORK LOANS CONSTANTLY AFFECTED BY RATES ARTIFICIALLY FIXED.

ADDITIONAL EXAMPLES OF LOANS ON WHICH 20 PER CENT AND 25 PER CENT ARE CHARGED—INTEREST AND DISCOUNT COLLECTED BY NEW YORK NATIONAL BANKS, SIX MONTHS ENDING JUNE 30, 1920, WAS ABOUT \$100,000,000, WHICH, AS COMPARED WITH SAME PERIOD IN 1917, IS AN INCREASE OF ABOUT \$50,000,000 IN INTEREST COLLECTED.

Criticisms on the statement given out by this office for the newspapers of Monday last seem to me to be rather vague and feeble as well as anonymous. I hoped they would be strong, illuminating, and constructive. I am constrained to believe that they do not express the thought of the bankers of the country or of New York, who certainly are men of ability, with intelligence and courage to speak clearly and frankly when they wish to speak.

One of the functions of this office is to do all possible to maintain and increase the good will and confidence of the public in the banks of the country. To that end continual labor, frequently troublesome to all concerned, has been applied to make sure that the management and conduct of all banks should be such as to deserve good will and confidence. Following along that same line, I think it right to reiterate some expressions included in the statement referred to, but unfortunately omitted by many newspapers which published portions of it. These are, that there is no purpose in this office to stir or cater to any prejudice against that great and useful part of our financial system popularly known as "Wall Street"; that there was and is no purpose to hold up the New York City bankers or any other bankers for special condemnation. It is my duty to discover and oppose what I believe to be evils and dangers threatening or impeding the business of the country. There has been no attack on individuals or individual interests. The criticism from this office has been against a system and method. The first step toward correction of any wrong must be discovery and exposure.

Statements of the existence of extortionate interest rates in New York, affecting the operations of the whole country, made by me some weeks ago, were met by sneering denials through newspapers. Thereupon it became necessary to present confirmatory specifications and evidence. This has been done. Anonymous and indefinite denials are not contradictions. Statements of facts and figures, sworn to by the banks themselves, can not be met by excited rhetoric or general denunciation, or unstained accusation of improper motive.

In my previous statement I showed that the aggregate of these demand of call loans secured by bonds and stocks handled by the New York banking institutions for their own account and for account of their correspondents, upon which interest rates varying from 7 per cent to 30 per cent have been charged, has probably averaged throughout the past year more than \$1,000,000,000.

The assertion by anonymous critics that the exorbitant interest rates were rare and applied to insignificant sums will not weigh against official reports made to this office under oath. We find, for example, one national bank declaring that loans made by it in the period covered by my statement at rates in excess of 10 per cent per annum, aggregated \$448,000,000, including \$186,000,000—1,426 loans—at rates of 15 per cent and over. On a certain day within this period another bank reported that, on loans for itself and correspondents, it was charging 15 per cent on \$55,895,000, and 18 per cent, 19 per cent, and 20 per cent on \$3,600,000 additional. The same bank admitted exacting on another day 18 per cent on \$57,183,000, 20 per cent on \$1,400,000, and 25 per cent on \$14,055,000. On three days early in January the amount on which this bank was charging 18 per cent exceeded \$63,500,000.

Another New York national bank reported that it was charging on a certain day on loans made for its account 16 per cent on \$23,500,000, while two days previously it was loaning at 14 per cent \$27,100,000, and at 16 and 18 per cent \$315,000 more; another day this bank reported that loans at 17 per cent to 20 per cent exceeded \$17,000,000. On December 31 last the same bank made 11 new loans for over \$2,000,000 at 25 per cent, and on January 2 it made 53 new loans aggregating \$10,000,000 at 15 per cent in addition to some millions already out at 15 per cent.

Still another bank reports that on a particular date during the past year it was charging on loans for its own account 25 per cent on \$2,150,000, 18 per cent on \$300,000, 15 per cent on \$10,000,000. On another date the same bank was charging 22 per cent on \$2,000,000 and 11 per cent to 16 per cent on \$8,200,000 additional, with other loans at the same time bearing 7 per cent, 8 per cent, 9 per cent, and 10 per cent. This particular bank has through this period been lending, as have other banks, many millions more at exorbitant rates for correspondent banks. The foregoing figures relate to only 4 of the 34 national banks in New York City, and they are matters of record.

It is of interest to the public that most of those New York banks, a few of whose loans are given above, while lending at these very indefensible rates, sometimes 25 per cent and 30 per cent, were being accommodated at the same time at 4 1/2 per cent to 6 per cent by the Federal Reserve Bank of New York with sums as great or greater than their loans recited above. They were therefore, occasionally charging borrowers 20 per cent to 25 per cent more interest than the rates they paid the reserve bank.

The amount actually collected for interest and discount by the 34 national banks in New York City for the six months ending June 30, 1920, exceeded all previous records, and amounted to approximately \$100,000,000, which was nearly \$50,000,000, or nearly 100 per cent, in excess of similar receipts for the corresponding period in 1917.

In February last the "renewal" rate in New York City for the whole month averaged above 10 per cent. This was more than double the normal average for call money.

While nearly every national bank in New York City has admitted that its rates on the so-called "street" or "brokers'" loans are marked up or down automatically from day to day, according to the fluctuations of the call money rate, yet reports from some banks show a marked discrimination, and that they exact on some of the well-secured loans rates considerably in excess of the so-called daily "renewal" rate, while other banks adhere quite closely to that rate.

As to the large amount of call loans held by national banks for account of correspondence—over \$500,000,000—it may be of interest to state that the New York banks, for their services in handling these loans, make varying charges—sometimes a fractional commission is charged; sometimes, in view of the deposit balances carried, no charge is made, while at other times the New York bank and its outside correspondents divide evenly the interest collected in excess of 6 per cent per annum.

New York, as I have stated before, is the only city of importance in the world where such interest rates as these exist or are tolerated. They have, in my opinion, been most costly to the entire country and can not be justified on any basis of economics or ethics.

The plainly, indisputably proper course is change of policy and reformation of abuses which have come almost imperceptibly, not loose and wholesale criticism of the man trying to heave the lead line and give warning of shoals. The point is not the qualities or intensions of the official, but whether the shoals are there. My work is to report them and prove where they are. My strong faith is that the bankers of the country will find and apply cure for the evil that has been shown. They have on them now some of the heaviest and most difficult responsibilities which ever rested on a financial body. The welfare not only of their own country, but of the world, depends in a great measure on their wisdom and character. I believe they will meet the test. The most important part of the comptroller's work is to help them, as he may. There is no better way to help than to detect and point out obstacles and perils in their path toward performance of the tremendous work they have to do.

The CHAIRMAN. How did the amount of money loaned on call rates at the time of this statement compare with the amount loaned previously, in December previous, for instance?

Mr. WILLIAMS. I have not the figures at hand, Mr. Congressman.

The CHAIRMAN. Were the amounts larger or smaller?

Mr. WILLIAMS. I do not recall, Mr. Chairman.

The CHAIRMAN. It seems to me that might be an interesting matter to determine.

Mr. WILLIAMS. I shall be very glad to compile, so far as the information at my command permits, any information the commission may desire.

The CHAIRMAN. I think it is important to know whether, in January, 1921, money was being withdrawn from the interior for New York by these high rates, or whether the pressure from the interior was causing the withdrawal of the funds from New York; it is very pertinent to this discussion.

Mr. WILLIAMS. Yes, sir.

Representative SUMNERS. At that time, were the New York banks bidding high for money?

Mr. WILLIAMS. I am pleased to say that after my statement of July 31, 1920, was given to the press, and was given publicity, I do not think that the New York call rate has at any time been above 10 per cent.

Representative SUMNERS. Yes; but my question is at the time of these high call interest charges, were the New York banks bidding high for money from the banks throughout the country?

Mr. WILLIAMS. I have in mind one bank whose correspondents throughout the country—one banking institution whose correspondents throughout the various parts of the country sent on to that bank for them to loan out approximately \$100,000,000 at the high rates prevailing in New York City. As to exactly how much of that money came from each State, I do not know.

Representative SUMNERS. Do you know what the arrangement was between the loaning bank in New York and the correspondent bank that furnished the money?

Mr. WILLIAMS. As I recall, the arrangement differed with the different banks in New York City; some banks there arranged to loan the money for their correspondent banks on a basis which enabled them to divide a portion of the excess interest rate which they obtained, while others, as I understand it, loaned and gave their customers the benefit of the full interest rate; in other cases there were commissions charged for placing loans in Wall Street.

Representative SUMNERS. Was there a condition obtaining in New York at that time different from that which obtained in other sections of the country which caused that community to bid higher for money than other communities were bidding?

Mr. WILLIAMS. I think that very largely the conditions in New York were the result of the speculative mania which was prevailing at that time. Commodities and securities were going up rapidly and people were making such large profits in this or that commodity or stock that they thought that they could afford to pay the high rates for money out of their profits, but when things went the other way it was like a two-edged sword.

Representative SUMNERS. When the banks ascertained that high rates of interest would be paid, did the banks, separately or through concerted action, create a condition under which high rates would have to be paid?

Mr. WILLIAMS. When the Federal Reserve Board put up the rate to 7 per cent in the New York district, it is my information that the banks in New York City raised the minimum rate on a large portion of their call loans to 7 per cent. I voted against the increase to 7 per cent in New York and other districts. I thought it was wiser to limit the credit by other methods than by putting the rate at that figure. I was also opposed to excess rates which were charged at times in other districts.

Representative SUMNERS. Is it your opinion that if the banks were limited in the amount of interest which they could charge they would not be able to draw out from the industries throughout the country money for speculative purposes?

Mr. WILLIAMS. I think it would be better for the whole country if there was that limitation everywhere.

Representative SUMNERS. Whereas the speculative interests would suffer from inadequate funds, while industry throughout the country would be adequately supplied; is that your idea?

Mr. WILLIAMS. Precisely.

Mr. CHAIRMAN. I should like to read now a letter which I addressed to Gov. Harding, of the Federal Reserve Board, under date of October 18, 1920. The several documents and letters which I have read, I think, indicate that I deprecated the excess interest rates which were being charged and the methods which were being employed in certain ways. This letter relates to the credit situation at that time. [Reading:]

OCTOBER 18, 1920.

MY DEAR GOVERNOR: I attended the two hearings held in your office last week, given to the farmers and to cotton manufacturers and merchants, and was much impressed with the representations made by the delegates and by the United States Senators who led in the discussion.

In my opinion, the declines which have taken place in commodity values in the past six months have been due primarily to the operation of natural causes, and these declines in orderly manner have been facilitated by the policies pursued by the Federal Reserve Board during this period. The recession from the unnatural prices which prevailed in the case of so many commodities was desirable and inevitable, and it was proper that the Federal Reserve Board should have endeavored to have this decline proceed gradually, rather than by withholding all restraints, making possible later on a collapse and disaster.

The decline which has taken place in the prices of leading commodities in the past few months has probably been without precedent in the commercial history of this country; and the extent of this shrinkage in value, as expressed in dollars, has been appalling. It will require exceedingly skillful handling on the part of our bankers and business men to prevent the shock of this decline from precipitating numerous failures in business and banking and widespread uneasiness and disturbance.

The shrinkage in the value of wheat, as applied to the entire crop, represents about \$500,000,000; the decline in corn from one to two billion dollars additional, as applied to the entire crop; while the amount which the cotton growers would receive for their crop on the present basis of 20 cents a pound as compared with 40 cents, the price at which cotton was quoted a few weeks ago, represents an apparent decline in values of another billion dollars. Wool is now hardly salable at more than one-third of last winter's price; while leather is quoted at only 40 per cent to 50 per cent of what it was bringing a few months ago. The price of raw silk in Japan has declined to about 20 per cent of the price at which it was sold in March. In both Japan and Louisiana, the value of the rice crop has been cut in two. These figures indicate an economic upheaval which must be faced and handled with all the skill and wisdom we can command.

The plans and policies which have aided in bringing about deflation in the great staple commodities should be at once taken up for consideration and revised as far as may be necessary to meet present and changed conditions. If this is not done speedily I am fearful as to the consequences which may ensue.

As a first step in this connection I respectfully urge that the Federal Reserve Board take up forthwith the consideration of the ruling and regulations which have been interpreted as preventing the well-secured paper of cotton factors, who need the money in connection with their advances for agricultural and commercial purposes, from being eligible for rediscount with reserve banks. If the board does not feel justified in asking for a reversal of the interpretations which have been put upon its rulings in this connection by some of the Federal reserve banks, I urge that we suspend for the present these regulations of the board which justify this discrimination on the part of the reserve banks. It seems to be generally admitted that the most that can be said against such paper is that its eligibility is doubtful. I respectfully urge that the people and sections that are suffering so greatly at this time be given the benefit of the doubt, if doubt there be.

Faithfully, yours,

JOHN SKELTON WILLIAMS.

Hon. W. P. G. HARDING,
Governor Federal Reserve Board.

Mr. Chairman, on October 21, 1920, I addressed a letter to the Secretary of the Treasury—

Representative MILLS (interposing). Mr. Williams, before you go on, I would like to ask you a question. I was not here during your entire discussion of these high money rates. If it could be shown that during the year 1920 money was being withdrawn from New York City, your argument would fall to the ground?

Mr. WILLIAMS. Not necessarily so. How much was there before, how much was withdrawn, and what were the conditions? It depends on the conditions.

Representative MILLS. If it can be shown that the whole tendency during this period money was—

Mr. WILLIAMS (interposing). That is a complex statement, Congressman. In order to answer that you must know the conditions, present and past.

Representative MILLS. If it could be shown that money was flowing from New York, instead of to New York, during 1920, would it

not tend to show that the high money rates did not have the effect which you attribute to them?

Mr. WILLIAMS. I think that in your absence I pointed out that in 1919 money rates went up to 30 per cent.

Representative MILLS. I did not mean to discuss that now.

Mr. WILLIAMS. In 1919 they went up to 30 per cent; in the early part of 1920 they varied from 15 to 20, to 25 per cent. Since the time my press statement was given out—in July, 1920—they have never, I believe, been above 10 per cent. I think there were moral conditions which exercised a restraint.

Representative MILLS. As a matter of fact, then, during 1920, when the real serious situation began, call money rates had not had any effect so far as drawing money from New York is concerned?

Mr. WILLIAMS. In 1920?

Representative MILLS. In 1920.

Mr. WILLIAMS. In 1919 they were up to 30 per cent there, and they also went up to 20 per cent, I think in the early part of 1920, and up until June—I think the rates were in excess of 10 or 15 per cent up to June, 1920. In the latter part of 1920 there was an easing of the money market there.

Representative MILLS. The real depression began in the latter part of 1920; in the last six months of 1920; is that not so?

Mr. WILLIAMS. In the last six months of 1920?

Representative MILLS. Yes.

Mr. WILLIAMS. You mean the fall in values?

Representative MILLS. The fall in values?

Mr. WILLIAMS. Yes; in June they were low, and in the latter part of July there was a heavy collapse in commodity values. In the spring of 1920 the silk market collapsed, I think, to about 20 per cent of its high value.

Representative MILLS. The peak of the prices was reached during May; but, generally speaking, the great drop in prices was during the last six months of 1920; is that not so?

Mr. WILLIAMS. Principally.

Representative MILLS. During that period the call money rate in New York had no influence on the flow of money to or from New York?

Mr. WILLIAMS. I think I did.

Representative MILLS. You don't believe it did?

Mr. WILLIAMS. I think it did.

Representative MILLS. But I understand you to say there were low rates during that period?

Mr. WILLIAMS. No; I did not say low rates; I said lower than they had been, but not low rates.

Representative MILLS. Now, if it could be shown that money was flowing from New York rather than to New York, would you care to modify your statement?

Mr. WILLIAMS. No.

Representative MILLS. All right.

Mr. WILLIAMS. Mr. Chairman, on October 21, 1920, I addressed this letter to the Secretary of the Treasury [reading]:

OCTOBER 21, 1920.

DEAR MR. SECRETARY: I trust that you will accept my experience of more than a third of a century in practical banking and finance as some justification for my venturing to express to you, unasked, the hope that you will give serious consideration to the petition which I see from the newspapers has been, or is to be, sent to you and to the White House in behalf of the revival of the activities of the War Finance Corporation.

I beg leave to hand you with this a copy of a letter which I addressed, under date of October 18, to Gov. Harding, of the Federal Reserve Board, which briefly sets forth my views as to the seriousness of the present financial and economic situation. I also beg leave to hand you, with this, a copy of a letter which I received to-day from ex-Gov. _____, of _____, now president of a successful national bank in that State.

It is my distinct belief that much good could be accomplished at this time by reestablishing the War Finance Corporation, of which you are chairman.

I trust that you will not take this expression of my hope in this connection as being in any way a criticism of your action in suspending the operations of the War Finance Corporation at the time that you acted some months ago. Since then conditions have changed radically and I feel strongly that these changed conditions would abundantly justify the use of your power to recall the corporation into life. The emergency that caused its creation had subsided apparently. Now that emergency has returned or a new one arisen, and revival of the means so successfully used in the past seems to me to be required.

The shrinkage which has taken place in the prices of leading commodities since the time when you decided to suspend the operations of the War Finance Corporation, some six or eight months ago, is estimated at from three to five billion dollars. This represents a commercial upheaval which must give up pause and call for solemn study.

As I see the situation, the corporation would not interfere with the laws of trade or economics or of supply and demand. To the contrary, it would aid in assuring the just and healthy workings of those laws and restrain interference with them and obstruction of them by speculators taking advantage of the necessities of owners of commodities or forcing prices upward or down by methods sometimes used. All of us know how large combinations of capital may, when so minded, cause artificial fluctuations in the market—fluctuations based on buying and selling which mean no actual transfer of the things purporting to be bought and sold.

If the corporation should control conditions to the extent of giving help as needed as to allow prices of some commodities suffering most severely to be fixed by actual transactions between producers, or owners and consumers, the law of supply and demand could and would work smoothly and accurately, and much of the cause for suspicion and complaint would be removed.

If buyers know, however, that the ability of owners to hold up prices justified by conditions depends on fast diminishing resources and powers of resistance, their natural tendency is to refrain from buying until they can dictate terms. On the other hand, if buyers know that the powers of resistance are strong they will pay what they fairly can afford, preferring moderate profits to inaction. The corporation would promote fair bargaining on the basis of reasonable returns to all parties.

My observation and information are that the War Finance Corporation would prove immensely helpful in finding markets for American products which are now suffering most heavily, not only in allied countries but also in neutral countries, and through some of these neutral countries, such as Holland, important markets could be developed in Germany and Austria. This would give employment to labor in enemy countries and would help those countries pay the indemnity due the Allies.

Whether or not you agree with me, I do believe that you will give the subject the earnest thought demanded by the tremendous importance to our own people and the people of the world and by your great power and responsibility.

The shrinkage in our leading commodities during the current year, to which I have referred, has ranged from 25 per cent to 75 per cent from prices of less than a year ago. This shrinkage as expressed in dollars amounts not to millions or hundred of million. but to billions of dollars.

The strain upon the business fabric of the country is in some respects unparalleled and I do feel that the time has come for the exercise of such salutary and constructive powers as may be at our command. A leading bank president, who called at the Treasury this week, tells me that an executive officer of a New York bank mentioned to him the other day that he had already been placed on the creditors' committee of 30 different business houses or corporations which had been unable to stand up under this unprecedented shrinkage in values.

A large wholesale jobber, when asked a few days ago how business was, replied that there was no business; that orders which he had not shipped were being canceled; that goods which he had shipped were being returned; and that upon the invoices of other goods which had been shipped and disposed of he was now being called upon to make rebates.

In many foreign ports American goods are congesting port facilities, the consignees having been unable to obtain credit and funds necessary to release them. The situation with many of our national banks has become more aggravated of late, and unless relief can be found an increase in bank failures, I fear, will be inevitable.

The revival of the War Finance Corporation would provide, in my judgment a much needed steadying influence at this time.

I trust that you will pardon these volunteered suggestions, realizing that they are intended to put before you views from my angle of observation and are inspired by loyal and sincere purpose to be of service to the country, the administration, and yourself in this momentous situation.

Very sincerely, yours,

JOHN SKELTON WILLIAMS.

Hon. D. F. HOUSTON,
The Secretary of the Treasury.

Representative SUMNERS. Mr. Williams, I want to ask you at some time during your testimony as to what date you fix as approximately the date when the policy of the Federal reserve system tended to bring about the condition of what has come to be known as deflation.

Mr. WILLIAMS. You mean when the pressure should have been relaxed?

Representative SUMNERS. No, sir; what date do you fix as the date when they began what we speak of as deflation upon member banks to force liquidation on the part of their customers?

Mr. WILLIAMS. It would be a little difficult to answer that exactly, Congressman. I urged that the pressure be relaxed in October, and in August—

Representative SUMNERS (interposing). October and August of last year?

Mr. WILLIAMS. A year ago, in those two letters. I think if there had been a revision of policies in October last, that the subsequent economic history of the country would have been different.

Representative SUMNERS. Can you give approximately the date when the policy began which you urged should be reversed?

Mr. WILLIAMS. I should like to think that over a little.

Representative SUMNERS. Put it in the record at this place, if you will.

Mr. WILLIAMS. All right.

(The statement referred to is as follows:)

In my opinion it may be fairly said that the so-called "deflation" or "contraction" policies of the Federal Reserve Board were started in the latter part of 1919 or the first part of 1920; at least I think the record will show that the board began then to exert its influence in that direction, in certain parts of the country, if not generally.

I have stated, clearly and repeatedly, that the curbing efforts of the board and of the reserve banks were, for part of the time in the past two years, distinctly helpful and beneficial in restraining inflation and in stabilizing values. But when the upward movement was halted, and the downward rush of prices set in, the Federal Reserve Board, whether from inertia or from an inability to comprehend the meaning of events and the radically changed conditions, distinctly failed in the supreme trial. The lack of sympathy displayed by the board, and its apparent impotence to meet courageously and resourcefully a situation demanding instant and sagacious action was in my opinion unpardonable.

I am convinced that if the Federal Reserve Board had heeded the urgent suggestions, recommendations, and warnings contained in my clear-cut letters and mem-

granda of August 9, 1920, August 26, 1920, October 18, 1920, October 21, 1920, and December 28, 1920, and had revised its policies and methods to meet and respond to the great changes which had already taken place and were going on in the world of business and finance, that it could, as I said in my Washington address on April 15, 1921, "have saved us from a fall so precipitate and smashing, and from much of the distress and ruin through which we have been dragged. It could have made the shrinkage of values more gradual and uniform instead of violent and sporadic, could have helped strongly to keep the circulating currents of commerce at more even flow, so that the losses of each producer might be offset by reasonable reduction in the cost of what he must consume."

On December 28, 1920, in advocating a liberalization of policies, I had said, *inter alia*:

"Events, developments, and conditions warn us to remember that a stoppage too sudden may be disastrous as an explosion, that an unyielding barrier thrust into the path of a runaway machine may only hasten wreckage and assure a smash which skillfully regulated guidance might prevent.

"Two months of actual experience which have elapsed since my letter to you of October 18, 1920, was written tend to intensify rather than diminish my fears for the immediate future."

The Reserve Board, however, refused to act favorably upon the urgent recommendations for more liberal policies made by me as a member, and also by many of the best minds in the financial and business world, and the great decline in values went on. I am happy to note, however, that the board moved, presumably, by the force of an aroused public opinion, has been at last compelled to change, and to put into effect lower interest rates and more liberal measures which if they had been adopted at the time that I urged them upon my colleagues, would, I believe, have saved the country from a large part of the losses and suffering so needlessly forced upon it.

I ask permission to quote here the following extract from a press statement given out from the White House by the President under date of July 29, 1921:

"Perhaps the most important development has been the action taken by the Federal reserve banks in reducing discount rates. This action is calculated to relieve the stagnation of business, and at the same time it gives authoritative recognition of the improvement in credit conditions justifying the policy of reduced rates."

In connection with the urgent recommendation which I made in October, 1920, to the Secretary of the Treasury, who was also chairman of the Federal Reserve Board, that the activities of the War Finance Corporation be resumed, I quote the following from the President's statement of July 29, 1921:

"The renewed activity of the War Finance Corporation is not to be measured simply by the resultant restoration of confidence or by the amount of its advances. Its intervention in aid of the export trade and in making advances to carry American agricultural products, pending or awaiting export, has been, according to many evidences received, an inspiring and heartening factor in the whole agricultural situation."

Representative SUMNERS. Now, I understand that the statement has been given out—if I am not correct I would like to be corrected—recently given out by the Federal Reserve Board to the effect that during this year the rediscounts of agricultural paper have increased about 100 per cent. If that is not correct, will some gentlemen please correct me? Now, could it be possible that the pressure imposed last year had such a detrimental effect upon the prices of agricultural products as to make it impossible for the producers of those products to pay their debts out of the prices received for their sale?

Mr. WILLIAMS. I think there was an undue pressure.

Representative SUMNERS. And the fact that the pressure was put on, it is claimed by some people, as it was put on last year, is the thing that is responsible for the fact that that rediscount of agricultural paper was found to be double this year. Do you have a judgment on that point?

Mr. WILLIAMS. Well, there is an apparent increase in agricultural and live-stock paper discounted with Federal reserve banks. That

is to say, paper running over 90 days. The paper which found its way into the Federal reserve bank—the agricultural and live-stock paper which found its way into those banks—was a comparatively small part of the total live-stock and agricultural paper outstanding. A recent bulletin of the Department of Agriculture, if I remember correctly, placed the value of farm property in this country at about \$77,000,000,000; and my recollection is that the value of live stock was about \$8,000,000,000, if I remember correctly. I am not sure of those figures, but somewhere around there—six and one-half or eight billion dollars, I do not recall which. The amount of money which the Federal reserve banks have taken of agricultural and live-stock paper is pitifully small compared to the value of the live-stock and agricultural interests of the country.

Representative SUMNERS. That seems to be one of the difficulties of the proposition in dealing with the remedial features, and I want to ask some questions as to policy before you complete your testimony; but if you prefer to procede with the historical features, I will come to that later.

Mr. WILLIAMS. That is for you to say, sir.

Representative SUMNERS. Perhaps it would be well to ask the questions later.

Representative TEN EYCK. Mr. Sumners has asked that question and Mr. Williams has replied, and I would like to ask a question at this time, if I may. The commission is interested in amounts that are discounted for country banks, and the amounts of discounts allotted or given on agricultural and live-stock paper; but we are more interested in the flexibility and the ease with which the farmer, who is the actual producer of food products, can borrow, and the amounts of money which are allotted to him particularly, rather than to the merchants and commission houses who handle his products. Now, along that line, I want to get your idea: Is it possible to distribute the reserve fund to the country banks so that the farmer will be able to borrow in proportion to the value that agricultural products bear to other industrial products of the country?

Mr. WILLIAMS. It should not only be possible, but it seems to me it is our solemn duty to see that a larger proportion of the funds of the Federal reserve system reach the agricultural and the live-stock interests. Now, the figures which I gave this morning, if I remember correctly, showed that in the national banks of the three central reserve cities—New York, Chicago, and St. Louis—their bills payable and rediscounts amounted to, in September, 1920, I think it was, about 24 per cent of their total loans and discounts, whereas the rediscounts and advances made to the country banks was only about 10 per cent, so that in the three large cities the percentage was two and one-half times as great as the country banks.

Representative TEN EYCK. And the discount given to the country banks was not used entirely for agricultural and live-stock purposes?

Mr. WILLIAMS. Certainly not.

Representative TEN EYCK. It was used for merchandising purposes?

Mr. WILLIAMS. It was used partly for merchandise.

Representative TEN EYCK. And for manufacturing concerns in those districts?

Mr. WILLIAMS. Of every sort.

Representative **TEN Eyck**. For manufacturing concerns in those districts of every sort?

Mr. WILLIAMS. Yes.

Representative **TEN Eyck**. Would it be possible to work out a scheme whereby the farming industry of the country will get a proportionate share of the reserve funds in time of need in proportion to the valuation of the products that they give to the world?

Mr. WILLIAMS. Well, that is a large proposition entitled to the best thought that we can give it.

Representative **TEN Eyck**. That is all.

Representative **SUMNERS**. **Mr. Williams**, in that connection, do you recognize the fact that country communities, because they are served by small banks, do not have great banking facilities, and in a time like this of extraordinary demand by the agricultural interests for credit, that the avenues of approach to the farm are not ones that are easy to progress along?

Mr. WILLIAMS. I think that there are a good many things that suggest themselves here and there where the system could be improved. As to the farmer, I think that one evil from which he has suffered greatly has been the practice in some Federal reserve banks of requiring the small country bank not only to put up its eligible paper, 100 per cent of eligible paper for 100 per cent of rediscounts or advances, but to put up 150 per cent or 200 per cent or 250 per cent so as to make the Federal reserve bank bombproof and ironclad and all that sort of thing. I think that is all wrong. I think that the Federal reserve banks should take some risk in the interest of the community and for the public good.

Representative **FUNK**. Is that same requirement made of other lines of industry?

Mr. WILLIAMS. Not that I know of.

Representative **FUNK**. Only against the agricultural paper?

Mr. WILLIAMS. Well, I don't know to what extent; I think it is principally in the country districts. I may be mistaken, but there are gentlemen in the room who can give you more information than I can on that subject.

The **CHAIRMAN**. Where was this 150 and 250 per cent collateral required?

Mr. WILLIAMS. Well, I have in mind a case in the Southwest at this time where a bank claims that it was gutted by the actions of the Federal reserve authorities in requiring excessive collateral for the money which it was advanced. I do not know the merits of the case. I merely happen to recall one instance where the member bank put up—I don't know whether it was 150, 200, or 250 per cent.

The **CHAIRMAN**. Of course, it would seem—

Mr. WILLIAMS (interposing). But it was not the theory of the act. I think in some districts they avoid those excessive demands. I think in the Cleveland district, if I am not mistaken, the bank takes such paper as it is willing to discount for 100 cents on the dollar, and it does not require 50 per cent or 150 per cent margin.

Representative **MILLS**. But where they do require the 150 per cent that would apply just as much against the manufacturer or the merchant as it would against the farmer?

Mr. WILLIAMS. What is that?

Representative MILLS. In a district where they do require excessive collateral it would apply just as much against the manufacturer or the merchant as it would against the farmer?

Mr. WILLIAMS. Well, I don't know. I am not in sufficient touch to say whether the farmer is singled out or whether the manufacturer is singled out, or how it is, but I do know that in some reserve banks the small banks are required to put up a very large margin of collateral before they are permitted to have discounts from the reserve banks.

Representative MILLS. But you don't want the committee to understand that that is applied to farmers only?

Mr. WILLIAMS. No.

The CHAIRMAN. What I would like to know is, whether this plan of requiring 150 per cent collateral was a general plan applied in some Federal reserve districts as against all banks, or whether it was simply an individual case where the bank required 150 per cent collateral?

Mr. WILLIAMS. I think it is rather common in some reserve districts, and in some other reserve districts it is very rarely resorted to.

The CHAIRMAN. Well, now, in what district do you think it is very common?

Mr. WILLIAMS. I am not in a position to discuss that. The members of the Federal Reserve Board can give you that information.

The CHAIRMAN. If you think it is a common practice in some of the districts, you must have some idea as to what districts it is practiced in.

Mr. WILLIAMS. I know that I gave you one instance in the Southwest.

The CHAIRMAN. In the Dallas district?

Mr. WILLIAMS. In the Dallas district.

The CHAIRMAN. Yes. That was one instance.

Mr. WILLIAMS. Yes, sir.

Representative MILLS. But you are speaking from hearsay, not from actual knowledge?

Mr. WILLIAMS. I am reasonably sure of my ground.

Representative MILLS. Well, your knowledge is not sufficiently detailed and accurate to permit you to state where this practice prevails?

Mr. WILLIAMS. I know that the practice prevails in some districts and I suggest, if you wish detailed information on it, that you get it from the Reserve Board.

Representative MILLS. But you do not know what districts?

Mr. WILLIAMS. I would prefer not to discuss that matter. It is not under my supervision at this time.

Representative MILLS. Well, do you or do you not know whether it exists in such districts?

Mr. WILLIAMS. Well, if I do know I prefer that you should get the information from the Reserve Board.

Representative MILLS. But you decline to state whether you know?

Mr. WILLIAMS. Why should I state whether I know or not?

Representative MILLS. Because the committee is interested.

Mr. WILLIAMS. Well, then, I will tell you where you can get the information first hand.

Representative MILLS. No.

Mr. WILLIAMS. It is a rule of evidence that you should get information first-hand rather than second hand, where you can.

Representative MILLS. But if a man is testifying from facts, I would like to know whether he is testifying from actual knowledge or hearsay.

Mr. WILLIAMS. As far as that information is concerned, I should like you to gain the information from those who can testify as to that matter from their own knowledge.

Representative MILLS. Well, I should like to know what weight to accord to your particular testimony.

Mr. WILLIAMS. What particular testimony?

Representative MILLS. That these excessive demands are made in certain districts.

Mr. WILLIAMS. I tell you I heard it on what I believe to be good authority, and I tell you where you can get that information confirmed or denied.

Representative MILLS. But your information is hearsay?

Mr. WILLIAMS. But it is sufficient to permit me to form conclusions.

Senator ROBINSON. Where can the information be obtained?

Mr. WILLIAMS. From the Federal Reserve Board.

The CHAIRMAN. Well, Mr. Williams, it seems to me that if you know where cases of this kind have occurred you should state.

Mr. WILLIAMS. I know second hand. I prefer that you should get it first-hand.

The CHAIRMAN. I know, but I am saying that I think that if you know where cases of this kind have occurred, that you ought to tell the committee where they have occurred in order that the committee can make the necessary investigation.

Mr. WILLIAMS. I suggest that you can make the necessary investigation.

The CHAIRMAN. We can not proceed on general statements, Mr. Williams.

Mr. WILLIAMS. I suggest that you get the information from the Federal Reserve Board.

The CHAIRMAN. I think it is fair to the Federal Reserve Board and fair to the committee that you give information that you can in detail so the thing can be run down by us and by them.

Mr. WILLIAMS. I will be glad to come back before the committee if the Federal Reserve Board tell you they know nothing about it.

The CHAIRMAN. Well, I have expressed my opinion about what you ought to do. Proceed.

Mr. WILLIAMS. I will read you a letter, with your permission, which I addressed to the governor of the Federal Reserve Board under date of December 28, 1920.

Senator CAPPER. May I suggest that you made a very forceful appeal to the Secretary of the Treasury for the resumption of the functions of the War Finance Corporation? I am curious to know what response you got to that.

Mr. WILLIAMS. I think it was a water haul.

Senator ROBINSON. You mean he did not reply to your letter?

Mr. WILLIAMS. No; I mean that the functions of the War Finance Corporation were not resumed at that time.

Senator ROBINSON. Did Mr. Secretary Houston make a reply to that letter?

Mr. WILLIAMS. I don't think he made a direct reply to that letter. I think that his acknowledgment of the receipt of my letter took the shape of a copy of a letter which he had written to some one else and which he sent me. I don't think the letter itself was ever acknowledged, except in that way.

Senator CAPPER. The War Finance Corporation has since resumed, and rather justified your stand taken by you there?

Mr. WILLIAMS. Yes; I think it was a most excellent move when it resumed.

My letter of December 28, 1920, is as follows [reading]:

Hon. W. P. G. HARDING,

Governor Federal Reserve Board, Washington, D. C.

DEAR GOV. HARDING: In a letter which I wrote you on October 18, 1920, I directed attention to the terrific shrinkage which had taken place in the value of nearly all commodities and materials since the early months of this year and since the Federal Reserve Board adopted the policies which have governed the reserve system during the past 12 months, and I urged the importance of taking proper steps toward preventing unnecessary demoralization, loss, and panic and to promote stabilization.

In the opening of my letter I said:

"In my opinion, the declines which have taken place in commodity values in the past six months have been due primarily to the operation of natural causes, and these declines in orderly manner have been facilitated by the policies pursued by the Federal Reserve Board during this period. The recession from the unnatural prices which prevailed in the case of so many commodities was desirable and inevitable, and it was proper that the Federal Reserve Board should have endeavored to have this decline proceed gradually rather than by withholding all restraint, making possible later on a collapse and disaster.

"The decline which has taken place in the prices of leading commodities in the past few months has probably been without precedent in the commercial history of this country, and the extent of this shrinkage in values, as expressed in dollars, has been appalling. It will require exceedingly skillful handling on the part of our bankers and business men to prevent the shock of this decline from precipitating numerous failures in business and banking circles and widespread uneasiness and disturbance."

After giving concrete facts and figures to illustrate the unprecedented shrinkage which had taken place in values, I said:

"These figures indicate an economic upheaval which must be faced and handled with all the skill and wisdom we can command.

"The plans and policies which have aided in bringing about deflation in the great staple commodities should be at once taken up for consideration and revised as far as may be necessary to meet present and changed conditions. If this is not done speedily, I am fearful as to the consequences which may ensue."

Since my letter to you was written, commercial, industrial, and financial conditions have become steadily worse; and the further shrinkage which has taken place since the middle of October amounts to billions of dollars.

I feel more strongly than ever that the welfare of the country calls for the adoption of somewhat more liberal policies on the part of the Federal Reserve Board and the Federal reserve banks whose powers are now more widely recognized and acknowledged than ever before.

It is my strong belief that it is within the power of the Federal Reserve Board at this time, by the adoption of new, wise, liberal, and sound policies and the announcement of such policies, to instill a feeling of confidence and hope and to check the spirit of demoralization which, unless arrested in time, may lead to disaster.

It is plain to every one that the business depression from which this country has been suffering has become world wide; and it would be unreasonable for us to expect a very early return to normal conditions.

On the other hand, the collapse in business and in industry has been so sudden and so drastic that the decline in the prices of some products can not be expected to go much further; and in the absence of an explosion or general collapse, it will be only a question of how long we may expect to drag along on the bottom, and when the turn for better times will come.

The dominant position which this country holds now as the world's chief creditor and principal reservoir of capital and credit means that this country is likely to have for some years to come a greater influence upon the industrial and financial conditions of other countries than these other countries are likely to exert upon us. But, however, that may be, the countries of the world are probably more mutually interdependent at this time than ever before. It was probably the slackening in our purchases of silks and other Japanese products which precipitated the commercial and financial crises in that empire last spring. Although the withdrawal or curtailment of American credits in South America has been an important factor in bringing about the depression in business, and the shrinkage in values in those countries, it was inevitable that prices must sooner or later recede to a more normal basis.

The Federal Reserve Board saw plainly a year ago that this country was living in a delirium of high prices, extravagance, and luxury. Production had been curtailed; while consumption had enormously increased, and the creation of new capital and savings was proportionately reduced. It was realized that the brakes should be applied, for otherwise inflation might run mad with a resulting explosion in business and finance from which it might take us many years to recover, despite the salutary and saving power of our banking and currency system. It was, therefore, wisely decided that an effort should be put forth at that time to curb the extension of credit for luxuries and nonessentials, while giving full and proper protection, as far as possible, to farmers and all industries and enterprises engaged in the production of the "essentials." On this point the board was practically unanimous.

This restriction of credit it was hoped would restrain extravagance and luxury and increase the production of commodities and materials which were most needed by the people, the prices for which had soared to unjustifiable heights.

The policy adopted by the Federal Reserve Board a year ago was successful in aiding in bringing about an orderly deflation. The skyward movement of prices was halted, and the price tendency for many commodities was duly reversed. The downward movement, slow at first, however, became precipitate during the summer and the early autumn months.

Events, developments, and conditions warn us to remember that a stoppage too sudden may be as disastrous as an explosion; that an unyielding barrier thrust into the path of a runaway machine may only hasten wreckage and assure a smash which skillfully regulated guidance might prevent.

Two months of actual experience which have elapsed since my letter to you of October 17, 1920, was written tend to intensify rather than diminish my fears for the immediate future. I am as confident of the safety and development of American business, society, and Government as the most enthusiastic optimist, but it is our part to strain every nerve and apply every resource of labor, thought, and self-sacrificing patriotism to avert an interval or disaster, or to make it as brief and easy as may be possible.

It is poor comfort to the man or woman with a family denied modest comforts or pinched for necessities each week to be told that all will be, or may be, well next year or the year after. Privations and mortifications of poverty can not be soothed or cured by assurances of brighter and better days some time in the future. Our hope and purpose must be to forestall and prevent suffering and privation for the people of to-day, the children who are growing up and receiving now their first impressions of life and their country.

I am far from believing in a paternalistic Government; but I also think there are emergencies when the powers of Government may very properly be used and ought to be used for the purpose of stabilizing business and averting financial panics when they threaten, and preventing commercial crises.

War forced our Government to become not only paternalistic, but possessive and controlling in its relations to commerce. Bitterly as we may resent paternalistic policies and resist continuance of them, we must realize the facts. Those policies were adopted suddenly, even violently, in emergency. They have developed, inevitably, an emergency of peace more threatening in some respects than that of war. Sudden and violent abandonment of governmental direction, influence, and assistance would be like seizing a vast and intricate and delicately adjusted machine, operating it at high pressure in new conditions and for new purposes, and then dumping it, disorganized, disarranged, and out of gear, leaving its former managers to readjust it and run it as they can.

During the past several years I have seen many occasions where the action of the Treasury Department has distinctly prevented financial panics.

I have witnessed other occasions where the mediation and timely action of the Treasury has ameliorated many serious and dangerous situations, and has been an important factor in checking grave losses to the business interests of the country.

At other times the same influence has been exerted to aid directly in the stimulation and encouragement of our commercial and industrial interests.

The part which the Treasury took in the formation of the cotton pool in 1914 is one illustration. Another illustration was the action of the Treasury in organizing the War Risk Bureau, which made possible the continuance of our export trade in the early days of the war when cargo insurance was unobtainable elsewhere.

The action of the Treasury in making practicable the emergency currency law and in facilitating and expediting the issuance of that currency in the summer and autumn of 1914 averted a financial catastrophe and prevented chaos. These illustrations could be multiplied, if need be, but you are doubtless as familiar with them as I am.

Opinions differ as to what should be done at the present time to ease conditions and inspire hope. Among the practical things that would help it is my judgment that the Federal Reserve Board would be justified in reducing the rate of interest which is being charged by Federal reserve banks on the loans of member banks secured by Liberty bonds, from the present rates of 6 per cent and 7 per cent to a uniform rate of, say, 4½ per cent. The owners of these bonds do not ask the Government to buy their bonds to save the holders from loss, and it hardly seems right under present conditions to tax these borrowers for interest on money borrowed from the reserve banks to 1½ per cent or 2½ per cent more than the bonds yield, especially when this interest so collected goes back to the Government indirectly.

I also think it would be well under present conditions either to suspend or to modify the operation of the progressive interest rate to member banks which, in order to save their customers and clients from disaster, have received from the reserve banks larger advances on eligible paper than their pro rata portion of the reserve bank's resources. Six per cent interest is enough to charge under present conditions. My attention was called recently to a member bank in the West (whose loans were principally to farmers) which had been charged by the reserve bank of its district as high as 19½ per cent on some of the loans which it had taken in order to accommodate needy customers.

I am receiving constantly letters and bitter complaints alleging restrictions of credit in different parts of the country, not only from farmers but from other business interests. For example, in a recent letter from the president of a successful national bank in the third Federal reserve district, he said:

"In the industrial world the consequences of high interest rates and curtailed credit is not less unhappy. Last night I was talking with a man running a furnace near —, Pa., who has values in stock and plant of over \$400,000, owes only \$60,000 on his plant and \$52,000 on his stock. He has 10,000 tons of iron at Buffalo and although he has orders from a reliable firm for every ton of his pig iron he can turn out, he can't borrow the money from the bank at the rate of \$7 a ton to release and ship the ore to his furnace. He has orders for all the product he can turn out and yet can't get credit to carry on a legitimate business.

"This condition grows out almost exclusively of a frightened condition due to a policy of restricted credit and excessive interest rates."

On the other hand, I know that it has been the general desire and aim of the Federal Reserve Board and the Federal reserve banks to care for the legitimate demands of the farmers and other borrowers; and to prevent, as far as practicable, the imposition of hardships anywhere.

Nevertheless, the present emergency is so acute that I can not avoid the conclusion that a more liberal policy than is now being pursued would be justified. While there is a very great scarcity of credit in various parts of the country, we find that the reserves of the Federal reserve banks are now actually higher than they were a year ago, averaging 45.1 per cent for all the 12 reserve banks on December 23, 1920, against 44.8 per cent for the corresponding week in 1919.

These banks have an unused lending power at this time (without reducing the reserve requirements) of about \$700,000,000; and by waiving or reducing their requirements as to reserve by only 10 per cent, their lending power could be increased to about \$2,500,000,000.

The business interests of the country, agricultural, manufacturing, commercial, and all other have, during the past year, sustained a strain and have endured a shrinkage in values which have been unparalleled in the commercial and economic history of any country.

The decline in prices, multiplied by the volume of commodities now on hand or produced during the past season, discloses an apparent shrinkage in values that is staggering. A decline of \$1 per bushel, for example, in the three and one-fourth billion bushels of the corn crop would amount to, say, three and one-fourth billion dollars. The shrinkage in cotton values from 40 cents to about 15 cents per pound on 13,000,000 bales, together with the shrinkage which has taken place in the same period

in cotton seed, shows an estimated loss of about \$2,000,000,000 more. The difference between the present price of wheat and the price which the farmer expected to get for the crop accounts for another billion and a half. The shrinkage in the value of the stocks of wool, hides, leather, furs, silks, and sugar runs into billions of dollars.

My estimate is that the shrinkage in value in this country from the highest prices of 1919-20 to the low of to-day in the year's products of our fields, mines, factories, mills, and forests, plus materials left over from the previous year, will amount to, somewhere from twelve to eighteen billion dollars, practically as much as the total amount of our Liberty bonds now outstanding, or, as another illustration, property values in this country which have apparently melted away in the past 12 months, represent a sum far greater than the total gold supply of the whole world at this time.

The significance of these figures and of these terrific losses may be better imagined when we recall that the total wealth of this country in 1900 was estimated at only \$88,000,000,000.

The orders for goods which have been canceled in the past few months and the goods which have been thrown back on the hands of the sellers—both as to domestic and foreign business men—amount, it is understood, to many hundreds of millions of dollars. Bills of exchange drawn on foreign countries against shipments are being returned protested, while the shipments lie rotting or deteriorating in foreign harbors—the Orient, South America, Cuba, and elsewhere.

I was told recently that an officer of a prominent bank had stated that he had already been placed in the creditors' committee of 30 different business houses or corporations which were unable to meet their obligations.

Pitiful tales come to me from national bank examiners in different parts of the country. The chief examiner from the Kansas City district told me recently that in parts of his territory the most heartbreaking tragedies were being enacted—farmers turned away from their farms, their cattle and implements sold, and ruined families becoming wanderers on the face of the earth.

The same examiner informed me of cases where farmers are being pitilessly sold out, and stated that in sections of the West the scarcity of money is such that their horses are being sold sometimes as low as \$3 apiece, and purchased by impoverished neighbors who kill them and feed their flesh to their hogs and obtain some reimbursement by selling the hide of the horse.

I am also reliably advised that in parts of the South the scarcity of money is so great that farm mules are being sacrificed at foreclosure sales at 10 cents on the dollar of their value a year ago, and that to raise cash other property is being thrown overboard in the same proportion.

In Wyoming I am told that there are millions of pounds of wool which the wool growers are quite unable to sell at this time and that in other parts of that State there is an abundance of cattle feed but that the cattle have disappeared.

In sections of Oklahoma it is reported that some farmers have abandoned their cotton fields because they can not raise enough money to pay the labor cost of picking, and that growers who have abandoned their own cotton fields where they have raised an indifferent character of cotton, are making \$1.75 a hundred pounds for picking the cotton of neighbors who have produced cotton of a grade which will bring a better price than their own. I am also credibly informed of farmers in the West, where there is no wood or coal and no money to bring in fuel, who have actually been burning their corn for fuel in their extremity.

The governor-elect of North Carolina told me last week that the situation in his section is so lamentable that three citizens of one county, with hope destroyed and nerves shattered, unable to struggle longer with desperate conditions, had ended their lives by suicide. A few days ago a former member of Congress from Georgia, the president of a well-run and successful national bank in that State, apparently unable to stand the growing misery which he beheld around him, also ended his life in the same direful manner.

I have given instructions that, as far as the authority of this office will permit, the banks under my supervision shall be urged to use in these critical times every proper means to prevent the selling out of honest debtors at sheriffs' sales and the ruin of their families by extending them time and by giving them, wherever practicable, the opportunity to hold on to their farms and their farming implements, to the tools of their trade or to the equipment of their business, whatever it is; and that these debtors be given a chance to recoup and to redeem their indebtedness and get again on their feet.

The member banks thus called on to give time and to show consideration to debtors will naturally demand and expect from the reserve banks consideration and forbearance, and, in the language of the poet, can properly say to their reserve banks, "The mercy I to others show, that mercy show to me."

Such facts and conditions as have been brought so vividly before us can not be met with theories or removed by explanations and should not be dealt with by vague surmises and promises or unconsidered experiments. They demand definite and energetic action, even if precedent must be disregarded, accepted rules suspended or waived, and new plans and methods devised.

The people have intrusted their welfare and interest to those of us who have been honored with public office of any degree and in any department of the Government, supposing us to be fitted for our task by knowledge, intellect, and character. Our plain duty is to act as promptly and as independently of usual habits of thought as may be necessary to find and apply remedy.

While there appears to be this scarcity of money, and of credit in the great agricultural and producing sections of the West and Northwest and in the South and Southwest, we find that individual banks in New York City are borrowing from the reserve system, in a number of cases, more than \$100,000,000 each; and sometimes as much as \$145,000,000 is loaned there to a single bank—twice as much as the total loans some of the reserve banks have been lending recently to all the member banks in their districts.

The records show that at the time of the last call for reports of condition of the banks, about the middle of November, one bank in New York was borrowing over \$134,000,000, or about \$20,000,000 in excess of what the Federal reserve bank of Kansas City was advancing to the 1,091 member banks in the tenth Federal reserve district covering the States of Kansas, Nebraska, Colorado, Wyoming, and parts of Missouri, Oklahoma, and New Mexico.

Another banking institution in New York was borrowing at the same time from the Federal reserve bank about \$40,000,000 more than the aggregate which the Federal reserve bank of Minneapolis was lending to its 1,000 member banks in the great States of Minnesota, North and South Dakota, Montana, and part of Wisconsin.

Another individual bank in New York was borrowing from the reserve bank at the time of the last call about \$30,000,000 more than the Federal reserve bank of Dallas was lending to all the national banks in that district including the State of Texas, and parts of Louisiana, Oklahoma, New Mexico, and Arizona, while still another banking institution in New York had gotten loans from the New York reserve bank which approximated in amount the total of the loans made by the Federal reserve bank of St. Louis to the 569 member banks in that particularly important district, including the whole State of Arkansas, parts of Illinois, Indiana, Kentucky, Tennessee, and Mississippi, and the larger part of the State of Missouri.

The Federal reserve bank of New York was also lending to one of its member banks at the same time \$20,000,000 more than the Federal reserve bank of Richmond was lending to all the member banks in the fifth reserve district, including the States of Maryland, Virginia, North and South Carolina, and the larger part of West Virginia.

An important question is how far the enormous sums which the reserve system is lending to the banks in the large cities are being used for the protection and promotion of legitimate business and how far these funds are being employed in speculation or for the selfish interest of the officers and directors of the borrowing banks and for the concerns in which these officers are specially interested.

The inequalities and injustice in the distribution of these funds become apparent when we analyze the uses which big favored banks in the East sometimes make of the money they borrow from the reserve system.

My attention was recently directed to a certain large bank which was borrowing more than _____ million dollars from the reserve system and which at the same time was lending to its own officers and directors and to their affiliated interests between _____ and _____ million dollars.

It was also developed that this same bank, to which the Federal reserve bank was lending more than _____ million dollars, had loaned to its chief executive officer and his family more than _____ million dollars; and that the loans, which this particular bank had made to its chairman, president, vice president, and one director for their personal operations and for their _____ affiliated companies, aggregated more than _____ million dollars.

Briefly, the official figures tell us that four banking institutions in New York City, at the time of the last call, were borrowing from the reserve system an average of over \$118,000,000 each—or practically as much money as the Federal reserve banks of St. Louis, Kansas City, Minneapolis, Dallas, and Richmond, all combined, were lending to more than 4,000 member banks in 21 States in the Union, comprising more than one-half of the entire area of the United States. If our reserve system has the funds to lend in such huge sums to the banks in New York, for such uses, is it not difficult to understand why money should be so scarce in the interior where the real wealth of the country is being so largely produced, and where money is so distressingly needed?

The money scarcity in the interior of the country has been greatly aggravated, as I have already explained publicly, by the artificially fixed interest rates in New York City, which have had the effect of withdrawing money from legitimate business in various parts of the country to be loaned at fancy rates in Wall Street.

The reports to this office show that at the beginning of August last, when money was being needed for crop-moving purposes, the national banks alone in New York City were lending in New York on call for account of correspondents and customers over \$500,000,000, which is a greater sum than the Federal reserve banks of Minneapolis, St. Louis, Kansas City, Dallas, and Atlanta were lending to the more than 4,000 member banks in those five Federal reserve districts.

It is also worthy of note that while the reserve system has been lending these huge sums to the banks in New York City during the past 12 months at average rates of probably less than 6 per cent, these same borrowing banks have been lending to other borrowers at interest rates greatly in advance of those paid the reserve banks—many millions being sometimes loaned, as I have heretofore shown, as high as 20, 25, or 30 per cent.

In my judgment, it would be well for the Federal Reserve Board, in extending these huge accommodations to banks, to stipulate that the banks borrowing from the reserve banks shall not exact from customers interest in excess of some rate or margin to be determined, which will leave not more than a reasonable profit to the member bank.

Member banks should be given to understand that the board disapproves and will not countenance the excessive rates which have been in vogue in New York City and which are higher than the rates charged by banks in any other country in the world. Such rates, in my opinion, have been very damaging to the commercial and financial interests of the country, and I submit that it would be well for the board to establish regulations to prevent the reserve banks from lending money to member banks at 6 per cent to be passed on to customers at extortionate rates. The effect of such a regulation, I believe, would be most helpful and salutary.

The records of this office show numerous instances of banks which have gotten large sums of money from the reserve banks to be loaned in Wall Street for the purpose of profiting by the difference in interest rates.

The official reports also show that in addition to the money which the New York banks were lending on call in New York for account of their correspondents and customers, the national banks in New York City this time last year had on deposit to the credit of their correspondent banks in all parts of the country, approximately \$900,000,000 more, while the total sum which the New York national banks were lending, directly and indirectly, to all other banks throughout the country was considerably less than one-fourth of that sum.

Existing banking conditions and practices at this time are, of course, in many respects extremely unsatisfactory and hard to excuse or explain. The important thing is to find and apply proper remedies. Perhaps there has never been a time when the business and industrial interests of the country were more deeply dependent on a sound, wise, and courageous administration of our banking and financial system than at the present moment.

Thus far the banks under the supervision of this office have made a wonderfully gratifying showing and we have been able by the utmost watchfulness and care to prevent many failures and to save many a bank that was headed in the wrong direction. I am informed that in the past 60 days from 95 to 100 banks under State supervision in 20 different States have failed. During the same period less than one-twentieth of that number of national banks have been placed with receivers, but I am apprehensive as to what the developments of the next few weeks may be unless some positive steps are taken to ameliorate conditions and to safeguard the situation, and I believe that this can be done.

This is a time for cool heads, resourceful brains, and strong, courageous hearts. It is time for all of us to abandon the ordinary motives and throw aside the prejudices of party, class, and section, even to disregard our own direct interests in united, faithful effort for quick and comfortable restoration of normal and healthy conditions and improvement on old conditions. For myself, as one Democrat, I intend to cooperate cordially and loyally, in and out of office, with every real endeavor of the new administration to those great ends. I believe all thinking and patriotic people of my political opinions and affiliations will share and be governed by that purpose, although lacking perhaps my exceptional opportunities at the present time for knowing the gravity of the situation and the urgency of the demand on our Americanism. Our's is a Government of the people.

The crisis we face offers an extraordinary opportunity for demonstration of our capacity for self-rule and ability to extricate ourselves triumphantly from danger and complicated difficulty. If Government and all citizens, Democrats and Republi-

cans, capital and labor, farmers and manufacturers, bankers and merchants, will work together with that really intelligent selfishness which realizes the value of and necessity for mutual concessions and helpfulness and the surrender of some immediate gain for permanent and general betterment of all, we can solve the problem within a few months.

We have wealth, brains, peace, stability, endless producing power, unlimited stores and storehouses of raw material. If we will use these with the generous patriotism and allegiance to each other and our country that gave us victory and honor, with the help of God, in the war, we will with the same help conquer the ill results of war with rapidity and completeness which will astonish us.

We gave the lives, blood, and limbs of our young men and poured out our money to win in Europe. I am confident that you must feel as I do, that if we will now sacrifice prejudice, greed and the sordid selfishness that is the densest stupidity, we will win at home against the evils that now beset us, at loss infinitely less, and with greater celerity.

I earnestly hope that the board in considering the problems which are before us may find ways and means to alleviate the evils which exist, and with its great influence and power take immediate action to aid in bringing about an early restoration of sound and healthy conditions, new growth and renewed prosperity. On my part I believe there is abundant justification for this hope.

Faithfully, yours,

JOHN SKELTON WILLIAMS.

Representative MILLS. Now with reference to that letter. You gave again—referring to the discount figures and loans to member banks—absolute figures and not relative figures, did you not?

Mr. WILLIAMS. Yes. I was giving it to the Federal Reserve Board, though, which had both.

Representative MILLS. Now you cited the five largest borrowers in New York City.

Mr. WILLIAMS. I cited five large borrowers. I do not recall whether they were the largest or not. They may have been.

Representative MILLS. Now, isn't it a fact that while at that time those banks had borrowed 142 per cent of their basic line, all member banks, not merely the five largest borrowers, in the Richmond district, had borrowed 121 per cent of their basic line?

Mr. WILLIAMS. I don't know.

Representative MILLS. In the Atlanta district, 211 per cent; in the St. Louis district, 117 per cent; in the Minneapolis district, 126 per cent; in the Kansas City district, 115 per cent; in the Dallas district, 110 per cent.

At the same time the five largest borrowers in the Richmond district were rediscounting 271 per cent of their basic line; the five largest borrowers in the Atlanta district were rediscounting 327 per cent of their basic line; in the St. Louis district, 152 per cent; in the Minneapolis district, 263 per cent; in the Kansas City district, 196 per cent; and in the Dallas district, 167 per cent. Isn't that the fact?

Mr. WILLIAMS. I don't know whether your figures are correct or not.

Representative MILLS. You have seen those figures before, have you not?

Mr. WILLIAMS. Not that I recall. Where do you get them?

Representative MILLS. I will ask you whether your letter of December 28 was ever answered by the Federal Reserve Board.

Mr. WILLIAMS. It was, and I have the answer before me, and I do not find your figures that you read out in that answer.

Representative MILLS. Do you find any figures of that kind in that answer?

Mr. WILLIAMS. No; I do not. What do you say the Richmond district was?

Representative MILLS. I haven't got their answer before me. I haven't seen it.

Mr. WILLIAMS. Well, the figures which you read out were not before me.

Representative MILLS. Did they give you any figures?

Mr. WILLIAMS. I have the letter before me.

Representative MILLS. Did they give you any figures as to the basic line of borrowings?

Mr. WILLIAMS. I received this letter, and I answered it, and with the permission of the committee I shall read my answer and this letter I received, both.

Representative MILLS. Have you any objection to putting the answer of the Federal Reserve Board into the record?

Mr. WILLIAMS. None whatever.

Representative MILLS. I suggest that that be put into the record.

The CHAIRMAN. You are referring now to the letter of March 16?

Representative MILLS. No; I am referring to the answer to Mr. Williams's letter of December 28.

The CHAIRMAN. Well, the figures which you give are in the letter.

Mr. WILLIAMS. Will you read those figures and see if I can follow them. I have certain figures here, but I do not find the figures which you read just now.

Representative MILLS. These are the figures for the five largest borrowers in the Richmond district, 271 per cent.

Mr. WILLIAMS. I find all members of the Federal reserve district of Richmond, 121 per cent.

Representative MILLS. Yes.

Mr. WILLIAMS. I don't know whether the letter contains the figures which you give.

Representative TEN Eyck. Wouldn't it be better to have him read the answer to his letter now into the record?

The CHAIRMAN. I have no objection to his reading it.

Mr. WILLIAMS. I have no objection.

Representative TEN Eyck. I think it ought to go in in its proper place.

Mr. WILLIAMS. Yes; I haven't the slightest objection. It is for the committee to say.

The CHAIRMAN. I think we had better get it all in.

Representative MILLS. I will not pursue this inquiry any further if you read that letter into the record.

Mr. WILLIAMS. I have not the slightest objection to its going in.

The CHAIRMAN. The letter speaks for itself. I suggest that the reply of the governor of the Federal Reserve Board to Mr. Williams's letter, under date of January 13, 1921, be read into the record. Without objection it may go in.

Mr. WILLIAMS. In connection with the letter which I have just read it might be well to read the following memoranda. [Reading:]

JANUARY 3, 1921.

Mr. COMPTROLLER: The board is about to take up question of salaries.

Respectfully,

W. W. HOXTON, *Secretary.*

And then this further memorandum. [Reading:]

JANUARY 3, 1921.

Mr. COMPTROLLER: The meeting has been called by the governor who has matters to present of which I have no knowledge.

Respectfully,

W. W. HOXTON.

The CHAIRMAN. Are these letters addressed to you?

Mr. WILLIAMS. Yes; letters between myself and the board.

The CHAIRMAN. Very well.

Mr. WILLIAMS. Relating to the letter which has just been read [reading]:

JANUARY 3, 1921.

Memorandum for Gov. Harding.

I have just received notice of a special board meeting. If merely matters of routine are coming up I would like to be excused owing to pressure of work on this office but if any matters of special importance are to be considered, please advise.

J. S. W.

And here is a letter dated January 6, 1921. [Reading:]

MY DEAR GOVERNOR: In our informal chat this afternoon you asked me why I did not bring up at a board meeting the subject of my letter to you of the 28th ultimo and the recommendations which it embraced. I replied that I will be glad to take the matter up with the board and go into full details at any time it may suit your convenience.

I reminded you that I had requested that the letter should be brought to the attention of the board and that I had been watching the docket so that I might be present when the subject should come up for discussion. I have seen no reference to the matter.

I also reminded you that when I was notified of a special meeting on Monday, thinking that possibly this matter might be considered, I sent in a note to you in the board room in order to ascertain the subject for which the special meeting was called; and that in reply to my note to you I received a note from the Secretary that the board was about to consider the subject of salaries. I am not advised as to whether or not the subject of my letter has thus far been mentioned at any board meeting, but if you will let me know when the board may care to discuss the subject, which in my judgment is an exceedingly important one, I shall be glad to arrange to be on hand.

Sincerely, yours,

JOHN SKELTON WILLIAMS.

Hon. W. P. G. HARDING.,
Governor Federal Reserve Board.

Gov. Harding writes to me on January 7, 1921, as follows [reading]:

DEAR MR. COMPTROLLER: Replying to your communication of the 6th instant, I would state that an informal conference of board members was held in my room yesterday afternoon, and it was decided that in as much as you had deemed it proper to express your views in writing that I should prepare a written reply which would express the views of all members of the board, other than yourself, and that when the reply is ready for delivery to you, a formal meeting of the board will be held to discuss both your letter and reply thereto. As soon as certain statistics which I have asked for are ready, I will prepare the reply to your letter and submit it to Secretary Houston and the appointed members of the board. I may add that I share in the view which I have heard you express on several occasions in times past that there ought to be no distinction between the ex officio and appointed members of the board, but it seems to me that in the method you have chosen in presenting your ideas to the board, you, yourself, are creating such a distinction.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Hon. JOHN SKELTON WILLIAMS,
Comptroller of the Currency.

And I wrote the following memorandum on January 10, 1921 [reading]:

Memorandum for Gov Harding:

Just received verbal notice, from messenger, of board meeting now convening in your office (purpose of meeting not stated). If any special matter of importance is coming up will arrange to attend, but if merely routine matters are to be discussed would like to be excused, as I am occupied with some important work just now.

J. S. W.

And then the following [reading]:

JANUARY 10, 1921.

Delivered the original of attached memorandum to Mr. Eddy, who after looking into the matter, reported that only routine matters were being considered by the board at the meeting referred to.

A. B. C.

And as the result of the board's receipt of my letter, without discussing the subject in a meeting at which I was present, as far as I recall—although I held myself ready at all times to attend the meeting if called—I subsequently received on January 13, I think it was, that letter which I have here, and to which I referred, and which it is the desire of the commission, I understand, shall be read into the record.

The CHAIRMAN. Yes.

Mr. WILLIAMS. That letter is as follows [reading]:

FEDERAL RESERVE BOARD,
OFFICE OF THE GOVERNOR,
Washington, January 13, 1921.

DEAR MR. COMPTROLLER: This is a formal acknowledgment of receipt of your letter of December 28, 1920, which was written on official stationery of the office of Comptroller of the Currency, signed by yourself individually and addressed to me as governor of the Federal Reserve Board.

I am informed that you sent a copy of this letter to other members of the board. It is not altogether clear whether you are writing in your individual capacity, as a member of the Federal Reserve Board or as Comptroller of the Currency, but as you refer in several places in your letter to instructions which you have given as Comptroller of the Currency and to information that you have received in that capacity, I assume that it will be proper to regard your communication as one from the Comptroller of the Currency.

I assume also that your object in addressing a written communication to the board is to make a record of your views, for if it had been your purpose merely to have the board consider the matter of changing discount rates, you could, in your capacity as a member of the board, have had the subject put upon the docket at any time or you could have brought it up informally at any meeting of the board.

This reply to your letter represents the views of the Secretary of the Treasury, who is chairman of the board, as well as those of Messrs. Platt, Hamlin, Miller, Wills, and myself. For the sake of brevity, I shall make use in this letter of the pronouns "we," "our," and "us," it being understood that these pronouns refer to the members of the board above named.

It seems to us, in the first place, that you have overlooked the underlying causes which have brought about the conditions which have aroused your sympathies and concern. In the wake of the world-wide inflation which was caused by the war, there followed, some months after the armistice, a period of reckless extravagance, record-breaking prices, speculation, and general disregard of sound financial and economic principles. It was recognized by prudent and well-informed men everywhere that such conditions were abnormal and could not continue. As early as August, 1919, the continuous expansion of credit and the constantly advancing cost of living became objects of grave public concern and the United States Senate addressed a communication on the subject to the Federal Reserve Board on August 5, 1919. Shortly afterward the President in an address to Congress called attention to the dangers of the situation. As late as the 17th of May last, the Senate adopted a resolution directing the Federal Reserve Board "to advise the Senate what steps it purposes to take or to recommend to the member banks of the Federal reserve system to meet the existing inflation of currency and credits and consequent high prices, and what further steps it purposes to take or recommend to mobilize credits in order to move the 1920 crops."

The board, after repeated warnings had proved ineffective, deemed it necessary to resort to the well-tried method of advancing discount rates and approved moderate advances for all Federal reserve banks late in the year 1919. In January, 1920, it approved a sharp advance in rates for all banks and in May, 1920, approved the rates which are now in effect. Meanwhile it became evident, early in the year 1920, that the world had entered into a period of reaction. One of the earliest and most striking manifestations of the fact that general readjustments were in process was the collapse of the silk market in Japan early last spring. About that time it became evident that there had been a sudden and violent revulsion of sentiment in the United States against the unnatural levels which had been attained by prices, which had begun to mount at a time when circumstances over which the Federal Reserve Board had no control prevented the Federal reserve system from exercising its important function of regulating the flow and volume of credit. Shortly after the break in the silk market, large importations of wool to the United States coming at a time when the domestic wool clip was ready for market resulted in a slump in the price of wool and in the utter demoralization of the wool market. Sugar had been advanced by speculative manipulation until it reached a price which checked domestic consumption and virtually stopped exports to Europe while stimulating imports into the United States from practically every sugar producing country in the world. Then followed a drastic decline in the price of sugar. Imports of rubber and coffee increased in like manner until the accumulated stocks became so great that the markets broke under their weight. The domestic production of other great staples—cotton, corn, wheat, rice, and tobacco—proved to be greater and the demand for them less than had been expected and the prices of these commodities have experienced a drastic decline, due to the operation of the economic law of supply and demand.

We recognize that the violent readjustments have caused much hardship and great pecuniary loss, but we are convinced that the readjustments which have taken place were inevitable and could not, even under the stimulus of inflation, have been long deferred. It is our confident belief that but for the precautionary measures taken several months ago, general conditions to-day would be far worse than they are and that the prospects of stabilization and revival would be much more remote. We wish to emphasize the fact that this process of drastic readjustment has been world-wide and that the effects have been most severe in those countries where the inflation of bank credit and currency has been most pronounced. We believe that as far as this country is concerned the crisis has been passed and we are of the opinion that the policies which were carried into effect by the Federal Reserve Board have prevented one of the greatest financial cataclysms of modern times.

We do not agree with you that in order to relieve existing conditions "precedents must be disregarded, accepted rules suspended or waived, and new plans and methods devised," particularly if those new plans and methods are fundamentally unsound. We believe your suggestion that the Federal Reserve Board reduce the rate of interest charged by Federal reserve banks on loans of member banks secured by Liberty bonds to a uniform rate of 4½ per cent is essentially unsound.

You say that "the owners of those bonds do not ask the Government to buy their bonds to save the holders from loss, and it hardly seems right under the present conditions to tax those borrowers for interest on money borrowed from the reserve banks 1½ to 2½ per cent more than the bonds yield, especially when this interest so collected goes to the Government indirectly." Entirely apart from the question whether these bonds were sold to a patriotic public at rates of interest lower than they should have borne, the Federal reserve banks are certainly under no moral or legal obligation to protect the bondholders from loss of interest and the discount policy of the Federal reserve system can not be adjusted to suit the convenience or relieve the necessities of individual holders.

Many billions of these bonds have been paid for in full and the effect, in the present circumstances, of a Federal reserve bank discount rate of 4½ per cent on paper secured by Liberty bonds would be to induce a temporary and artificial ease in the money market, which could not be sustained, because the lending power of the Federal reserve banks has its limitations, and which might result in a temporary revival of the speculative spirit which was so strongly in evidence 14 months ago and which had such an unhappy effect upon the commerce and business of the country.

You suggest that the progressive rate which is in operation in three Federal reserve districts should be suspended or modified. As you know, the board did not insist that the progressive rate be applied in any district but permitted those Federal reserve banks which desired to put it into effect to do so. It apparently has worked well in the St. Louis district. When first applied, the Federal reserve bank of St. Louis had a reserve, exclusive of rediscounts, of about 21 per cent. Its reserve is now over

48 per cent. The Federal reserve bank of Atlanta some weeks ago, with the approval of the board, suspended the progressive rate and put into effect a flat 7 per cent rate. In no district has the application of the progressive rate resulted in a general discount rate as high as 7 per cent. The high rate to which you refer in your letter applies only to a small portion of the advances received by that particular member bank from the Federal reserve bank, and the average rate charged that bank on all rediscounts at the Federal reserve bank is less than the contract rate permitted by law which the bank is charging its customers.

You evidently appear to accept at their face value the complaints which you receive from different parts of the country alleging restrictions of credit. Our experience has been that these complaints as a rule do not bear analysis and we would suggest that you follow up the statement made in a letter received by you from the president "of a successful national bank in the third Federal reserve district" to the effect that a furnace man doing business not far from his locality, who makes an excellent financial showing, has 10,000 tons of iron in Buffalo, for each ton of which he has orders from a reliable firm, and yet he can not borrow money from his bank at the rate of \$7 a ton to release and ship the ore to his furnace. We believe that there must be some other facts in this connection which have been overlooked or omitted, for if the furnace man is so deserving of credit and he has been so flagrantly illtreated, being denied credit by his bank, it seems strange that your correspondent, the president "of a successful national bank" doing business near by, does not himself offer to come to the furnace man's relief.

Apparently you hold the view that the decline in prices has been caused by restriction of credit on the part of the Federal reserve banks and by the member and non-member banks of the country. Your own reports show that there was a marked increase in the loans of all national banks between September, 1919, and November, 1920, and the rediscounts of Federal reserve banks for member banks increased steadily until November 5, 1920, when they reached the highest point in the history of the system. Since that date there has been a moderate reduction in the loans and discounts of Federal reserve banks, due mainly to seasonal liquidation. It is significant, however, that the most rapid decline in prices took place before November 5, while the loans and advances made by the Federal reserve banks were constantly increasing and the volume of Federal reserve notes outstanding was still expanding. It seems clear to us, therefore, that the decline in prices was due to economic causes and can not be ascribed to restriction of credit or to contraction of currency.

You refer to the fact that the combined reserves of all Federal reserve banks are now actually higher than they were a year ago and urge this as an argument for "a more liberal policy." The improvement in the reserve position of the Federal reserve banks has had a reassuring and stabilizing effect and we hope that the reserves will continue to improve for some time to come. We attach no significance to your statement that the Federal reserve banks "have an unused lending power at this time (without reducing the reserve requirements) of about \$700,000,000; and by waiving or reducing their requirements as to reserve by only 10 per cent their lending power could be increased to about \$2,500,000,000." You have made this statement publicly on two or three occasions during the past six months, and while we do not question your motives in giving publicity to the statement we regret your action in doing so and feel that the effect has been harmful, for it undoubtedly has given rise to false expectations and probably has caused holders of commodities, which could have been liquidated several months ago at prices much higher than those now prevailing, to hold on in the hope that the board would adopt a policy of inflation in an attempt to sustain or advance prices.

You refer to the great shrinkage in values which has taken place during the past year, estimating the amount at somewhere from twelve to eighteen billion dollars, but you do not refer to a corresponding expansion of values which took place earlier. We hold that the shrinkage which has taken place is somewhat analogous to that which occurs when a balloon is punctured and the gas escapes.

We are surprised at the references you make to the dealings of individual banks in New York City with the Federal reserve bank there, and particularly at your attempt to show that a few large banks in that city have been receiving undue favors at the hands of the Federal reserve bank. Your statements are calculated to mislead the uninformed, for you say that about the middle of November, one bank in New York was borrowing about \$20,000,000 more than the amount the Federal reserve bank of Kansas City was advancing to 1.091 member banks in the seven States or parts of States embraced in its district; that another New York bank was borrowing at the same time about \$40,000,000 more than the amount which the Federal reserve bank of Minneapolis was lending to its 1,000 member banks, and that another bank in New York City was borrowing \$30,000,000 more than the Federal reserve bank of Dallas was lending to all national banks in its district (making no reference to advances to State

member banks). You say also that another New York bank had received advances from the Federal reserve bank of New York equal approximately to the total loans made by the Federal reserve bank of St. Louis to its 569 member banks, and again that the Federal reserve bank of New York was lending to one of its member banks \$20,000,000 more than the Federal reserve bank of Richmond was lending to all member banks in the fifth Federal reserve district.

These statements, if made public, would lead no doubt to much unjust criticism of the Federal reserve bank of New York, which had made the loans, and of the Federal Reserve Board which had not prohibited them, but they are far from giving all the facts in the case. In the first place, you take no account of the banking power of the Federal reserve bank of New York as compared with the Federal reserve banks of Richmond, St. Louis, Minneapolis, Kansas City, and Dallas nor do you think it worth while to state the amount of the capital and surplus of the five banks referred to and what their reserve balances are. You probably know that all Federal reserve banks have a theoretical basic or normal discount line, which is based upon the reserve balances carried by the member banks plus the member banks' stock holding in the Federal reserve bank. You do not state, what you doubtless know, that there are many member banks in the Federal reserve district of Richmond, St. Louis, Minneapolis, Kansas City, and Dallas which have rediscount lines at their Federal reserve banks many times in excess of their basic lines and relatively greater than any line ever given by the Federal reserve bank of New York to any of its member banks. In order to correct any wrong impressions which you may have or which may be received by any who may read your letter, we call attention to the following table which shows the basic lines, borrowing from the Federal reserve bank and ratio of such borrowings to basic lines of five large New York City banks and all member banks in six Federal reserve districts, as of November 15, 1920. The five New York City banks named in the table are undoubtedly the banks referred to in your letter.

	Basic line.	Borrowings from Federal reserve bank.	Per cent of borrowings to basic line.
National City Bank	\$104,956,000	\$123,818,000	118
Guaranty Trust Co.	89,838,000	118,125,000	131
Chase National Bank	62,058,000	97,150,000	157
National Bank of Commerce	59,174,000	102,746,000	171
First National Bank	41,884,000	65,000,000	155
Total	357,920,000	506,839,000	142
All members in the Federal reserve district of—			
Richmond	102,188,000	121,555,000	121
Atlanta	81,913,000	172,658,000	211
St. Louis	121,648,000	142,927,000	117
Minneapolis	85,145,000	107,520,000	126
Kansas City	128,355,000	147,118,000	115
Dallas	91,763,000	101,057,000	110
Total	611,012,000	794,835,000	130

You will notice that in the Atlanta district the percentage of borrowings of all member banks to their basic line is 211, which is greater than that of the New York City bank which shows the largest percentage of borrowings to basic line. You will observe furthermore that the average percentage of borrowings to basic lines of the five New York City banks on November 15 was 142, while the average percentage of borrowings of all member banks in the six Federal reserve districts of Richmond, Atlanta, St. Louis, Minneapolis, Kansas City, and Dallas on the same date was 130. It should be borne in mind that the borrowing banks in these districts constitute probably not more than 60 per cent of the total members, so if only borrowing banks are considered their percentage of borrowings to basic line would be much greater than that shown in the table, which relates to all member banks.

Another statement in your letter is calculated to give a wrong impression. You say "it is also worthy of note that while the reserve system has been lending these huge sums to the banks in New York City during the past 12 months at average rates of probably less than 6 per cent, these same borrowing banks have been lending to other borrowers at interest rates greatly in advance of those paid the reserve banks—many millions being sometimes loaned, as I have heretofore shown, as high as 20, 25, or 30 per cent." If member banks have been borrowing since the rates were raised last January from their reserve bank at less than 6 per cent, it has been on paper secured by Treas-

ury certificates, some of which have borne 5½ per cent and some 5¼ per cent interest. These loans constitute, however, only a moderate part of the total loans and the average rate paid by these five banks to the Federal reserve bank does not differ essentially from the average rate paid by all member banks in the second Federal reserve district, which was about 6½ per cent in October, November, and December of the past year.

We do not deem it worth while to discuss the call-loan rates. The high rates cited by you have not been recorded for nearly a year. The board several months ago replied to a resolution of the Senate on this subject and pointed out that these rates are permitted under the laws of the State of New York. If there is any question as to their legality the responsibility for such rates, as far as national banks are concerned, rests with you as Comptroller of the Currency and not with the Federal Reserve Board.

Normally the discount rate of a Federal reserve bank should not control the rates at which member banks loan money to their customers. In many States the Federal reserve bank rate is so much lower than the contract rate permitted by law that the Federal reserve discount rate, as a matter of fact, does not control the rates at which customers are accommodated by member banks. No Federal reserve bank has a flat rate or an average rate higher than 7 per cent for any class of paper. In 6 States the legal rate of interest is 8 per cent and in 8 States that rate is permitted by contract; in 11 States a contract rate of 10 per cent is allowed, and in 10 States a 12 per cent rate is legal by contract. Four States, California, Maine, Massachusetts, and Rhode Island, permit any rate to be charged under contract, and in New York any rate agreed upon in writing is legal on collateral demand loans of \$5,000 and over. We believe that the theory that discount transactions should yield a profit to member banks is a fallacy which owes its wide credence in part to the fact that the Federal reserve banking system, which has some of the attributes of a central banking system, is comparatively new, and partly to the abnormal times through which we have passed, the inevitable effects of which are now being experienced.

In working out of the expansion occasioned by war financing, we believe that member banks should become accustomed to rely mainly upon their own resources normally, in order that when seasonal or emergency demands do arise the reserves of the Federal reserve banks may be available to meet those demands and sufficient to prevent the emergencies from developing into panic conditions.

We do not agree with you that it would be wise to encourage further expansion by reducing rates, and it should be remembered that there are about \$24,000,000,000 of Government obligations available to member banks as collateral for loans eligible for rediscount by Federal reserve banks. Based upon the experience of other countries, it is evident that if the limit of expansion should be reached in this country a condition of depression infinitely more serious and more widespread than that now existing would follow.

You state that your attention has recently been directed to a certain New York bank which was borrowing more than ——— million dollars from the Federal reserve bank, "and which at the same time was lending to its own officers and directors and to their affiliated interests ——— million dollars, or approximately as much money as the Federal reserve bank of Kansas City was lending to all the member banks, State and national, in that district. It was also developed that this same bank, to which the Federal reserve bank was lending more than ——— million dollars, had loaned to its chief executive officer and his family more than ——— million dollars; and that the loans, which this particular bank had made to its chairman, president, vice president, and one director, for their personal operations and for their 22 affiliated companies, aggregated more than ——— million dollars."

This might give the impression to some that the Federal reserve bank of New York (and incidentally, the Federal Reserve Board) was negligent in making large loans to a bank in this condition. The fact is, however, that the loans made by the Federal reserve bank to this particular bank, which is a national bank—although you do not say so in your letter—are undoubtedly eligible and good. Being a national bank, this particular member bank is under your supervision as Comptroller of the Currency. While the Federal reserve bank of New York has the right, under the Federal reserve act, to examine member banks, it has been the practice to accept the examination and reports of the comptroller's examiners. The board reposed confidence in three examinations and felt that an independent examination by an examiner of the Federal reserve bank would be an unnecessary duplication of work and expense.

We are surprised that such developments should have taken place in a national bank under your supervision and wonder why it is that your examiners did not discover and report these conditions at an earlier date. While it is true that values may have declined since the date of the previous examination, the practice of making such large loans to insiders is a bad one, regardless of valuations. At the request of several members of the board, I wrote you a few days ago asking when these dangerous ten

dencies had been first discovered, and we had hoped, for the sake of the record of your office for vigilance and efficiency, that they might have developed only since the date of the previous examination. In your letter of the 12th instant, however, you state that "conditions in this bank grew progressively worse between the time of the examination in October, 1919, and the examination in August, 1920." and point out that the discount lines of several corporations in which officers and directors of the bank were interested were increased between the dates of these two examinations. Allowing for these increases, it still appears that it was the practice of the bank, as far back as October, 1919, to lend large amounts to officers and directors and to their affiliated interests, although you state in your letter of December 28, 1920, that your attention "was recently directed" to these conditions.

Very truly, yours,

W. P. G. HARDING, *Governor.*

HON. JOHN SKELTON WILLIAMS,
Comptroller of the Currency.

Mr. WILLIAMS. Upon receipt of that letter I addressed the following communication to the governor of the Federal Reserve Board [reading]:

JANUARY 17, 1921.

HON. W. P. G. HARDING,
Governor Federal Reserve Board.

DEAR GOV. HARDING: I have the pleasure of acknowledging receipt of your letter of the 13th which I have read with the attentive care demanded by the tremendous importance of the subject under consideration. Let me urge that all technicalities and discussions of actual or supposed delinquencies or errors, by any of us, are at this time immaterial, comparatively. Apportionment of blame, if there be any, for present conditions may well be postponed and left for the historians and coroners sitting on dead events to wrangle over. We are living and responsible officials with a task to do and a problem to work out involving the welfare of millions of our fellow citizens who have trusted us and of countless other millions of our fellow human beings in other lands.

It seems to me to be our plain, imperative duty to go at this task and problem with our whole souls and with all the abilities and force we have, consecrated to, and concentrated on, the purpose of averting a catastrophe, and hastening restoration of safe and comfortable conditions with the very least possible hardship and suffering to individuals, classes, or countries. There are times when a masterly inactivity is in order; there are others when active aid or intervention in threatening situations may mitigate loss and suffering and avert disaster.

Your comparison of the financial process through which we have been going to the deflation of a balloon is peculiarly happy and appropriate and carries directly to the point I am trying to impress on you and my other colleagues on our board. Instead of driving a hole into the bag and crashing to earth in wreck and ruin, we should handle the valve rope and ballast with anxious and ever-alert care to effect a safe landing on good and solid ground. Our solemn duty, as of course, you realize, is to conduct the operation regardless of political, sectional, or individual feelings, of pride, of opinion, prejudices, preferences, and even of precedent and historic accepted rules and forms.

Our entire Federal reserve system is an arrival at wisdom and utility by abandonment of precedent and of methods and rules formerly approved by the business and financial world through many decades. In instances cited in your letter to me and in mine to you, crash and failure have been prevented by intelligent disregard of precedent. The Constitution of this Republic is the result of the purpose of thoughtful, faithful, forward-looking men to devise new ways of curing and averting old evils. The genius and inspiration of our people are toward the same end. I am eager to have us hold fast to that which is good provided it can be made to fit actual and present conditions, while refusing to be fettered and hampered by precedents, customs, or rules which seemed perfectly sound before the development of steam and electricity.

In my letter of December 28, to you, as you may recall, I referred especially to action along this line by the board itself, I said:

"The policy adopted by the Federal Reserve Board a year ago was successful in aiding in bringing about an orderly deflation. The skyward movement of prices was halted and the price tendency for many commodities was duly reversed."

In my press statement of July 31, 1920, to which you subsequently referred, I also said:

"The action of the Federal reserve banks in restricting extension of credit for non-essentials and luxuries and in encouraging increased production in commodities most needed has been distinctly beneficial and has, it is believed, been a material influence in reducing the high cost of living far and wide."

The record seems to show that we are all agreed on the necessity and propriety of releasing our thought from trammels of precedent and custom while seeking ways for relief and safety with the least possible loss. That being true, it is for us to give thoughtful and respectful attention to every suggestion from a respectable and responsible source, with the earnest hope of finding an idea that may be valuable in aiding us to serve our people and Government rather than with impulse to discover a flaw or pretext for criticism or condemnation. Therefore, I ask you to read more carefully what I did myself the honor to present, in my letter of the 28th, regarding the rate of interest charged by Federal reserve banks to member banks on loans secured by Liberty bonds. You describe this as "essentially unsound" and as reason for your objection say:

"Many billions of these bonds have been paid for in full, and the effect in the present circumstances of a Federal reserve bank discount rate of 4½ per cent on paper secured by Liberty bonds would be to induce a temporary and artificial ease in the money market which could not be sustained, because the lending power of the Federal reserve banks has its limitations, and which might result in a temporary revival of the speculative spirit which was so strongly in evidence 14 months ago and which had such an unhappy effect upon the commerce and business of the country."

Perhaps my suggestion was not clearly expressed. Evidently, and much to my regret, you have misinterpreted it. I asserted the opinion that the board "would be justified in reducing the rate of interest which was being charged by the Federal reserve banks on the loans of member banks secured by Liberty bonds from the present rates of 6 per cent and 7 per cent to a uniform rate of, say, 4½ per cent." Certainly I did not intend to suggest that the doors be thrown wide open and reserve banks accept all loans offered secured by Liberty bonds and discount them at 4½ per cent. I do not think my language can be construed fairly as meaning any policy of that kind. If you will be kind enough to recollect, you will confirm the assertion that in my conversations with you I have advocated reduction of the rates of interest on loans secured by Liberty bonds already owned and in the bank. I have contended that this would be a grateful relief to the banks and to their customers who have borrowed for legitimate and constructive purposes, and an encouragement to the patriotic people who have bought Government bonds and find them now valued far below par. I am quite sure your own memory and more careful perusal of the part of my letter to you referred to will convince you that I never have suggested or favored the policy of taking all loans that might be offered secured by Liberty bonds at lower rates or any rate.

As all of us know, there is a line between making money easily obtainable for those needing it for purposes useful to the country and its commerce and able to offer fair security on one side and on the other side putting it within easy reach of those who would waste and misuse it. That is the line of safety. There is a line, also, between conserving our capital and resources for the use and stimulation of legitimate productive business and locking it so tightly, with high interest rates, or otherwise, as to paralyze or cripple all business. As I understand our functions and responsibilities, we are seeking and feeling for these lines. If I am not as much mistaken in your position as you seem to me to be regarding mine, you favored, last summer, a very material reduction in rates of interest on loans secured by Liberty bonds. You urged on me the hardship that the rates then charged on such loans inflicted on one prominent national bank in the sixth Federal reserve district which has been conspicuously liberal in purchases of Government bonds. You doubtless remember the formal resolution of the board of the Federal Reserve Bank of Atlanta passed in July last, urging an arrangement by which there would have been a reduction of the interest rate on member bank loans secured by Liberty bonds already held by the bank. And I am sure you will also recall your telegram to the Atlanta Reserve Bank in July, 1920, over your own signature, expressing approval of their plan, including the 4½ per cent rate on member bank loans secured by Government bonds, and that you said to the Atlanta bank, in part, that you "believe board is likely to approve plan substantially as outlined in your telegram, but it will probably be several days before matter is definitely decided." The difference between us appears to be that you have concluded that the policy I understood you formerly to approve and advocate is "essentially unsound" while my thought and observation have taught me to believe it thoroughly sound and necessary, within the limitations I have described.

Regarding the progressive rate now in operation in three Federal reserve districts, I know, of course, as you say, that "the board did not insist that the progressive rate be applied in any district, but permitted those Federal reserve banks which desired to put it into effect to do so." Nevertheless, I can not conceive that the board intended to acquit itself of responsibility and divest itself of further power in

making the adoption of the progressive rate optional. Surely we can not sanction, or permit, the starting of an apparatus and look on with calm indifference and assumption of helplessness if it should begin to run wild and automatically make havoc.

When the progressive rate begins to operate so as to compel the member banks in some districts who are doing their best to care for the interest and welfare of their customers as well as themselves to pay to the Federal reserve bank interest on a portion of their loans as high as 50 per cent or 75 per cent per annum, or higher, it is about time, in my judgment, for the Federal Reserve Board to intervene and reduce the rates.

I must make my respectful protest against any policy which permits the imposition by Federal reserve banks on member banks of any such rates as those shown in the memorandum which I received from the board, dated January 5, 1921, showing that one national bank in Alabama had, a few months ago, been assessed under the "graduated plan" a rate of 80 per cent in excess of the normal rate, in one exceptional case; and where another bank in Mississippi had, in November last, been charged by its reserve bank as high as 22 per cent, and a bank in Colorado, dealing principally with farmers, an interest rate as high as 22½ per cent per annum, on the so-called "progressive" plan.

You say in your letter:

"Apparently you hold the view that the decline in prices has been caused by restriction of credit on the part of the Federal reserve banks and by the member and nonmember banks of the country."

With all due respect, allow me to say that I see no basis for this deduction, especially in view of the clear-cut and categorical statement made by me in my letter to you of October 18, 1920, and quoted again in my letter to you of December 28, 1920, in which I said:

"In my opinion, the declines which have taken place in commodity values in the past six months have been due primarily to the operation of natural causes; and these declines in orderly manner have been facilitated by the policies pursued by the Federal Reserve Board during this period. The recession from the unnatural prices which prevailed in the case of so many commodities was desirable and inevitable, and it was proper that the Federal Reserve Board should have endeavored to have this decline proceed gradually, rather than by withholding all restraint, making possible later on a collapse and disaster."

Commenting on my statement that the reserve banks have an unused lending power, without reducing the reserve requirements, of about \$700,000,000, and that by waiving or reducing their requirements as to reserve by only 10 per cent their lending power could be increased to about two and one-half billion dollars, you say:

"You have made this statement publicly on two or three occasions during the past six months, and while we do not question your motives in giving publicity to the statement, we regret your action in doing so and feel that the effect has been harmful, for it has undoubtedly given rise to false expectations and probably has caused holders of commodities, which could have been liquidated several months ago at prices much higher than those now prevailing, to hold on in the hope that the board would adopt a policy of inflation in an attempt to sustain or advance prices."

You, of course, do not question the absolute correctness of my statement, but I understand you to have regarded it as inopportune to give the facts to the public as I did. With all due modesty I must say it is my opinion, and I may say, my conviction, which I will also add is supported by the views of many of the best and most experienced bankers and business men in the country, that the promulgation of that statement at that time was of much value to the country and probably aided in preventing a more sudden smash and collapse in values than has taken place.

You speak of my reference to the very great shrinkage in values which has occurred during the past year, and your comment is that I have omitted to refer "to a corresponding expansion of values which took place earlier."

Let me try to impress on you again that I am not seeking a debate on abstract questions and would regard recriminations, attempts to irritate or injure individuals, or exchanges of charges and countercharges as beneath the dignity of a vast condition with which we must deal. We look with proper contempt on officers and rulers who have lost empires by ignoble squabbles at the climax of battles. I am trying by entirely frank methods to bring about courageous, prompt, effective action after honest, conscientious facing of facts and study of all possible plans and propositions. In my view as a general proposition the more the intelligent people and leading forces of the country are told of the realities of their affairs and situations the more practical wisdom and help we will get for our work. A policy of secrecy in public affairs is hardly ever justified except by actual state of war.

And I can not see that any former expansion of values, however artificial or exaggerated, would make an excuse for us if we aided in, or by inaction allowed, such rapid and extreme shrinkages as would mean general collapse and ruin. Perhaps the supreme test and finest achievement of statesmanship is in saving the people from the worst consequences of their own mistakes. In this present situation the vast majority of those on whom the ruin would fall are those in no way responsible for the conditions that caused it. I do not think we would prove ourselves fit for the important work intrusted to us if we stood content to remind thousands suffering from hunger and cold that some profiteers and speculators and a few others produced and many partook of a surfeit last year. The gain in prices may have been fantastic and largely on paper, but the loss, coming so swiftly, produces very real distress for hosts of good people, including women and children. We can not cure or palliate destitution by philosophizing or explaining or proving that it comes obedient to the laws of political economy.

Any sins or faults, real or supposed, of mine or any other person are now immaterial. I am no more concerned by the suggestion of neglect of duty in the matter of the New York banks than I am in your remarks on my omission of the word "comptroller" after my name in my letter to you. Such matters do not interest me at this moment. I hope you will pardon me for confessing that to me they seem trivial. In my view all of us should be more intent on reaching a definite conclusion and applying remedies for the troubles existing and the worse threatening than in making points of argument and innuendo among ourselves when we differ. Yet, as the New York banks' matter has been brought into the record, by me merely to illustrate conditions; by you to suggest that I was responsible for the conditions I described, it is necessary for me to state the facts here.

The figures I gave in my letter were obtained from official records of the Federal Reserve Board, and I do not understand that their accuracy is questioned. You submit, however, a table showing "borrowings from Federal reserve banks" by five certain banks in New York as compared with the borrowings of all member banks in six reserve districts. The figures which you give as to the borrowings by the member banks in these six districts differ from the figures which were furnished me by the board, because, as I understand it, the figures embraced in your letter now include rediscounts and contingent liabilities of the banks and those furnished me by the board and used by me I now understand from you were exclusive of rediscounts. Nevertheless, these differences are negligible for the purposes of this discussion.

I think I should, however, call your attention to the fact that in reporting the borrowings from Federal reserve banks by certain New York City banks you appear to have omitted the "acceptances" of these banks which were discounted by the New York Reserve Bank which, if added to the sum total, would materially increase the accommodations granted to these New York banks. The amount of acceptances, etc., which your table omits aggregates over \$30,000,000 and would increase the accommodations of one of the New York banks to \$134,545,000 and of another to \$128,496,000. It therefore appears that each of these two banks had obtained from the reserve bank at New York considerably more money than all of the member banks combined in either the Minneapolis Federal reserve district or the Dallas Federal reserve district, or the Richmond Federal reserve district at that time.

It also appears that there were at least four individual banks in New York City of whose paper the New York bank had taken in each case an amount in excess of the total loans and rediscounts made to all the member banks in the Dallas reserve district, which embraces the State of Texas and parts of the States of Louisiana, Oklahoma, Arizona, and New Mexico.

You suggest that my statement to the effect that the New York City banks were being lent huge sums of money during the past 12 months at average rates of probably less than 6 per cent while they in turn were lending to others many millions of dollars at 20 per cent, 25 per cent, or 30 per cent is calculated to give a wrong impression, and you state that if member banks have been borrowing since the rates were raised last January at less than 6 per cent it has been on paper secured by Treasury certificates some of which have been drawn 5½ per cent and some 5¼ per cent. The point impresses me as distinctly trivial, if you refer to the fraction under 6 per cent at which the New York banks have been obtaining money. If the banks in New York had been paying for the funds even 7 per cent it is my opinion that the rates of 20 per cent, 25 per cent, or 30 per cent which were charged by some of those to which the New York reserve bank was lending most largely at times were wholly indefensible, but as I have set forth my views on this particular aspect of the case very fully and publicly, and have discussed the subject again in my annual report, it is hardly worth while to go into that matter further at this time.

You say:

"We believe that the theory that discount transactions should yield profit to the member banks is a fallacy which owes its wide credence in part to the fact that the Federal reserve banking system, which has some of the attributes of a central banking system, is comparatively new," etc.

In this view I cordially concur, and there is nothing in my letter to you which would suggest a contrary opinion; at the same time I venture to suggest that the execution or imposition of excessive or high rates by Federal reserve banks not only occasions actual loss to member banks whose eligible paper may have been discounted by them at rates less than those exacted by the reserve banks but the announcement and promulgation of high rates may have a very damaging psychological effect upon the business community.

In the conclusion of your letter you refer to a certain New York bank to which I had directed your attention, to which the reserve bank had loaned more than \$100,000,000. I had pointed out to you the excessive loans which this bank was making to a group of its officers and to their allied interests which impressed me as being excessive and unwarranted.

In reply to these suggestions, you say:

"We are surprised that such developments should have taken place in a national bank under your supervision and wonder why it is that your examiners did not discover and report these conditions at an earlier date."

May I in all kindness remind you that in my letter to you of January 12 (which you had received before you wrote me your letter of the 13th instant with the statement I have above quoted) I showed that the national bank examiners criticized the officers of the bank referred to for various unsatisfactory conditions which they discovered at the time of the October, 1919, examination; and a report of that examination, showing the heavy loans to officers and their allied interests and other matters of criticism, was, I understand, submitted in due course to the Federal reserve bank at New York.

My letter to you of January 12 also informed you very clearly that between the time of the examination of October, 1919, and the examination of August, 1920, conditions in the bank had grown progressively worse; and as a result of the report made by the examiners in August, 1920, this bank has charged off losses aggregating approximately \$10,000,000.

During the period from October, 1919, when the bank was so properly criticized, and August, 1920, when the bank examiner returned for another examination, the New York Federal reserve bank was lending that particular bank, as I understand it, huge sums of money continuously, and the reserve bank was in position to inform itself at any time it saw fit to do so as to the concentration of loans, the character of the bank's business, and all other matters of criticism, and to be governed accordingly in making its loans.

The concluding paragraph of your letter says:

"Allowing for these increases, it still appears that it was the practice of the bank, as far back as October, 1919, to lend large amounts to officers and directors and to their affiliated interests, although you state in your letter of December 28, 1920, that your attention 'was recently directed' to these conditions."

Do you think it quite fair to convey the impression by your statement that the matter of excessive loans was a subject which only recently received the attention of this office, when I had informed you explicitly in my letter of January 12 (which you had already received and read) that "the attention of the management was in October, 1919, directed to the large proportion of capital and surplus which was employed in loans to officers and directors"?

May I, as apropos of your criticism, remind you that as long ago as January 28, 1920, I brought earnestly to your attention the case of another banking institution in New York City to which the advances by the reserve bank of New York had been particularly heavy. I pointed out to you in that letter (which I requested you to bring to the attention of the board) that "the Federal Reserve Bank at New York had loaned or rediscounted for the ——— on December 31, 1919, an amount equal to nearly six times the capital of the Federal reserve bank of New York; about 250 per cent of the capital and surplus of the Federal reserve bank of New York and that more than one-seventh of all the bills rediscounted for all member banks and all those purchased in the open market at the end of December, 1919, were for the benefit of that particular institution."

In that same letter I said:

"These figures also show that the Federal reserve bank of New York was lending to ——— at the close of December, 1919, an amount in excess of the total loans and discounts made as of December 26, 1919, to all of their member banks by either the Federal reserve banks of St. Louis or Minneapolis, or Kansas City, or Richmond,

or Atlanta, and about twice as much as the aggregate of all loans and discounts and purchased paper held at that time by the Federal reserve bank of Dallas."

I took the liberty of saying to you then that—

"This is a concentration of the funds of the reserve system with one debtor bank, conspicuous for its speculative operations and promotions, which, in my judgment, is not only not justified, but distinctly dangerous, and I feel it my duty to register my strong dissent from a continuance of such conditions as these, by writing you, as I am doing, as an ex officio member of the board. I trust you will find time to make a careful analysis of this situation. With such facts before us concerning the company's condition as I have here undertaken to bring to your attention, our responsibility becomes serious and very real. I think it would be well to apprise the board of this situation."

I have several times during the past year urged upon the board the desirability of having a thorough examination of that debtor institution made, either by the examiners of the board or by the examiners of the New York Reserve Bank, for it seemed to me we were on notice as to the "unconservative" methods of that institution and of its officers.

I also took some pains to analyze for the board's information, certain conditions which were revealed in an examination of that institution by State banking authorities, and I have brought to the board's notice certain loans amounting to millions of dollars secured largely on speculative stocks which were obtained by the president of that member bank to which the New York Reserve Bank's accommodations had been so particularly heavy, from banks under my supervision, and I also called your attention to a particular loan of about \$7,000,000 made by three member banks, including the institution of which that borrowing official is president, to a syndicate in which he is heavily interested. Reports in possession of the board show that this particular banking institution was lending many millions of dollars in slow and doubtful loans to its own officers or to syndicates or corporations in which officers of the banking institution were interested at the same time that huge advances were being gotten from the New York Reserve Bank.

I should not have referred here to this instance and to the concentration of loans to its own officers and their allied interests by this heavy debtor of the New York Reserve Bank were it not for the "wonder" you express as to why examiners under my supervision did not discover and correct certain conditions in a national bank upon which you comment in your letter, in regard to which the record shows admonitions or warnings were duly given by this office. As far as I am advised, no independent examination of the institution to which the reserve bank has been making these huge loans (and which is not under the comptroller's supervision) has as yet been made by the board or the reserve bank of New York.

Please do not take this as a criticism of the board for omission to examine or act, for I prefer (after bringing the matter before you in the past as I have done) to assume that you have gotten sufficient assurances (of which I have not been informed) to satisfy you that matters in that institution are now quite as they should be.

I may add in conclusion as to that particular banking institution that its accommodations from the Federal reserve bank at New York at the time that I brought the matter to your attention, a year ago, aggregated (including about \$9,000,000 in acceptances) \$127,418,000.

For the purpose of comparison it appears from the Federal reserve official bulletin that the total amounts of loans and discounts outstanding about the same time, or, say, on January 2, 1920, to all of the member banks in their respective districts (aggregating some five or six thousand banks) were as follows:

Federal Reserve Bank of—

St. Louis.....	\$60,858,000
Kansas City.....	88,176,000
Minneapolis.....	71,380,000
Dallas.....	57,135,000
Richmond.....	108,448,000
Atlanta.....	88,724,000
San Francisco.....	74,237,000

That one institution (whose loans were so largely employed in speculative undertakings) was borrowing at that time from the New York Reserve Bank practically as much money as the aggregate amount which the two Federal reserve banks of Minneapolis and Dallas were lending to all their member banks in the States of Minnesota, North Dakota, South Dakota, Montana, Texas, and parts of Michigan, Wisconsin, Louisiana, Oklahoma, New Mexico, and Arizona.

As far as I am concerned, no one need trouble to read the somewhat detailed and necessarily lengthy observations regarding the New York banks, evoked by criticisms of my official conduct toward them, which seem to me entirely irrelevant and which I hope I have proved to be unwarranted. The really important question for us is whether we can do something to end or alleviate the great depression in the business of the country which is obvious and in danger of growing worse unless we lead in some policy of relief and encouragement.

If anybody anywhere can suggest such a policy either in line with the suggestions I have ventured to make, or entirely different but promising improvement I will give it the most careful and conscientious study and, if at all possible, my most cordial approval and cooperation. For one, I am not content with the present conditions and outlook. I can not be while I know so many innocent people are suffering and the number of sufferers, in all ranks of life, increase; while our country is forced to stand seemingly helpless to give to other countries and people the aid which our inherent strength and comparative immunity from the destruction of war entitled them to hope from us.

Your letter indicates some skepticism as to the reports of embarrassments and suffering which reach us at Washington from various sections of the country and to some of which I referred in my letter to you of the 28th ultimo. Perhaps your skepticism may be justified in some instances, but on the other hand we sometimes find actual conditions more extreme than have been represented.

I am informed by a chief national bank examiner that in one State in his district there have been 37 State bank failures since the 1st of November last, and that he hears other State bank failures are impending and their closing temporarily deferred because of a shortage of State examiners to place in charge of them. I am happy to inform you, however, that in that particular State and in that entire district, embracing three States and parts of several others, there has been no national bank failure for more than three years, although a number of failures have been directly prevented as a result of extraordinary exertions and action on the part of our examining force.

As one indication of the demoralization existing in general business, let me direct your attention to an official statement given out, within the last 30 days, under the auspices of the chamber of commerce of the State of New York, probably the most important commercial body in the country, stating that owing to the cancellation and attempted cancellations of contracts, merchandise with an estimated value of \$3,000,000,000 is now choking warehouses, and on steamers, and on piers and in railroad cars, the ownership of which is disputed; and of this vast mass of merchandise it is reported that about \$1,000,000,000 worth is lying in foreign lands, a large percentage of which may ultimately find its way back to this country, to depress still farther our own glutted markets, where consumption because of fright and general demoralization has already reached such an extremely low level. "Meantime," said the report, "litigation is increasing on all sides."

Investigations and reliable reports indicate clearly to my mind that it will be necessary for the Federal reserve system to relax in the matter of credit extension and provide their member banks more liberally with funds, and on a fairer basis than is sometimes charged on the "progressive" plan, in order to enable member banks in the agricultural districts of the West and South, the Southwest and Northwest to supply the farmers with the wherewithal to make their crops for the ensuing season.

Despite the impoverishment and money scarcity now existing in so many parts of the country, the Federal reserve banks, as a whole, are now, as the official records show, abundantly supplied with funds. In fact, their unused lending power, which I referred to in August last as \$750,000,000, has now increased to about \$1,200,000,000 and a reduction or waiver in reserve requirements of not over 10 per cent on deposits and notes would now bring their total unused lending power up, at this time, to more than \$3,000,000,000.

It is entirely true that I wish to go on record, as have other members of the board repeatedly from time to time in the past in presenting their views in writing as important subjects have been considered. I wish to be recorded definitely as having done my utmost to urge our board to saving and palliative action and consideration for the trouble of the public and thereby at least free myself from the censure that will fall on us with crushing force if we omit any possible effort to mitigate present and real suffering or to avert disaster, although the consideration of personal exculpation is, of course, slight and negligible in comparison with my main purpose and hope, which are to obtain from the board some prompt and effective action for relief.

After writing you on December 28, 1920, I thought it desirable to furnish copies of that letter, confidentially, to the chief national-bank examiners, who are in daily touch with the banking and business situation, who are all men of large experience, of high character, and exceptional ability, and whose opinion upon the subject should be valuable.

The replies which I have received aid in confirming my conviction as to the correctness of the views which I expressed to you in my letter, despite the fact that my distinguished colleagues on the board appear not to be in accord with them. For your information and for their information, however, I will take the liberty of giving you the following excerpts from some of the replies which have come into me from chief examiners in this connection for such consideration as you may think they deserve.

The chief examiner in one of the great agricultural districts said:

"The fears you expressed as to what the results would be unless policies which aided in the unprecedented deflation should be revised to meet the present changed conditions have been more than realized, in that conditions have grown and are still growing steadily worse. Failures of banks and business houses within the last 60 days have been going on at an alarming rate, and reports indicate that this will continue unless prompt action of some kind is taken. Many pitiful occurrences such as you describe have taken place, and as far as it applies to this section your presentation of the case is not in any sense exaggerated.

"The best means for remedying the situation are not clear, but your recommendation that a Federal reserve bank rate of 4½ per cent on loans secured by Liberty bonds and a 6 per cent rate on commercial and agricultural paper, it is believed, would afford some real relief. * * *

"Your letter is regarded as most timely."

The chief examiner for another district, where manufacturing and commercial interests predominate, said:

"It is a timely communication, soundly based upon the fundamentals of existing conditions, and offers constructive suggestions for the prevention of the prostration of our business life, for the minimization of losses to our manufacturers, merchants, and farmers—who in the main are innocent and patriotic bystanders—for the maintaining of our international financial position through the keeping of our own house in order, and for the continuance of confidence of the public in the Federal reserve bank and the continuance of its control of our credits—necessarily relinquished during the war—for which it was designed. * * *

"No more opportune time could exist for the adoption and announcement of wise policies. * * *

"New and additional credits will have to be made to borrowers for legitimate purposes. Our mills will have to run and our crops will have to be grown, but the credits for such purposes should be within reason and on the basis of proper costs. Those credits should be available for the whole country alike and at about the same rates. If there is a larger demand in one section than can be supplied from that section the central reserves should be available, if the demand is a legitimate one. If it is not legitimate, there is no reason to meet it. * * * The reserves of one section should not be available for credits extended in that section for speculative ventures when there is a dearth of funds in another section for legitimate enterprises * * *"

Another particularly well-informed chief examiner in an important and extensive district writes:

"I do not think that you have put it too strongly in advocating that the Federal reserve system must deal with conditions as they are, recognizing that there is inflation, abuses, and admittedly disproportionate credit extension, but that the action taken by the Federal reserve banks means, so to speak, life or death to the various financial communities, and remedies must be suited to each case with fullest consideration of present strength or weakness. * * *

"I believe the facts, as you have presented them, if set before representative men who have the interests of the entire country at heart, should make them feel it their duty to urge and secure whatever remedial legislation may be necessary, so that one section could not have such unusual accommodations while others, particularly rural communities, are facing a fight for existence. It is situations such as these that are provocative of the social unrest, giving the agitator and the political montebank a basis for great exaggeration."

I respectfully ask that this letter be considered at the next meeting of the board, which, in response to my inquiry of the 14th instant (following the receipt of your letter of the 13th, replying to mine of the 28th ultimo), you informed me is to be held to-morrow.

Very sincerely, yours,

JOHN SKELTON WILLIAMS.

The CHAIRMAN. Mr. Williams, may I ask you how long will it take you now to present the matters you have in mind? I want to give you every opportunity to present everything that you think would be of value to the commission.

Mr. WILLIAMS. Well, I think I could get through in a couple of hours.

The CHAIRMAN. If it would take a couple of hours, I think we had better take a recess until to-morrow morning. Without objection, the commission will stand in recess until 10 o'clock to-morrow morning.

(Whereupon, at 5.15 o'clock p. m., Tuesday, August 2, 1921, an adjournment was taken until 10 o'clock a. m. of the following day, Wednesday, August 3, 1921.)

AGRICULTURAL INQUIRY.

WEDNESDAY, AUGUST 3, 1921.

CONGRESS OF THE UNITED STATES,
JOINT COMMISSION OF AGRICULTURAL INQUIRY,
Washington, D. C.

The joint commission met, pursuant to adjournment, on yesterday, at 10 o'clock a. m., in room 70, Capitol Building, Representative Sydney Anderson (chairman) presiding.

The CHAIRMAN. The commission will come to order.
Mr. Williams, you may proceed.

STATEMENT OF HON. JOHN SKELTON WILLIAMS, FORMER COMPTROLLER OF THE CURRENCY—Resumed.

Mr. WILLIAMS. Mr. Chairman and gentlemen, in looking over my papers yesterday afternoon after the close of the session, I found that there was one table to which I referred which I had not handed over to the official reporter. I shall do so now, with your permission, and read the same.

The CHAIRMAN. If there is no objection, you may proceed.

Mr. WILLIAMS. This is a brief table showing the total amounts of "agricultural paper" and "live-stock paper" held by all Federal reserve banks on the last Friday of each month for the last five months of the years 1921 and 1920.

The CHAIRMAN. Does that show an increase or decrease during those five months?

Mr. WILLIAMS. That shows an increase from May, 1920, to May, 1921, of I should say about 60 per cent; from \$140,000,000 to \$229,000,000. The percentage of increase is very handsome. The actual increase is not so impressive. These figures may go into the record, may they, Mr. Chairman?

The CHAIRMAN. Yes; without objection they may go in.
(The table of figures referred to is as follows:)

Total amounts of agricultural and live-stock paper held by all Federal reserve banks on the last Friday of each month for the last 5 months of the years 1921 and 1920.

[Taken from Federal Reserve Bulletin.]

	1921	1920		1921	1920
January.....	\$229,000,000	\$56,800,000	April.....	\$230,300,000	\$106,200,000
February.....	220,200,000	67,100,000	May.....	229,400,000	140,600,000
March.....	222,500,000	74,600,000			

Mr. WILLIAMS. The figures in this table, Mr. Chairman, rather remind me of the percentages of increase which were shown a few years ago in certain parishes in the diocese of Virginia. The annual report of the bishop showed that certain small parishes were showing enormous increases, some 100 per cent and some 150 per cent and some 200 per cent, while the flourishing parishes in the large cities showed increases of only 5 or 10 per cent. Some one was struck by the comparison and investigated to get at the real facts, and he found the explanation. It appears that in some of those remote congregations there would be one year, perhaps, reported one communicant; the next year it would be two, and the percentage of increase was placed at 100 per cent, without the actual figures. In another case there would be two communicants, and it would be increased to three, and the increase would be 50 per cent. These increases of the advances to the agricultural districts remind me very much of those parishes.

It is true that the figures show an increase from \$140,000,000 to \$229,000,000 from May, 1920, to May, 1921, but how pitifully small those percentages are, compared to the total loans to the business interests of the country; and how small they are when compared to the total loans and discounts made by all the reserve banks.

The \$229,000,000 amounts to hardly as much as this Government spent in the closing days of the war in five days. The total loans of the national and State banks of the country, I suppose, amount to \$30,000,000,000 or \$40,000,000,000. And when you consider the help extended through the reserve banks on agricultural and live-stock paper, and compare this \$230,000,000 with all the loans in all the banks, of \$40,000,000,000, you realize that the farmers and live-stock raisers are not drawing very heavily on the banks, or if they are drawing upon them their drafts are not being honored.

Representative FUNK. Can you give us that situation in the total amount rediscounted by the Federal reserve banks?

Mr. WILLIAMS. The figures which are available to me and which are drawn from the Federal Reserve Bulletin, and which I have just placed in the record, show a total of \$229,000,000 of agricultural paper and live-stock paper having a maturity of over 90 days.

Representative FUNK. What was the total amount outstanding during that time of all kinds of paper?

Mr. WILLIAMS. That is in the record already. I will have to look it up in order to give that to you.

Representative FUNK. I wanted to get it in here in order to get the contrast.

Mr. WILLIAMS. At yesterday's hearing I called attention to the fact that—I think it was in November, 1920—the total loans and rediscounts and acceptances purchased by the 12 Federal reserve banks aggregated about \$3,000,000,000; so that the agricultural paper and live-stock paper represented about 8 per cent, or scarcely 8 per cent, of the total accommodations granted by the Federal reserve banks, which is a very small percentage, if that is all, when we consider the value and invested capital in agriculture and live stock; and the fact that it is claimed that 43 per cent of the population of the country are engaged in agriculture.

The CHAIRMAN. You gave the figures of \$3,000,000,000 as representing the total discounts?

Mr. WILLIAMS. Loans, discounts, and acceptances, as I recall it.

The CHAIRMAN. As of what date?

Mr. WILLIAMS. November, 1920. I think it was about the maximum at that time.

The CHAIRMAN. That total, however, has been very much reduced at the time of this compilation of \$229,000,000.

Mr. WILLIAMS. I would like to put into the record another table, Mr. Chairman, There has been considerable contraction, but I would like to put into the record another table, which answers that question.

The CHAIRMAN. Very well.

Mr. WILLIAMS. I have the statement here. I have taken this from the New York Times. It shows that on July 20, 1921, the gold reserve was \$2,508,298,000, as compared with July 23, 1920, when it was \$1,983,271,000, an increase in the gold reserve of \$500,000,000 or \$600,000,000 in a year. Bills discounted and bills bought, however, between July 23, 1920, and July 20, 1921, instead of showing an increase during this period of deflation and contraction show \$1,710,056,000 on July 20, 1921, and \$2,823,450,000 on July 23, 1920, a contraction of a a billion dollars, or more than a billion dollars; about \$1,100,000,000. The Federal reserve notes outstanding on July 20, 1921, were \$2,564,613,000, as against, on July 23, 1920, \$3,118,205,000. The total resources on July 20, 1921, were \$5,216,780,000 as against on July 23, 1920, of \$6,075,124,000.

May I place this table in the record, Mr. Chairman?

The CHAIRMAN. Yes; without objection it may go into the record. (The table referred to is as follows:)

Comparative figures, Federal reserve system.

	July 20, 1921.	July 23, 1920.
Gold reserve.....	\$2,508,298,000	\$1,983,271,000
Bills discounted and bills bought.....	1,710,056,000	2,823,450,000
Federal reserve notes.....	2,564,613,000	3,118,205,000
Total resources.....	5,216,780,000	6,075,124,000

Mr. WILLIAMS. I should call attention, however, to the fact that the amount of Federal reserve notes outstanding at any particular period is no criterion of the amount of money in circulation, for the Federal reserve notes are largely issued in exchange for gold acquired and placed in the vaults of the reserve banks.

The CHAIRMAN. I just wanted to get the figures, if I could, in connection with this \$229,000,000 of agricultural paper which, I take it, was of some date in June.

Mr. WILLIAMS. That is shown on a table which is in the record.

The CHAIRMAN. The figures for total loans and discounts, including acceptances for the same month; have you that figure?

Mr. WILLIAMS. It is on this paper, Mr. Chairman, to which I will call your attention, with your permission.

The CHAIRMAN. All I want to get is the June figure; the total loans and discounts for all Federal reserve banks in June.

Mr. WILLIAMS. In May, 1921, it was \$229,000,000, and in May, 1920, it was \$140,000,000, of agricultural and live-stock paper.

The CHAIRMAN. What I want is the total loans and discounts.

Mr. WILLIAMS. That is in another table. I do not have that table before me.

The CHAIRMAN. The figures that I have before me show the total loans or assets of the Federal reserve banks at the end of June, 1920, as \$2,229,000,000.

Mr. WILLIAMS. I have not those figures at hand.

The CHAIRMAN. I just wanted to get that into the record so that we would have the comparison for the same month.

Mr. WILLIAMS. Yes; but I have not those figures, Mr. Chairman.

Senator LENROOT. The charge is being made constantly that the agricultural communities are being discriminated against in the matter of accommodation for loans; what is the significance of these two tables which you have just read with reference to that charge?

Mr. WILLIAMS. The significance of these tables is that they represent a painfully small proportion of the total loans and discounts; that the advances on agricultural and cattle paper represent a very small proportion and have for the last year or two represented a very small proportion of the credits granted by the Federal reserve banks to the business of the country.

Senator LENROOT. Oh, I understand that; but does it indicate that there was any deflation or contraction of that amount during that time?

Mr. WILLIAMS. Assuming that all paper over 90 days is classed as agricultural paper, it has increased during the year to the extent of probably \$100,000,000, but the \$100,000,000 increase represents a very small proportion of what the farmer had to have to maintain himself.

Senator LENROOT. The question goes back then to whether the farmer was receiving what he should have had prior to that time, rather than to any question of deflation as against the farmer?

Mr. WILLIAMS. So far as the paper is concerned which is discounted by the Federal reserve banks?

Senator LENROOT. Yes.

Mr. WILLIAMS. Now, it would require a further investigation to find out whether the farmers' credits have been deflated on the whole or not. It is conceivable that while the farmer may be getting, or may have been getting, \$100,000,000 more—or, rather, while \$100,000,000 more of farmers' paper was being rediscounted this spring than at a certain time last year by the Federal reserve banks for the farmers, yet it may be that the farmer may have been required to pay up his loans and actually may have gotten less than he did before, because the member banks necessarily loan to the farmer large sums of money which they do not obtain from the Federal reserve banks.

Now, as I say, we can only make surmise as to what those actual conditions were until we can get the facts from the parties interested. Let me illustrate: We will say a certain country bank was loaning \$100,000 to farmers a year ago, and continued to hold that paper of the farmers; suppose that the country bank, owing to restrictions and red tape on the part of the Federal reserve bank, has been averse to using its farm paper for its rediscounts. The figures in that bank would show that the member bank, the country bank, has been

borrowing on other paper from its Federal reserve bank; perhaps on Liberty bonds, which it subscribed to, and has not been using its farmers' paper to obtain rediscounts. We will now suppose that pressure was brought to bear upon the borrowing bank to sell its Liberty bonds. Its reserve bank may have said: "We will not carry them for you any longer; get rid of them." So the country bank sells \$50,000 worth of Liberty bonds on which it had been borrowing from the Federal reserve bank, and gathers together \$50,000 of agricultural and cattle paper and succeeds in persuading the Federal reserve bank to rediscount that paper, and complies with the red tape requirements and regulations. That case would show that there has been an increase of \$50,000 of farm paper with the Federal reserve bank, while the farmer has not got 1 cent more of accommodation.

Senator LENROOT. In other words, if the banks did not present their agricultural paper to the Federal reserve bank, the failure to loan upon them, if they are not presented, was not the fault of the Federal reserve bank, but the fault of the banks themselves in those cases; on the other hand, the general policy of deflation adopted by the Federal Reserve Board, although agricultural discounts might have been increased, might have required the banks to call in the loans in accordance with that policy, although the loans might have been increased; is that correct?

Mr. WILLIAMS. Yes, sir. I will also call attention to this aspect of the case. Some Federal reserve banks require the member banks, not only to put up the face value of the discounts granted to them in farmers' paper, or other eligible paper of one kind or another, and in some cases they have required the member bank to put up a margin of 50 per cent, or 100 per cent. That has been bitterly protested by member banks in some parts of the country. You can readily see that if that custom is followed, the member banks would borrow all the money they could borrow on Liberty bonds, in order to loan to the farmers, but might hold the farmers' paper, if they have to give such excess collateral.

Now, I have in mind at this time a country bank in the Southwest which claims that it was ruined by the exactions in that respect of its Federal reserve bank; that the Federal reserve bank required them to put up all of their paper in order to get such accommodations as were accorded them, until they finally had to suspend, and I am told that suit is now threatened by the directors of the bank that failed—that was forced to suspend—against the Federal reserve bank authorities to require them to pay the depositors of the closed bank dollar for dollar. I am not familiar with the merits of that case. That can be ascertained through the proper sources, I am sure, by the commission. You can find the facts, even though I am not conversant with them, from others.

But you can very well see how it may be that the country banks find it impracticable to get money on agricultural and farmers' paper, if they are required to put up a heavy margin on the one side, or if the red tape is too great on the other hand.

Representative MILLS. Isn't this the ground you covered yesterday, Mr. Williams?

Mr. WILLIAMS. I did not cover it yesterday.

Representative MILLS. You did not go over this ground yesterday?

Mr. WILLIAMS. No, sir; I did not go over this matter yesterday. Representative MILLS. You did not touch on the question of excessive collateral?

Mr. WILLIAMS. The record is made up of what was covered yesterday. My recollection is I did not cover this aspect of the case.

Representative MILLS. I just came in now, but I was under the impression that yesterday you discussed the question of excessive collateral.

Representative SUMNERS. Mr. Mills, if you will pardon the suggestion, what the witness has just stated was brought out by a question of Senator Lenroot.

Representative MILLS. I just came in, but I thought the subject of excessive collateral was covered.

Mr. WILLIAMS. We are discussing now, farmers' paper. I do not want to impose upon the time of this commission, if I am discussing something in which they are not interested.

Representative MILLS. That was not the purport of my question. I wanted to find out whether we had something new here, or whether we are covering something we had covered yesterday.

Mr. WILLIAMS. I think it is new.

Representative MILLS. You state now then that there are a number of cases in which excessive collateral has been required?

Mr. WILLIAMS. Yes, sir.

Representative MILLS. Will you give us the instances?

Mr. WILLIAMS. The Federal Reserve Board can give you the instances. I have given you one, but the Federal Reserve Board can give you as many instances as you may want.

Representative MILLS. Are you in position to give us any other instances?

Mr. WILLIAMS. I think it is a rule of evidence that you do not take second hand evidence, if you can get evidence at first hand.

Representative MILLS. I am not interested now in whether the evidence is second hand or first hand evidence. Do you know of any other instances?

Mr. WILLIAMS. I do not know what you have to do with my knowledge of the case. I have a good deal of knowledge on this subject, but I am sure this commission has not the time to give me to go over it.

Representative MILLS. Do you care to answer that question, whether you have knowledge of any other instances, or other cases?

Mr. WILLIAMS. Yes; I do. But I prefer to let the information come from the Federal Reserve Board.

Representative MILLS. Do you know of other cases?

Mr. WILLIAMS. I do.

Representative MILLS. Will you give them?

Mr. WILLIAMS. I prefer that the board should give them.

Representative MILLS. Do I understand you decline to give them to this commission?

Mr. WILLIAMS. Under the circumstances, I do.

Representative MILLS. You have made the broad statement that there has been excessive collateral required by Federal reserve banks in a number of districts.

Mr. WILLIAMS. Yes, sir.

Representative MILLS. Will you name the reserve banks that have required excessive collateral?

Mr. WILLIAMS. I respectfully refer you to the administration of the system, the board and the governors of those banks.

Representative MILLS. You have made a serious charge.

Mr. WILLIAMS. I stand by that charge.

Representative MILLS. You have made a serious charge; do you decline to substantiate it?

Mr. WILLIAMS. I call for the evidence from the board.

Representative MILLS. Do you decline to substantiate the charge?

Mr. WILLIAMS. I have told you where to get the evidence. If you can not get it there, then I am prepared to answer.

Representative MILLS. Are you not aware that yesterday, pursuing this same line of inquiry, that you admitted you had no such knowledge—no knowledge of the banks requiring excessive collateral, and that it was hearsay on your part?

Mr. WILLIAMS. I stand by every statement I have made, and if you can disprove anything I have said, you are at liberty to do so, so far as I am concerned.

Representative MILLS. Do you want the commission to understand that you are testifying from hearsay, or that you have actual knowledge?

Mr. WILLIAMS. I am telling the commission where they can get the actual facts.

Representative MILLS. I am asking you whether you are testifying from hearsay, or whether you have actual knowledge?

Mr. WILLIAMS. I have knowledge which I think is authentic.

Representative MILLS. Do you decline to tell the commission—

Mr. WILLIAMS. I was not present when the reserve bank required of the member bank 50 per cent or 100 per cent collateral; to that extent it is not first-hand information.

Senator LENROOT. May I ask, Mr. Williams, anything that does exist, is that a matter of record with the Federal Reserve Board?

Mr. WILLIAMS. It is.

Representative MILLS. Unless we examine every case, how are we to find out the cases where excessive collateral has been demanded?

Mr. WILLIAMS. You can ask the board.

Representative MILLS. But you decline to tell us—

Mr. WILLIAMS. I told you where you could get the evidence first hand.

Representative MILLS. You decline to give it to us?

Mr. WILLIAMS. I do not have it in detail, and you can get it from the board.

Senator LENROOT. Do the members of the board admit that there has been excessive collateral demanded?

Mr. WILLIAMS. I think they will admit it.

Senator LENROOT. If they do not admit it, are you prepared to give us certain instances?

Mr. WILLIAMS. I am prepared to give certain instances if they do not admit it.

Senator LENROOT. If they deny that there was excessive collateral demanded, you are prepared to substantiate it?

Mr. WILLIAMS. I am, and I will.

Representative TEN EYCK. Mr. Williams, referring back to the line of questions Senator Lenroot asked you, I would like to know, as regarded the two hundred odd million dollars which was loaned or discounted of agricultural and live stock, whether or not a great proportion of that was not loaned to the dealers in agricultural products and live stock, and only a small proportion was loaned directly to the farmers who actually produced the food?

Mr. WILLIAMS. That is conceivable.

Mr. TEN EYCK. Now, the reason I ask that is this: That if the purchaser of live stock is loaned money to buy it with and the farmer is not given money to hold it with, then the farmer is put at a disadvantage, and really the lending institution has done an injury, instead of doing good?

Mr. WILLIAMS. That is conceivable.

Representative MILLS. Does the Federal Reserve Board ever loan directly to anyone?

Representative TEN EYCK. I said, "discounted."

Representative MILLS. Does the Federal Reserve Board ever discount individually to anyone?

Representative TEN EYCK. I am not taking the position that they are to blame; I am on this commission to get information and try to help to frame a report and make recommendations recommending legislation which will solve the difficulties.

Representative MILLS. Surely, Mr. Ten Eyck, you do not want to ask a question which assumes facts that do not exist. Your question assumed that the Federal Reserve Board makes loans; the Federal Reserve Board does not loan to individuals.

Representative TEN EYCK. I will ask Mr. Williams if it is not true that that is liable to happen, and if it did not happen under certain conditions. Mr. Williams has just given us a table—

Representative SUMNERS (interposing). The loans by the Federal Reserve Board are supported by the paper of the individual.

Representative MILLS. It is the paper of the member banks.

Mr. WILLIAMS. It is not the paper of the member banks, always.

Representative TEN EYCK. Mr. Williams has just told us that two hundred and odd million dollars was loaned on agricultural and live stock paper, and I just asked him if it was not loaned to the dealer in live stock and agricultural products, rather than to the farmer himself?

Representative MILLS. You mentioned it as being borrowed from the reserve bank. I do not want to be technical, but the reserve bank does not loan to the individual.

Representative TEN EYCK. That is the purport of my question.

Senator HARRISON. It is paper that is put up with the bank.

Representative TEN EYCK. I said, paper of live stock and agricultural securities, referring to the figures given previously.

Representative FUNK. Mr. Williams, the complaint has been made here all during these hearings that agricultural as a class has been discriminated against, and the intimation has been put out that this condition is the result of some policy of the Federal Reserve Board. Now, this commission would like to know, if you have knowledge of any action which would produce a discrimination against agricultural paper.

Mr. WILLIAMS. I wonder if I might be permitted to proceed with the introduction of certain correspondence, and then take this up later on?

Representative FUNK. You can proceed on that if you like, but I want your views on that before you close your testimony.

Mr. WILLIAMS. Very well.

Representative SUMNERS. I would like to ask one question, and if it is to be covered by correspondence, I will not ask that the question be answered at this time. And this question is not directed in a spirit of criticism, but to try to ascertain the facts, and if the difficulty has arisen from a maladministration of a system, that is one question, and if there is need of additional legislation, that is another. Now, a great many people have complained to me, farmers and people in the agricultural sections, that in the period of reaction which took place following the war and the adjustment following that period that at the very time when the markets of the world were not prepared to absorb the agricultural commodities, including live stock, coming on the market, and the producers of those commodities needed help most to prevent the crowding of those commodities on the market and thereby breaking the market, that at that critical time, in 1920, and perhaps in 1919, either direct or indirect pressure was exerted upon the member banks to force the payment of the debts owing by the farmers; that that, in time, compelled them to turn loose their commodities in quantities in excess of the ability of the consuming market to absorb, and that, in turn, broke the prices to a point where they had to get rid of their Liberty bonds that they had up with the banks, and that they were not able to produce the crop of 1920—or, put it this way, that they were compelled to produce the crop of 1920 at very high relative expense, other commodities not having come down in proportion to agricultural commodities, and that for that reason they had to increase their loans. Their Liberty bonds were gone and their farm commodities would not bring a price sufficient to pay their debts. Now, do you know anything with reference to whether or not such a policy, whether through necessity or in the exercise of judgment, was put into effect by the Federal reserve system?

Mr. WILLIAMS. I think that it would be highly desirable in this connection, and as an answer to your very pertinent inquiry, for this commission to obtain from the Federal Reserve Board copies of all circular letters which have been sent out by the 12 Federal reserve banks to their member banks during this period of deflation, in order to find out precisely the kind of pressure that has been exerted. I know that that feeling which you described is very widespread.

Representative SUMNERS. You may proceed.

Representative MILLS. I want to ask you some questions, Mr. Williams.

Mr. WILLIAMS. Very well.

Representative MILLS. Did you not approve the policy of the Federal Reserve Board during the year 1920 up to October, 1920?

Mr. WILLIAMS. I did not.

Representative MILLS. Did you not, in your letter of December 28, which you introduced in evidence yesterday, specifically say that you approved of the policy of the Federal Reserve Board in putting on the brakes?

Mr. WILLIAMS. I do not know whether you were present yesterday when it was read or not, but I inserted in the minutes and in the record a statement of protest filed by me in August, two months prior to the date of which you speak.

Representative MILLS. But up to August you approved of the policy of the board?

Mr. WILLIAMS. I did not, altogether.

Representative MILLS. May I have your letter of December 28?

Representative SUMNERS. Primarily, I am not concerned about who approved of it or who did not approve of it; I am concerned about the policy and what was responsible for the conditions of the country.

Senator HARRISON. High officials sometimes change their minds, do they not?

Mr. WILLIAMS. I may say in this connection, I was opposed to the high rates allowed, and if the minutes of the meetings are correctly recorded, and I assume they are, they will show that. For instance, I was opposed to the establishment of a 7 per cent rate in New York. I felt that if the establishment of any higher rate was justifiable, the proper conditions could be brought about better on a 6 per cent basis than on a 7 per cent basis. There are certain features of my correspondence which speak for themselves.

Here is the letter for which you asked, Mr. Mills. [Handing paper to Representative Mills.] I think you will find on the first page the matter you refer to.

Representative TEN EYCK. I want to ask another question here. Is it possible to legislate in a practical way that the agricultural paper discounted by the national banks in the various locations be given, especially on food products, preferential treatment?

Mr. WILLIAMS. They should be given at least equal treatment, Congressman. I shall be prepared, if your patience holds out, to offer some suggestions for amendments to the existing laws, before I conclude.

Representative TEN EYCK. That is fine; that is what we would like to have.

Mr. WILLIAMS. Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes; you may proceed.

Mr. WILLIAMS. I should like to read the following letter, which I addressed to the Federal Reserve Board under date of February 4, 1921. [Reading:]

FEBRUARY 4, 1921.

Hon. W. P. G. HARDING,
Governor the Federal Reserve Board.

DEAR GOVERNOR HARDING: In my letters to you of December 28, 1920, and January 17, 1921, I called attention to the manifest injustice and hardships inflicted upon member banks of the Federal Reserve System by the imposition of the so-called "progressive" interest rates and on the 25th ultimo I offered a resolution in the board that such rates be suspended in all districts where they are still in force. Action upon this resolution was deferred from time to time and when a final vote was taken on the 2nd instant—"that is to say, on the 2nd of February, 1921"—after the resolution had been amended by me to prevent the charge of interest in excess of 10 per cent under this progressive plan, it was voted down.

The more I have looked into this subject the more I am convinced that the progressive rate as it has been applied in certain districts, is wholly indefensible, and I believe that the reserve banks and this board would be very severely criticized if the rates of interest which have been exacted upon this plan by some of our reserve banks should be made public. I do not believe we are ever justified in pursuing a policy which can not be approved by a sound public opinion.

I have before me statements of one of the national banks under the supervision of this office located in the State of Alabama upon which the exactions for interest by the reserve bank of its district have been particularly oppressive. The bank I refer to is the _____ National Bank of _____, Alabama. It has a capital of \$25,000 and a surplus of \$12,500, and has tried hard to serve the people of that town and section. Its loans and discounts at the time of the November 15, 1920, call aggregated \$299,000, of which over 85 per cent were to farmers, agriculturists, and live-stock raisers, and nearly all of the balance to merchants, mercantile corporations, and firms. The bank is performing an essential and needed service in its community. In order to enable it to respond to the urgent needs of its customers and clients, this bank during the cotton season called upon its reserve bank for accommodations and its loans in the height of the season went up to something over \$100,000, or say, 2½ to 3 times its capital and surplus. The money, however, was urgently needed to take care of the pressing needs of the community.

I also have before me a statement rendered to this particular bank by the Federal reserve bank of Atlanta showing that for the two weeks ending July 31, 1920, the bank was charged for its accommodations as high as 31 per cent per annum interest on the progressive plan. Two months later when the advances to the bank had increased to \$115,000, during the height of the cotton movement, the rate charged by the Federal reserve bank of Atlanta to this bank went as high as 87½ per cent per annum.

For the two weeks ending September 30, 1920, the bank was borrowing an average of \$115,211. Two weeks' interest upon this sum at the rate of 6 per cent per annum would have been \$298, but the records show that for its accommodations for these two weeks this bank paid the Federal reserve bank of Atlanta for interest \$2,189, running all the way up from 6 per cent to 87½ per cent per annum. That means to say that this little bank paid in interest in excess of 6 per cent per annum for those two weeks \$1,891, an amount equal to more than 7 per cent per annum dividends on its entire capital stock for a whole year.

The average rate for its accommodations these two weeks was about 45 per cent per annum, or at the rate of \$56,914 per year for the use of \$115,211 borrowed to loan to its patrons.

The practical meaning of this is that the bank was driven to choose between permitting the ruin of dependent customers on the one side, and on the other side putting itself in serious danger while trying to save its clients of having surplus and perhaps capital wiped out by the exorbitant interest charges exacted by the reserve bank.

The superinterest charged this little bank, in excess of 6 per cent per annum for the two weeks ending September 30 last, was so exorbitant that if kept up, it would, in less than a year, have eaten up the bank's entire capital and surplus and rendered it insolvent.

The records show numerous cases where banks in other districts have been given accommodation for 2, 3, 4, or 5 times their capital, at interest rates which amount to a mere fraction of the rates charged this bank. In fact, our records will show where a reserve bank loaned banks in New York City during those very two weeks in September lump sums of \$800,000, and collected from them interest for the use of \$800,000 less than the struggling bank in Alabama was charged for the use of \$115,000 for that same period. To several of these New York banks the reserve bank shoveled out more than \$100,000,000 apiece at 5 per cent to 7 per cent interest, several times their capital and surplus, about the same time the little bank in Alabama was being charged 87½ per cent.

This particular instance is, I believe, the most extreme that has thus far been brought to my notice; but many other banks, in at least four Federal reserve districts, where the progressive rate has been in force, have been required to pay rates which I am satisfied the public would regard as shocking, and which in my own opinion are wholly indefensible.

Such a policy, it seems to me, is like the treatment of an ailing patient with drugs which may give momentary relief while inevitably destructive of life if kept up. Following the certain development of such a situation to its ultimate results, the reserve banks will find themselves in possession of quantities of miscellaneous live stock and farm implements, the final securities on which many of these loans are based, along with broken and liquidating member banks. The depositors of the banks "accommodated" at such unlivable rates would suffer losses very serious to them, and many acres of farm land would be idle because those who use them now would lack the means to cultivate them.

If you care to call for them, the records of the reserve banks, I am advised, will provide you too many instances of the exaction of these amazing and ruinous rates.

I trust that the board may determine that a safer, sounder, and more humane policy will be to lend member banks as much as discretion will allow at rates in no event in excess of 10 per cent per annum, as was contemplated in the resolution which I had the honor to offer recently in the board, but which was voted down at the board meeting of the 2nd instant, and when that line has been reached refuse them further accommodation, certainly not impose upon them interest rates which are merely aids to suicide.

I will be obliged if you will submit this letter to the board at its next meeting for consideration.

Faithfully, yours,

JOHN SKELTON WILLIAMS.

Representative MILLS. What is the date of that letter?

Mr. WILLIAMS. February 4, 1921.

Representative MILLS. Now, will you please explain what the progressive rates were, and where they were established?

Mr. WILLIAMS. They were established in four different districts on different bases. The Federal Reserve Board will give you the precise basis on which they were established.

Representative MILLS. When were they established?

Mr. WILLIAMS. The records will show that.

Representative MILLS. Will you tell me the approximate date?

Mr. WILLIAMS. I think most of them were established in the spring of 1920.

Representative MILLS. In the spring of 1920?

Mr. WILLIAMS. In the spring of 1920.

Representative MILLS. What was the theory of the progressive rates?

Mr. WILLIAMS. I prefer you should get that from the board.

Representative MILLS. Were you present at the meeting when it was decided to approve the progressive rates?

Mr. WILLIAMS. I did approve of the theory of some increase on excessive loans, but it never entered my mind, in discussing the question of progressive rates, that any such increases as those exacted subsequently would ever be considered for a moment or ever be tolerated, or if the rules ever produced such rates, that they would not be immediately modified.

Representative MILLS. Were you present when the question of permitting progressive rates came up?

Mr. WILLIAMS. I was in favor of progressive rates within reasonable bounds.

Representative MILLS. In other words, you were agreed with the other members of the board, in the spring of 1920, that progressive rates should be permissible?

Mr. WILLIAMS. It was not my duty to pass on the progressive rates. When I found out the basis on which the progressive rates were being applied, I protested immediately, and as vigorously as I could.

Representative MILLS. But what I want to find out is, when the progressive rates were agreed upon in the spring of 1920, whether it met with your approval?

Mr. WILLIAMS. It would not have met with my approval had I known how it was to be applied.

Representative MILLS. It probably would not have met with the approval of the other members of the board. But the point is, were you present when the principle of the progressive rates was approved?

Mr. WILLIAMS. When I found out the gross injustice that was being done, I urged that the progressive-interest plan be immediately

abolished, but the other members of the board voted against my resolution.

Representative MILLS. That was in February?

Mr. WILLIAMS. Yes, sir.

Representative MILLS. In February, 1921?

Mr. WILLIAMS. Yes; but following my protest against the contraction policies of the board made in October, the progressive rate in the Atlanta district was abolished—a few weeks after my October letter.

Representative MILLS. As a matter of fact, you did approve of the progressive rates?

Mr. WILLIAMS. I never intended to approve any plan that was susceptible of such distortion.

Representative MILLS. But you did vote for the plan?

Mr. WILLIAMS. I did not imagine for a moment that it could be so distorted.

Representative MILLS. I am not going into your motives and reasons for voting for or against it; but the fact is, you did vote for the plan?

Mr. WILLIAMS. When I found it was being so abused, I tried immediately to have it abolished.

Representative MILLS. But you did vote for it?

Mr. WILLIAMS. I did approve of the legislation which gave the right to put in a reasonable plan. I never thought the plan would be made to operate as it did—

Representative MILLS (interposing). A plan was adopted putting in the progressive rates?

Mr. WILLIAMS. Yes, sir.

Representative MILLS. And you voted for that plan?

Mr. WILLIAMS. You may assume that I did; I have no objection to that.

Representative MILLS. That is what I mean.

Mr. WILLIAMS. I do not recall whether I was present at the particular meeting of the board which took that action, but you may assume that I was. But if I did vote for it I never contemplated for an instant that it could be so distorted and abused. The main point is, when I found out how it was being mismanaged I tried immediately to do away with it.

Representative MILLS. You have frequently made use of this one horrible example in all of your speeches?

Mr. WILLIAMS. I have made use of four or five examples.

Representative MILLS. But you have made use of this Alabama case in all of your speeches?

Mr. WILLIAMS. I have made use of it; yes, sir.

Representative MILLS. In the two speeches which you put into this record?

Mr. WILLIAMS. I hope so.

Senator HARRISON. It is a good case to illustrate with.

Representative MILLS. And you did use it as an example in your speeches?

Mr. WILLIAMS. I said it was the most extreme case brought to my attention.

Representative MILLS. You know, as a matter of fact, that the Federal Reserve Board did not approve of this particular case?

Mr. WILLIAMS. I know that the Federal Reserve Board failed to approve of my resolution attempting to—

Representative MILLS (interposing). That is not an answer to my question, and you know it.

Mr. WILLIAMS. I hope they did not approve of it.

Representative MILLS. Do you know, as a matter of fact, that they did not approve of it?

Mr. WILLIAMS. You can ask them that.

Representative MILLS. I am asking you whether you know, as a matter of fact, that they did not approve of it?

Mr. WILLIAMS. I can not recall whether I ever heard whether they approved of it, or not. I do not suppose they did. I can not imagine how any sane man could approve of it.

Representative MILLS. Do you or do you not know that a refund was ordered in this particular case?

Mr. WILLIAMS. I do not. I know that Gov. Harding testified that certain reserve banks—or a reserve bank, I do not recall which—had been authorized to make refunds of the rates in excess of 12 per cent, I think. That was several weeks after I urged that it be done. I do not know whether my remonstrance had anything to do with it.

Representative MILLS. But you do know that it was done?

Mr. WILLIAMS. I do not know whether it was done. I know Gov. Harding stated it was authorized to be done.

Representative MILLS. That would indicate that he disapproved of he disapproved of this action as heartily as you did?

Mr. WILLIAMS. Not necessarily.

Representative MILLS. Not necessarily?

Mr. WILLIAMS. No, sir; because when I moved to do away with such rates as were doing an injustice, it was voted down by the other members of the board.

Representative MILLS. And you did not make that motion until after they had been in effect 10 months?

Mr. WILLIAMS. I made that motion promptly after I found out the abuses which were being practiced under its operation.

Representative MILLS. And after they had been in effect 10 months?

Mr. WILLIAMS. You can find the dates from the records; I do not know how long it was.

Representative MILLS. Nine months?

Mr. WILLIAMS. I do not know how long it was.

Representative MILLS. Do you say it was as long as nine months?

Mr. WILLIAMS. I do not know how long it was.

Representative MILLS. It was at least a half year after they were in effect?

Mr. WILLIAMS. I know it was in October when my letter urging a revision of policy was sent, and they were also in effect in July, in the Atlanta district.

Representative MILLS. And you protested in February, 1921?

Mr. WILLIAMS. It did not come to my attention until then. The reserve banks knew of it; I did not know of it.

Representative MILLS. So for eight months these progressive rates were in effect, and you did not see any reason to protest?

Mr. WILLIAMS. That is not stated fairly, Congressman.

Representative MILLS. I will withdraw the question, and put another.

Mr. WILLIAMS. All right.

Representative MILLS. You did not protest as to the progressive rates until they had been in effect eight months?

Mr. WILLIAMS. I protested as soon as I found out about it. I was ignorant of it, and—

Representative MILLS (interposing). And that was eight months?

Mr. WILLIAMS. I protested vigorously and ineffectually for awhile.

Representative MILLS. And during all that time, you testified yesterday, you were receiving complaints from any number of banks and individuals as to this so-called deflation, were you not?

Mr. WILLIAMS. I have received a great many complaints in regard to the hardships which the borrowers of the country had to endure. If you will permit me, I will bring out some of those.

Representative MILLS. I will, if you will answer my questions. If you will answer my questions, we will progress a great deal more rapidly. Now, don't you believe, if the conditions throughout the summer, which you have mentioned here, were typical as to the conditions which existed in those districts where the progressive rates were in force, that those conditions would have been called to your attention prior to February, 1921?

Mr. WILLIAMS. Not necessarily.

Representative MILLS. Do you not think that if such conditions as are exhibited by that particular instance were typical and had existed during those eight months, that they would have come to your attention as Comptroller of the Currency and in constant contact with all the banks of the country?

Mr. WILLIAMS. I am very glad to answer that very question quite specifically. I did not know of these outrageous rates which were being charged in some districts until I called upon the board, I think it was in January, for a memorandum showing the operations of the progressive rates in certain districts, and they gave me a brief memorandum showing a number of instances, and showing this case; and my first information about this case came to me in response for general information.

Representative MILLS. Have you got that memorandum, Mr. Williams?

Mr. WILLIAMS. Not with me. The board can furnish you a copy of it.

Representative MILLS. Have you got a copy of it?

Mr. WILLIAMS. I do not know. But the board can furnish you a copy of it.

Representative MILLS. Have you got it?

Mr. WILLIAMS. I may have it, but I do not have it in this room.

Representative MILLS. If you have it, will you put it in the record?

Mr. WILLIAMS. If I have it, I will be pleased to do so. I suggest, if it is in order for me to do so, that the board be requested to furnish the commission with a copy of the memorandum.

Representative MILLS. If you have not got it, I shall ask them for it.

Mr. WILLIAMS. If I have it, I will produce it.

Representative MILLS. I should like to have that memorandum, Mr. Williams, while you are still on the stand.

Mr. WILLIAMS. I do not have it with me.

Senator LENROOT. Mr. Williams, you approved the principle of the progressive rates; I am not speaking of the details?

Mr. WILLIAMS. I did, on the theory that they would be reasonably exercised.

Senator LENROOT. I mean, you approved of the principle of the progressive rates at the time it was adopted?

Mr. WILLIAMS. I was in favor of some progressive rate, but I was not in favor of it as adopted and as exercised.

Senator LENROOT. Please answer my question. You did or you did not approve of the principle of the progressive rate at the time it was adopted.

Mr. WILLIAMS. Yes, sir.

Senator LENROOT. You did that, I suppose, because you believed that discounts beyond a certain rate should be discouraged, and would be discouraged by the application of a certain rate?

Mr. WILLIAMS. Yes, sir.

Senator LENROOT. Now, is it your opinion, in view of what has transpired, that it would have been better to shut off rediscounts after the limits had been reached?

Mr. WILLIAMS. It is not, Senator. However, in the light of past experience, it is my judgment that the progressive rate should not apply above 10 per cent, in any event.

Senator LENROOT. Very well; then I will put it this way: When discounts are limited to 10 per cent, after the limit of 10 per cent has been reached, then all further discounts should have been stopped?

Mr. WILLIAMS. Not necessarily. I can conceive of instances where, in order to save a bank, it would be necessary to extend it very much more than the amount on which the 10 per cent rate would apply, and that is done in many instances.

Representative MILLS. What do you mean by the basic rate?

Mr. WILLIAMS. In the various districts—you are catechising me now; you know what the basic rate is as well as I do.

Representative MILLS. I want your idea of what the basic rate is.

Mr. WILLIAMS. In a general way, the basic rate or rediscount line is considered to be the proportion of the resources of a reserve bank which each member bank is entitled to borrow, based on its capital, surplus, resources, or other factors.

Representative MILLS. Thank you.

The CHAIRMAN. I would like to ask you a question, Mr. Williams, in regard to the progressive rate: My understanding is that the purpose of the adoption of the progressive rate was to make possible greater aid to some of the member banks, which it was not possible to give them under the regular rate procedure; in other words, some of the reserve banks have claimed that some of the large borrowers were absorbing all of the ability of the reserve banks to make loans, and that the only way to stop that absorption and permit loans to be made to other member banks was to fix a rate with penalties attached to it, and thus diminish the larger borrowings of the larger banks; is that the principle?

Mr. WILLIAMS. That is not the principle in my mind, Congressman. I have contended always that the exercise of a wise discretion was much better and wiser than progressive interest rates, and I think that is still true.

The CHAIRMAN. That was the underlying principle of the progressive rate, was it not?

Mr. WILLIAMS. I can not say that it was. The underlying principle was to restrain borrowers from seeking to obtain larger discounts.

The CHAIRMAN. That would naturally apply to the banks which were borrowing the larger sums?

Mr. WILLIAMS. Naturally; and it would also restrain others who had not borrowed excessively from going beyond a certain limit. I will say that at the same time, as I understand, this little bank in Alabama was paying 87½ per cent because it was borrowing four or five times its capital—

The CHAIRMAN (interposing). Do you know whether, after the adoption of the progressive rate, the number of borrowing banks in the districts where it was applied were increased or decreased?

Mr. WILLIAMS. I do not have those figures at hand. As I was saying, about that same time another small bank in a district in the East, which was brought to my attention, was found to be borrowing some seven or eight times its capital, as I recall the figures—seven or eight times its capital—at 6 per cent.

Representative TEN EyCK. I would like to ask a question about the call loan rates. When the rates increase abnormally it has a tendency to bring in money from the country banks to obtain that interest; in other words, the country banks are liable to send their money in to New York to loan, instead of loaning it in their own localities?

Mr. WILLIAMS. I think perhaps you are connecting that with what has happened in New York in the increase in the money market there; the advancing money market there has brought in money from the country districts.

Representative TEN EyCK. Would that not cause that condition to exist in New York to some extent?

Mr. WILLIAMS. If it prevailed there to any extent; but the progressive rate did not apply to the New York district, as I understand it. They applied a 7 per cent rate to the New York district, and that was very disconcerting.

Senator HARRISON. Why was a discrimination shown, if it did not apply to the New York district?

Mr. WILLIAMS. I understand that the New York bank did not want the progressive rate there, and the board was governed in that instance by their request.

May I continue, Mr. Chairman?

Representative SUMNERS. If you will pardon me, I want to ask a question.

Mr. WILLIAMS. I think some of these questions will be answered in my discussion.

Representative SUMNERS. I want to ask a question that I do not think will be answered in your general discussion.

Mr. WILLIAMS. Very well.

The CHAIRMAN. The Chair can not control the members of the commission, if they desire to ask questions.

Mr. WILLIAMS. Excuse me; there is no disrespect intended, and I only thought it might facilitate the proceedings if I were allowed to go on.

The CHAIRMAN. The Chair would be very glad to facilitate the hearings, but the Chair can not prevent the members of the commission from asking any questions they desire, or to indulge in any cross-examination, if they desire.

Representative SUMNERS. With reference to these progressive rates, in order that we may have the record on that point at this place, it seems that the principle of these rates was indorsed by the board and the Comptroller of the Currency, and then later it found congressional indorsement; but the criticism is with reference to the method of application, as I understand the situation?

Mr. WILLIAMS. Yes, sir.

Representative SUMNERS. That is what I want to inquire about. You said a moment ago that you thought, under certain conditions, in order to save a bank, it would be advisable to extend to the bank a larger rediscount privilege than ordinarily would be warranted. The thing I am concerned about is saving the folks, as well as the bank. I suppose it is necessary to save the banks in order to protect the interests of a community. But I am wondering whether a condition could not be developed, either by a change in administrative policy, or by new enactment, under which, when a community's necessities exceed the ability of the little country bank to meet, that some consideration could be given to the necessities of the people, without regard to whether or not those necessities were reflected in the demands of the bank for credit.

Mr. WILLIAMS. That is a matter, is it not, Congressman, which calls for the exercise of wise discrimination and discretion on the part of the reserve bank authorities in each district? It can be handled by the right sort of men.

Representative SUMNERS. You may proceed.

Representative MILLS. Mr. Williams, I have before me here copies of the minutes of the various meetings of the board with reference to the progressive rates, which I would like to read to you with a view to refreshing your recollection as to the action taken.

Mr. WILLIAMS. Yes, sir.

Representative MILLS (reading):

Meeting February 9, 1920. Counsel directed to prepare bill covering board's recommendation in 1919 report re progressive rate after governor had read from the draft of the annual report the recommendation as to legislation. Also, special meeting was ordered for February 10 to consider the text of the board's 1919 report. Mr. Williams was present and action was unanimous.

At that meeting you approved the principle of the progressive rates?

Mr. WILLIAMS. We are not contending about that.

Representative MILLS. Meeting of May 11, 1920, is as follows [reading]:

Meeting of May 11, 1920. Letter May 5 from the chairman of the Federal reserve bank of Dallas, recommending for the approval of the board a plan for making effective the graduated discount rate amendment to the Federal reserve act. Unanimously approved, Mr. Williams present.

Is that correct?

Mr. WILLIAMS. I do not know. I assume it was. I do not recall the meeting.

Representative MILLS. This does not refresh your recollection?

Mr. WILLIAMS. No.

Representative MILLS (reading):

Meeting of May 28, 1920. Telegram 26th from the chairman of the Federal reserve bank at Atlanta, submitting for the approval of the board plan for making effective graduated discount rates at that bank. Upon motion, duly made and seconded, it was voted to approve the plan as submitted, with the exception that surplus of the Federal reserve bank should not be prorated among the member banks and be included in the circulation of the basic line of each member bank. Mr. Williams was present at this meeting and the action was unanimous.

Mr. WILLIAMS. That is not in conflict with anything I have said.

Representative MILLS. I was under the impression, and if so, I am glad to have it corrected, that you have stated that while you approved of the principle of the progressive rates, you would not approve of the specific plans for putting them into effect?

Mr. WILLIAMS. I stated that I did approve of the general principle, but that I had no idea that the abuses such as did develop would develop in their practical operation; that when I learned of the workings of the plan, as developed, I entered my protest very promptly.

Representative MILLS. It now appears that you not only approved of the principle but approved of the specific plans of the several banks.

Mr. WILLIAMS. Let me say this, that if any member of the board had told me the next minute after I voted for this plan, as you say I did, if they had said, "This has been in operation in the Atlanta district, and has caused, in its operation, the payment of 87½ per cent," I would have moved and voted to rescind the action of the board immediately.

Representative MILLS. But the fact is you approved specifically of the plan submitted by the Dallas bank and the Atlanta bank.

Mr. WILLIAMS. I was recorded as present at the meeting. I do not remember the occasion when those particular plans were voted on.

Representative MILLS. But you are not prepared to say that this is not correct, are you?

Mr. WILLIAMS. I am not disputing it. I am satisfied with it, if the records show it. As is very well known, I was not present all the time at all the meetings. This made no impression on me. Having approved the principle of the legislation which would enable the banks to put this into effect, I assume that I voted with the rest of the board on the plan that came from the respective banks, not knowing there was to be this hardship in its operation.

Representative MILLS. But if any error of judgment was made in that plan, you shared with the board that error in judgment?

Mr. WILLIAMS. I may have; but I did not share in the error of judgment in the workings of the plan, because I protested promptly and vigorously.

Representative MILLS. Here is another meeting [reading]:

Meeting June 8, 1920. Letter June 1, from the chairman of the Federal reserve bank of Dallas, advising that it will be the policy of that bank not to apply the progressive discount rates in effect at the bank to drafts to which are attached bills of lading covering grain actually sold and placed in the process of shipment. It was voted to approve the action of the Federal reserve bank of Dallas. Mr. Williams was present and action was unanimous.

Mr. WILLIAMS. None of those statements that you have read state that Mr. Williams was present when the vote was taken. But I assume I was.

Mr. Chairman, may I ask at this point whether you were able to obtain from the board the record of the meetings which I attended from the time of the organization up to March 3, which I took the liberty of requesting you to obtain, if possible?

The CHAIRMAN. I have not seen the statement, Mr. Williams, but I understand it is here.

Mr. WILLIAMS. In view of the statements which have been made to the effect that I attended the meetings rarely, I should like to have that record go into the record here of this commission, if agreeable.

Representative MILLS. I have another meeting here, of April 17, 1920—

The CHAIRMAN (interposing). I have that statement here now, Mr. Williams. I have a statement here which I think covers the information which you asked for; perhaps not in the detail in which you wanted it. I understand that the records of the board only show that you were present at the beginning of a meeting, and then show when you retired from the meeting. This table shows the number of meetings when you were present all of the time; the number of meetings when you were present a part of the time; and the meetings when you were absent.

Mr. WILLIAMS. Yes.

The CHAIRMAN. And the number of meetings held each year down to the date of this communication, which is dated March 2, 1921.

Mr. WILLIAMS. Will it be agreeable to the commission to include that in the record here?

The CHAIRMAN. Without objection the statement will be included in the record. The Chair hears no objection.

(The statement referred to is here printed in full, as follows:)

Record of attendance by Mr. Williams at meetings of the Federal Reserve Board from the date of organization, Aug. 10, 1914, to and including Mar. 2, 1921.

Year.	Present full time.	Present part time.	Absent.	Total meetings held.	Year.	Present full time.	Present part time.	Absent.	Total meetings held.
1914.....	106	.....	24	132	1919.....	59	45	26	130
1915.....	171	2	51	224	1920.....	104	34	72	210
1916.....	122	11	86	219	1921.....	8	9	16	33
1917.....	105	6	89	200	Total.....	713	138	430	1,281
1918.....	38	31	66	135					

Reference is invited to a former memorandum giving a record of Mr. Williams' attendance at meetings of the board from October 1, 1920, to February 25, 1921. During that period 71 meetings were held, at which Mr. Williams was present during the entire meeting 13 times, during part of the meeting 20 times and absent entirely 38 times.

Representative MILLS. I have here the meeting of April 17, 1920 [reading]:

Meeting April 17, 1920. Telegram dated April 16, from the chairman of the Federal reserve bank of Kansas City, submitting for approval of the board a plan of graduated discount rates to be effective Saturday, April 17, 1920. Mr. Moehlenpah moved that the plan be approved as submitted by the Federal reserve bank

of Kansas City. Mr. Miller moved to amend by omitting the exemption of member banks' notes secured by Treasury certificates, Liberty bonds, and Victory notes actually owned by the borrowing member banks on April 1, 1920. The motion to amend was lost and the original motion prevailed, Mr. Miller not voting. Mr. Williams was present at this meeting and action was unanimous, except that Mr. Miller did not vote.

So that it appears now that as early as April, 1920, a plan for the establishment of progressive rates in the Kansas City district was approved by the board with you present and voting.

Mr. WILLIAMS. There is nothing inconsistent in those records with what I have stated.

Representative MILLS. So that instead of 6 months which we were discussing, your protest did not come until 10 months after the rates were in force?

Mr. WILLIAMS. May I ask when those rates began to take effect?

Representative MILLS. In this particular case April 17, 1920.

Mr. WILLIAMS. Does the record show in each district?

Representative MILLS. It does in the Kansas City district.

Mr. WILLIAMS. Would it not be well to show when each plan took effect?

Representative MILLS. I am simply reading the minutes as they appear here.

Mr. WILLIAMS. In each of the four districts?

Representative MILLS. I am simply reading the minutes as they stand here. It appears from these that the rates in the Kansas City district were put into effect as early as April, 1920, so that your protest did not come until 10 months after they were put into effect.

Mr. WILLIAMS. It came as soon as I knew how they were being operated.

Representative MILLS. Here is another meeting, of April 27, 1920 [reading]:

Meeting April 7, 1920. Telegram dated April 26, from the governor of the Federal reserve bank of Kansas City, recommending for approval of the board modification of the graduated rate plan in effect at that bank. Approved. Mr. Williams was present at this meeting and action was unanimous.

Now I don't know whether it is worth while putting them all in. I would like to call your attention to the meeting of August 31, 1920, which was four months after these rates had been in effect.

Mr. WILLIAMS. May I insert right there that I was not advised by the board, or otherwise, of the excessive rates which were being charged under the operation of that method until January, I think it was January, 1921. If I had had the remotest suspicion that any such rates were being charged I should have called upon the board for a statement.

Representative MILLS. Now in the meeting of August 31, 1920, which is some months after these progressive rates were in effect:

The governor stated that the Federal reserve bank of Atlanta had asked him whether or not the Federal Reserve Board would look with favor upon the suspension by the bank of its progressive discount rates for a period beginning now and ending January 1, 1921.

Upon motion, it was voted that the governor advise the Federal reserve bank of Atlanta that the board would not at present look with favor upon the abolition of the progressive discount rates, but that, if requested to do so, it would give consideration to such abolition if coupled with a request for the establishment of a 7 per cent rate on rediscounts of commercial paper. Action was unanimous. Mr. Williams was present.

Mr. WILLIAMS. May I inquire whether when the governor read this resolution before the board he gave the board any information whatsoever as to how the progressive rate was working and the extortionate interest rates which were being charged. Does the record show?

Representative MILLS. I am reading the complete record.

Mr. WILLIAMS. Does it show that?

Representative MILLS. No.

Mr. WILLIAMS. Then I will assert that it is my belief that no such information was given to the board to enable them to pass upon it, and I, for one member of the board, had no idea that it was working that way.

Representative MILLS. But the fact remains that on August 31, 1920, when the bank in the particular district of which you complain most requested that it be allowed to discontinue the progressive rates, you, with other members of the board, declined to authorize them to discontinue it.

Mr. WILLIAMS. Because I did not have information which ought to be laid before the board in that connection, in my opinion.

Representative MILLS. Well, now, Mr. Williams, do you not think that as a member of the board charged with very important duties, that after these progressive rates had been in effect four months it was your duty to have ascertained how they were working?

Mr. WILLIAMS. Well, now, I am very glad you asked that question. You think it was the duty of the governor of the Reserve Board to ascertain how they were working?

Representative MILLS. I am asking you a question, and it is not answered by your asking me one in return.

Mr. WILLIAMS. Well, did the governor know it?

Representative MILLS. We are not discussing that question.

Mr. WILLIAMS. Did the other members of the board know it?

Representative MILLS. We are not discussing that question. I will ask them that question, if you want me to, when they appear before this commission.

Mr. WILLIAMS. You have stated that you do not believe the other members of the Reserve Board, if I remember correctly your assertion, would have approved of these high rates, or the 87 per cent rate, or whatever it was. Now, did they know it?

Representative MILLS. No; I said they did not approve of the particularly horrible example that you have been citing all over the country. I am asking you now whether, as a member of the Federal Reserve Board, charged with very important duties and having approved the progressive plan, whether it was not your duty four months after it had been in effect to know how it was working?

Mr. WILLIAMS. It was not as much my duty as it was the duty of other members of the board to inform themselves on that particular matter, on that particular point.

Representative MILLS. I am not asking what the comparative duty was.

Mr. WILLIAMS. You may reach your own conclusion on that. I have no objection to it.

Representative MILLS. You do not think it was your duty?

Mr. WILLIAMS. Well, you may think it was not my duty, as you please.

Representative MILLS. Well, whether it was your duty or not, you had not informed yourself as to how it was working on August 31?

Mr. WILLIAMS. When the matter was brought before the board, as you state, by the governor, the information on that subject was not presented, and the vote was not taken in the light of all that data which should have been supplied.

Representative MILLS. Well, you plead ignorance?

Mr. WILLIAMS. Perhaps it was negligence on my part when the matter came up not to have insisted that the record should be furnished to show precisely how the progressive rate was operating. Perhaps it was.

Representative MILLS. I do not propose to offer all of this record at this time, but I do think that when the governor of the board comes in it would be proper to offer these particular minutes in evidence, Mr. Chairman.

The CHAIRMAN. Very well. Mr. Williams, you may proceed.

Mr. WILLIAMS. On February 7, 1921, I wrote the following letter [reading]:

TREASURY DEPARTMENT,
Washington, February 7, 1921.

Hon. W. P. G. HARDING,
Governor the Federal Reserve Board.

DEAR GOV. HARDING: I have your letter of even date acknowledging mine of the 4th in regard to the hardships imposed by Federal reserve banks on member banks under the operation of the so-called "progressive" plan.

Representative MILLS. What date is this letter that you are now reading, Mr. Williams?

Mr. WILLIAMS. February 7, 1921.

Representative MILLS. Did you receive an answer to yours of February 2?

Mr. WILLIAMS. I don't know whether I have it with me or not. If there was an answer I request that it be inserted in the record.

The CHAIRMAN. Well, we have to find out whether there was or not.

Mr. WILLIAMS. I don't recall.

Representative MILLS. You do not recall whether there was or not?

Mr. WILLIAMS. I do not, but I assume that there was, and I ask that it be inserted in the record.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. Proceed.

Mr. WILLIAMS (continuing reading):

In the case of the Alabama bank to which I called your attention, the Federal reserve bank of the sixth Federal reserve district has charged, as I showed you, interest as high as 87½ per cent or an average of about 45 per cent for the last two weeks in September. My point of view is that under no circumstances can such a rate as that be justified in any district. If the bank is entitled to credit it should be accommodated at rates certainly not in excess of 10 per cent per annum; and the thought of 87½ per cent or an average of 45 per cent should not, in my mind, be entertained anywhere.

The records, of course, show that on application of the Atlanta bank the Federal reserve board approved the suspension of the progressive rate for that district at a meeting in November. But the progressive rate is still in operation, I am informed.

in three other districts with several thousand member banks and in one of these districts. I understand that computations are made on the same basis as in the Atlanta reserve district—which resulted in the exaction of a rate in the case mentioned which even a pawnbroker could not justify—87½ per cent.

I agree, cordially, with your view that “no matter what the demand for loans may be in any particular community, I do not believe that a member bank is justified in assuming that it can obtain an unlimited amount from the Federal reserve bank or in acting in a way which makes it, in effect, a broker for the Federal reserve bank in placing loans.”

Representative MILLS. Mr. Williams, I did not quite get that sentence. Would you mind reading it again?

Mr. WILLIAMS [reading]:

I agree cordially with your view that “no matter what the demand for loans may be in any particular community, I do not believe that a member bank is justified in assuming that it can obtain an unlimited amount from the Federal reserve bank or in acting in a way which makes it, in effect, a broker for the Federal reserve bank in placing loans.”

That is the sentence?

Representative MILLS. Yes.

Mr. WILLIAMS (continuing reading):

But this can be prevented by the exercise of intelligent discretion by the reserve bank without resorting to such rates as these we are discussing.

You also are correct in your statement that “the legal rate in Alabama is 8 per cent.” The report of condition of November 15, 1920, however, of the national bank in Alabama referred to in my previous letter, shows that the “average rate” of interest in this bank’s sworn statement is the average rate which it was charging about the very time that the reserve bank was exacting a rate as high as 87½ per cent and an average rate for the last two weeks in September of over \$100,000 borrowed at about 45 per cent, or nearly six times as high as the bank was collecting from its customers.

The reports of condition of the national bank were submitted to the Atlanta reserve bank at the same time that they were submitted to this office, so that the reserve bank was, in this way, kept informed as to its deposits, loans, discounts, and borrowings and other operations of the member bank to which it was granting loans.

I sincerely hope that the board may take prompt action to prevent in the future the exaction of any such interest rate by any reserve banks operating under the progressive plan, or any other plan, as is shown in the case of this small bank in Alabama, for I can not believe that such rates meet with your approval or with the approval of our colleagues.

Yours, very truly,

JOHN SKELTON WILLIAMS.

Representative MILLS. When did this Alabama incident take place?

Mr. WILLIAMS. The letters which I have read refer to the last two weeks of September, 1920.

Representative MILLS. So that if the action of the board on August the 31st had been different and the request of the Atlanta bank to discontinue progressive rates had been granted, this incident never would have happened, would it?

Mr. WILLIAMS. It is hoped so.

Representative MILLS. Now, do you think it is quite fair for you to stump the country criticizing—

Mr. WILLIAMS (interposing). I object to your statement. I have not stumped the country. I referred to it in two speeches, one in Washington and one in Georgia.

Representative MILLS. Well, do you think it is quite fair for you in two speeches which have received wide publicity to cite this horrible example resulting from the action of the Federal Reserve Board,

criticizing them, without disclosing to the public that you shared the responsibility for this particular incident no longer than three weeks before it happened?

Mr. WILLIAMS. I think that my position was entirely fair and consistent.

Representative MILLS. Well, have you in any speech which you have made disclosed the fact that on August 31 you declined to allow the Atlanta bank to discontinue the progressive rate?

Mr. WILLIAMS. I had no idea that it was being abused in that way or would be abused in that way. That incident had not happened at that time, and presumably no such rate had been charged up to that time.

Representative MILLS. Have you ever disclosed that you shared the responsibility with every other member of the board?

Mr. WILLIAMS. It was not my—I was not a director of the Federal reserve bank, which was directly concerned in that transaction. I did not know of the transaction. Perhaps other members of the board did or did not. I don't know whether they did or not at that time—they could not have known of that transaction. They perhaps knew of other rates which were being charged, but that transaction had not taken place at that time.

Representative MILLS. But you have assumed to criticize the Federal Reserve Board for its progressive rates, and you have cited this as the horrible injustice which arose under the Federal reserve.

Mr. WILLIAMS. Now, let us be fair about that. In my speech to which I have referred already, and in my correspondence I said that was an exceptional case, and the most extreme that I have seen, and you know that.

Representative MILLS. Yes; but you cited it as an example of what happened under the progressive-rate system.

Mr. WILLIAMS. Yes; and that was perfectly true, and several months after that when I tried to abolish the whole progressive system it was voted down.

Representative MILLS. But have you ever in any public speech stated that you shared the responsibility for the Alabama case with the other members of the board?

Mr. WILLIAMS. I do not consider that I did in the same measure.

Representative MILLS. But you did vote against discontinuing the progressive rate in the Atlanta district, did you?

Mr. WILLIAMS. I did not know that the rate was going to be abused in that way.

Representative MILLS. But you did vote for that, did you not?

Mr. WILLIAMS. I don't know whether I did or not.

Representative MILLS. The minutes show that you were present, and the vote was unanimous. Will you question those minutes?

Mr. WILLIAMS. We will assume that they were correct, but the secretary of the meeting will tell you and the records which have been introduced to-day will show that I was present during the whole of some meetings and during a portion of some meetings. I don't know whether at that meeting I was present when that vote was taken or whether I was not, but if the minutes show that I was present I am willing to be considered as being present.

Representative MILLS. And assuming that you were present and voted affirmatively, do you think it is fair to criticise your fellow-members of the board without telling the public that you participated in that action?

Mr. WILLIAMS. I see nothing unfair in what I have done or said. Shall I proceed, Mr. Chairman, with the correspondence?

Representative SUMNERS. Of course the history of this thing is rather important, but to be candid about it I am more interested in trying to find some relief for the present situation. In the letter just read, Mr. Williams, you say that you agree with the writer of the letter that these country banks ought not to act as brokers for the Federal reserve bank. I am wondering if we could get some suggestions, even if requiring additional legislation under which these agricultural communities, which, by reason of the fact that they do not require great credit under ordinary conditions, and therefore have small banking facilities, could find some route around their little country banks in the presence of a great crisis such as agriculture now confronts under which the individual man who has good credit, good basis for credit, would not be ruined merely because the ordinary demands of the community have not developed big financial institutions to take care of the emergency?

Mr. WILLIAMS. Mr. Chairman and gentlemen, there has never been a time in this so-called period of deflation when the resources of the Federal reserve banks were not sufficient and abundant for all legitimate purposes and could have greatly eased up conditions in agriculture and in business. In the address, which I understand was introduced yesterday, which I made at Bangor, Me., a year ago, I pointed out that at that time when the reserves were at about the lowest point they had ever been, that the Federal reserve banks had an unused lending power, at that very time, of about \$700,000,000 which was four or five times as much as the maximum amount of bills payable and rediscounts which the national banks of the country had ever had occasion to make at any time prior to 1913. And I call attention also to the fact that at this time of great pressure, when banks in many parts of the country still claim that they have been, up to a very recent date, unable to get accommodations they need, and when money is still tight in many communities, especially farming communities, the Federal reserve banks have an unused lending power of about two and one-half billion dollars, which is about sixteen times as much as the maximum amount that the national banks of the country have borrowed at one time on bills payable and rediscounts prior to 1913.

Representative SUMNERS. Well, now, if as a matter of fact the system does have unexpended resources, but the agricultural community has in it banks which are, I believe you call it, extended—I have in mind a community whose total banking capital, surplus and undivided profits, is \$500,000, and they have loans outstanding of three and one-half million dollars, which community is a community composed of small farmers, nearly all of whom own their farms, but the banks have not been able to extend further loans because, at least they claim, that they have not been able to get money on account of their extended situation—is there anything that can be done under the present system or under any additional legislation which you would suggest, that would enable an individual farmer who has

perfectly good basis for his loans, to procure the money which his necessities require?

Mr. WILLIAMS. From the Federal reserve bank?

Representative SUMNERS. If we have not the authority now, if we have not the law now, if we have not the machinery now, what suggestion can you offer under which accommodation of that sort can be made?

Mr. WILLIAMS. Do you mean to enable the farmer to deal directly with the Federal reserve bank?

Representative SUMNERS. I do not care where he gets his money. He is out there in the country where his banks are already extended, but he has a perfectly good basis for loans, and he is suffering, and the community is suffering with him, and the country is suffering to that extent.

Mr. WILLIAMS. Well, if he does not happen to have a well managed or sympathetic bank in his own town or nearby which will grant him the accommodation I would try some other near-by bank, and if the bank claims that they have not the funds, I should suggest that the farmer might discuss the matter with the member bank, urging upon it that his paper is eligible, and that it can obtain rediscount from the reserve bank.

Representative SUMNERS. But the banker comes back at him and says: "We have loans out now of three and one-half million dollars and we have only a capital and undivided surplus and profits totaling \$500,000."

Mr. WILLIAMS. That is a very large problem, Congressman, and if you wish me to do so I shall give some thought to this particular aspect of this problem, and discuss it with you later.

Representative SUMNERS. That is a country-wide problem.

Mr. WILLIAMS. It is a very important problem.

Representative SUMNERS. Yes.

Mr. WILLIAMS. Mr. Chairman, shall I proceed?

The CHAIRMAN. Proceed.

Mr. WILLIAMS. On the 28th of December I addressed an earnest appeal to the Federal Reserve Board urging that something be done; that in the very critical conditions that existed there should be a relaxation and modification of their deflation policies, as I had done in the communication in October, and in pursuance of the policies which I had suggested in August. My letter to the Federal Reserve Board of December 28 was not brought up for general discussion at board meetings at which I was present. I mentioned the matter to Gov. Harding upon one or two occasions and asked him whether this subject was coming up for a general discussion, and was advised that the matter would receive the attention of the board. I assume that it was discussed in "caucus" rather than in open board, but the correspondence and memoranda which I placed in the record yesterday along with the letter of December 28, 1920, show the situation at that time. I finally heard from Gov. Harding. I received a letter from the governor in January, on the 13th of January, 1921, I think, which was introduced in yesterday's proceedings, but the board did not act upon the very definite suggestions which I had made in my letter. Those suggestions were taken up some weeks later, as will appear from the correspondence which I will introduce.

Some days later on, however, the Federal Reserve Board learned, it appears, in some way, that copies of my letter of December 28 had been sent to certain Members of the United States Senate or others, and they evinced a very lively desire to ascertain the names of every person to whom I had furnished copies of that communication.

In that connection I addressed this letter to the Federal Reserve Board on February 14, 1921 [reading]:

Hon. W. P. G. HARDING,
Governor, the Federal Reserve Board.

DEAR GOV. HARDING: I am this morning in receipt of a letter from Secretary Hoxton, of the executive committee of the Federal Reserve Board, stating that at a meeting of the committee held on the 10th instant a motion was passed asking that I furnish the board "with the names of those persons to whom you (I) have given copies of your (my) letter of December 28, addressed to Gov. Harding, so that the executive committee may be in a position to formulate its report to the Federal Reserve Board, as contemplated in the action of that body at its meeting on February 8, 1921.

The resolution of February 8, to which I understand this refers, is as follows:

I. Memorandum dated February 7, from the chairman of the Federal reserve bank of New York, transmitting the following excerpt from the Whaley-Eaton Service in its issue of February 5:

"Copies of a letter said to have been written by Comptroller of the Currency Williams to Gov. Harding of the Federal Reserve Board have been circulating among a few Congressmen and the facts in this letter of such alleged authorship are responsible for the resolution introduced by Representative Baer, the Non-Partisan League Member of the House, in which it is stated that the average loans from the Federal reserve system to four banks in New York City amount to as much as the St. Louis, Kansas City, Minneapolis, Dallas, and Richmond reserve banks combined are lending to 4,000 member banks in 21 States. The letter has been shown to representatives of the various agricultural organizations having offices in Washington and they are being urged to demand an investigation. It is stated that Gov. Harding replied to this letter, but we have seen no copies of that reply. This affair is back of the story that Mr. Williams was contemplating resigning, a report which Mr. Williams has ridiculed."

Mr. Miller moved, in view of the above, that the matter be referred to the executive committee to prepare a statement for submission to the Federal Reserve Board, said statement to be drawn with a view to making it public, should such a course be found, in the opinion of the board, to be necessary.

You will remember that when you brought this subject to the attention of the board last week you asked whether it would be agreeable to me to furnish the board with a list of those persons to whom I had given copies of my letter to you of December 28, last. In reply I told you very promptly that if the board desired it done, it would give me much pleasure to send to each of those to whom I had furnished copies of my letter of December 28 a copy of your reply of January 13, 1921, or of such further answer as you or the board might care to make. I also informed you that the copies (other than those delivered to members of the board) of my letter referred to had been given confidentially, and with the distinct understanding that they were not for publication, and that I had taken the precaution to write upon each copy (without exception as far as I recall) the name of the person to whom, in confidence, it was given.

As I understand the situation the substantial correctness of the statements contained in the letter of December 28 has not been and can not be challenged. Therefore, I can not imagine why it should be necessary for you to know the names of the persons to whom I had given, confidentially, copies of this letter, in order, as your resolution claims, that the executive committee "may be in a position to formulate its report to the Federal Reserve Board."

I shall, of course, be glad to do anything I can to help the board get itself "in a position to formulate its report," but the names of the persons to whom I have sent copies of my letter to you can not, as far as I can see, affect or qualify, one way or another, the facts which in my letter I have brought to the board's attention.

If any of the persons to whom I have handed the letter have disregarded my confidence and given it circulation or publicity, it has been done without my knowledge or approval. I do not know to whom any one of the comparatively few people who have received the copies have exhibited them. My information in this connection is substantially confined to the statement which you laid before the board as having been printed by the "Whaley-Eaton Service." I do not know who has been circulating the letter "among a few Congressmen," as stated in the Whaley-Eaton Service.

Of the 435 Members of the House of Representatives, I do not believe there are as many as two who have received from me copies of that letter.

In my letter to you of January 17 I informed you explicitly that I had furnished copies of the letter to you to the 12 chief national bank examiners; and for your information, and hoping that their views might be regarded as entitled to weight, I embraced in my letter to you on January 17 extracts from some of the replies which I had received from different chief examiners expressing their strong concurrence in the position which I have taken in the matter. I also sent a copy of the letter to the Secretary of the Treasury, the chairman of our Reserve Board, and copies were sent to each member of the Reserve Board, including Vice Gov. Platt, Mr. Hamlin, Dr. Miller, and Mr. Wills, hoping, by doing this, to secure for the letter a greater degree of attention than otherwise might be accorded it.

I also gave copies to one or more Assistant Secretaries of the Treasury and to a few Members of the United States Senate who have had occasion to discuss this subject with me, and who were deeply concerned in the situation. In addition to the foregoing I have furnished copies in confidence to a few of my personal friends and perhaps two or three others who might not be included in that circle. I should add that in the copies referred to certain names and figures were deleted as clearly indicated in the copies. Frankness requires me to say that I hear that an official or officials of the American Cotton Association have written to at least two Senators inquiring whether the statements ascribed to me by the "Whaley-Eaton Service" were made by me and whether they are correct. This inquiry has been referred to me and I feel compelled to answer in the affirmative, although I have no knowledge of how the Whaley-Eaton Service obtained its information. The Cotton Association undoubtedly is in possession of general statements contained in my letter to you of December 28, 1920. Whether the entire correspondence between you and myself on this subject is to be given publicity, as has been suggested, is a matter within the discretion of the board or the executive committee. I shall certainly not oppose it if the board thinks it desirable.

In fact I will say in conclusion that as far as I am concerned, I have not the slightest objection to the board acting favorably upon the proposal which was made by one of our members a few days ago when this question came up that the board publish my letter to you and also the board's reply of the 13th ultimo. I will now go further and state plainly that it is my personal belief that my letter of the 28th of December contains some information of an important character, to which I think the public entitled, and should have before it. In fact, to make public this information I believe would be distinctly salutary and beneficial.

I hope that you may feel justified in explaining to me more fully why the executive committee feels that it can not be "in a position to formulate its report" without having before it a list giving the names of the persons to whom I have furnished, in confidence, copies of my letter to you of December 28.

Very truly, yours,

JOHN SKELTON WILLIAMS.

On that same subject I addressed the following letter to Gov. Harding under date of March 1, 1921 [reading]:

TREASURY DEPARTMENT, COMPTROLLER OF THE CURRENCY,
Washington.

DEAR GOV. HARDING: I have your favor of the 26th ultimo in which you tell me that after I left the meeting of the board that day, you were "directed by the board to communicate with you (me) and renew the request that you (I) let the board have a list of these names at your early convenience or express definitely your (my) unwillingness to do so." The "names" referred to are those of the persons or individuals to whom I may have furnished copies of my letter to the board of December 28 last.

No complete copies of that letter, I believe, were given out to any one; I assume your request also refers to any copies of the letter which may have been given out with certain names deleted (for the purpose of preventing identification of banks referred to) in the letter.

To dispel all doubt and relieve any possible pangs of suspense, I answer promptly that I will not furnish the board with the names of any other persons than those I have already given you to whom I sent copies of the letter of December 28 (deletions as shown in copies furnished the other members of the board) and I append my reasons for refusal.

(1) The matter of my disposition of those copies is absolutely irrelevant to the main and only point in this connection properly under discussion and before us for consideration.

(2) I am not informed what use is intended to be made of the list referred to. My letter to you of the 14th ultimo furnishes you all the information on this subject that I care to give. I will not give further facilities for having those to whom I have sent a written and recorded document signed by me on my official and personal responsibility, approached personally, without any knowledge or presence, by persons of whose capacity, information, or responsibility I may know nothing. A moment's thought will convince you or any man of ordinary experience, that a formal document of importance if only to its author, should not be subject of traverse by an opponent in private, unchecked, and unrecorded conversation, without opportunity for the proponent to know and rebut allegation or argument against his position, however unjust or injurious to him. I learn from your own statement to me, Governor, that my apprehension of the use that might be made of the list is not fanciful. You are my authority for the fact that you personally sent for or saw one person you had reason to believe had seen my letter and proceeded to undertake on ex parte statements to reverse judgments he had based on it. I am left ignorant not only of what you said to him, but of his identity which you declined to tell me.

I do not think the board quite realized that it was asking me to put myself and my case at the mercy of those obviously hostile to my opinions and suggestions and of some whose fondness for myself is not exactly enthusiastic.

These two reasons appear to me to be convincing and conclusive.

As I have stated to you and to the board in my letter of February 14 and otherwise, in writing and in conversation, I am entirely willing to have the discussion in the open, and all my letters to the board or to you and any replies that have been made or may be made spread before the public, deleting names or references where these may seem desirable for the protection of others. The large problems discussed in this correspondence is the public's vitally important business. In my view, the public is entitled to know all about it. My experience tells me that straight-forward frankness and open dealing in all matters of public concern are the surest way to the general confidence that is the foundation of safety. For my part, I know of nothing in this matter or anywhere in my official life that I wish to hide.

If this view is not shared by the board I reiterate now my former offer and pledge to convey to each of the persons to whom I gave copies referred to of my letter of December 28, any reply or rejoinder the board, or anybody in its behalf, may prepare all comments or remarks on the subject by me to be in writing and copy thereof to be transmitted to the board. Years of hereafter and disclosure are to come. The more clearly every act and motive of ours is put in permanent record and the less casual or loose conversation or secret discussion we have, the better for ourselves, the business community, and the country.

More knowledge of the persons who have seen my letter of December 28 or the deleted copies of same can be of no imaginable advantage, although I told generally of their character and relationships. If the board wishes to reach them with actual or intended communications to offset, counteract or explain what I have written, the way is open. If the relationships among us are such that any of us may pretend to suspect that I would not faithfully keep my promise—and I do not feel any would really feel such suspicion—I certainly can not be expected to submit my case to hostile presentation not to be recorded or put before me.

I hope I have made my position clear. I will be glad to have the whole of my correspondence with the board made public, deleting such names or direct references as may cause individual hardship or injury. I will be glad to give to the persons who received the copies of my letter of December 28 deleted, any reply the board may wish to make. For reasons given before and for the further reason that the names of the persons who received my letter of December 28 can have no possible bearing on the merits of this case or the truth or untruth of my assertions and deductions, I respectfully decline to furnish the list requested. Let me add in conclusion that I have not yet received the explanation invited in the closing paragraph of my letter to you of February 14, 1921, in which I said, "I hope that you may feel justified in explaining to me more fully why the executive committee feels that it can not be 'in a position to formulate its report' without having before it a list giving the names of the persons to whom I have furnished in confidence copies of my letter to you of December 28."

Sincerely yours,

JOHN SKELTON WILLIAMS, *Comptroller.*

Hon. W. P. G. HARDING,
Governor Federal Reserve Board.

Mr. Chairman, I will now read a letter into the record which I wrote to Gov. Harding under date of February 19, 1921.

Representative FUNK. Well, now, Mr. Chairman, if the letter which Mr. Williams is about to read is of the character and covering the matter that the last letter covered, I do not think it serves the purposes of this commission.

Mr. WILLIAMS. It is not.

Representative FUNK. I take it that this commission is not interested in a back-yard quarrel. If this witness has some facts as to the action of the Federal Reserve Board in restricting credits to agricultural business we want to know it, but I, for one, am not interested in back-yard quarrels.

Mr. WILLIAMS. What you refer to as a back-yard quarrel, may I say respectfully, Congressman, is giving publicity or furnishing members of the United States Senate and House of Representatives with copies of a letter which set forth facts and conditions which I thought vitally affected not only the farming interests, but the whole business interests of the country.

Representative FUNK. That may be true, but what do we care whether the governor or some member of the Federal Reserve Board criticizes you for sending letters to members of the Senate, and asking their names? That does not help us in this inquiry. We have spent 15 or 20 minutes in listening to you read a letter in which you set forth your quarrel with the governor of the Federal Reserve Board. That does not help this commission in its inquiry at all.

Mr. WILLIAMS. It related to furnishing to the United States Senate and the House of Representatives copies of letters which dealt with important public matters.

Representative FUNK. Well, give us the letters. Give us the facts. Tell us what the board has done or has not done; that will be helpful to this commission in its investigation.

Mr. WILLIAMS. I will do so.

The CHAIRMAN. What is the date of the letter which you are now about to read, Mr. Williams?

Mr. WILLIAMS. February 19, 1921. The letter is as follows [reading:]

TREASURY DEPARTMENT,
COMPTROLLER OF THE CURRENCY,
Washington.

Hon. W. P. G. HARDING,
Governor Federal Reserve Board.

DEAR GOVERNOR HARDING: In my letter to you of December 28, 1920, in discussing the uneven distribution of loans and credits and, what seemed to me, to be in certain instances, excessive loans by the New York bank to particular banks in New York City, I said:

An important question is how far the enormous sums which the reserve system is lending to the banks in the large cities are being used for the protection and promotion of legitimate business, and how far these funds are being employed in speculation or for the selfish interests of the officers and directors of the borrowing banks and for the concerns in which these officers are especially interested.

"The inequalities and injustice in the distribution of these funds become apparent when we analyze the uses which big favored banks in the East sometimes make of the money they borrow from the reserve system."

I now think it proper to bring to the attention of the board the following case which has come to my notice since my letter to you on this subject. I have reason to believe there are many other banks to whom the New York reserve bank was lending far larger sums than the particular bank referred to was borrowing from the reserve bank, who also loaned to this unfortunate borrower at unconscionable rates—as the New

York reserve bank or the board, can ascertain if you see fit to make inquiry. This instance, however, will illustrate how loans made to member banks by the New York reserve bank are sometimes used.

The New York City bank referred to, whose report is before me, states that its borrowings from the Federal reserve bank for the nine months from February, 1920, to October, 1920, both inclusive, averaged approximately \$5,000,000 for each of these months. This is equal to about 70 per cent of the capital of the borrowing bank—certainly not an unjustifiable amount if the funds obtained were properly used. In fact the borrowings from the reserve bank by this particular bank have been commendably light.

The bank reports that its rediscounts, including acceptances with the New York reserve bank which in May amounted to \$2,741,936—were paid off by June. Its average bills payable, however, in the month of May were only \$1,290,322; and for the month of June, these borrowings from the reserve bank increased to an average of \$3,891,813—the increase for June over May being \$2,600,000.

This additional \$2,600,000 need not have been borrowed from the reserve bank at that time but for two certain loans which the member bank made to ostensibly two borrowers under date of June 14, 1920, for \$1,000,000 each—particulars in regard to which I shall now give you.

The member bank reports that the \$3,891,813 borrowed from the New York Federal reserve bank for the month of June was obtained at 6 per cent per annum interest.

But in lending the funds to one of the bank's customers the member bank collected for interest and commission on \$1,000,000 loaned by a dummy loan to its customer (note made to the real borrower's secretary) interest and commission equivalent to about 20 per cent per annum for 5 months and 10 days.

For the other loan the bank appears to have charged on the net amount loaned the equivalent of about 200 per cent per annum.

It appears that the customer, Mr. ———, gave his note, secured by collateral and payable 12 months after date, for \$1,000,000. The bank allotted participations in this loan to eight correspondent banks for sums aggregating \$475,000, leaving the member bank's net commitment on the ——— loan \$525,000.

The CHAIRMAN. This is the instance that you referred to yesterday, is it?

Mr. WILLIAMS. Yes. [Continues reading:]

The bank received a check from Mr. ——— for a cash commission of \$260,000, so that the net amount advanced by the lending bank was only \$265,000 on this particular loan.

In addition to the 26 per cent cash commission, Mr. ———, the borrower, was required to pay 6 per cent per annum interest, and the loan was paid off in 5 months and 10 days.

In allotting participations in the \$1,000,000 ——— loan to eight correspondent banks, it appears that the correspondent banks received 6 per cent per annum interest, plus a cash commission of 3 per cent, the New York member bank retaining 23 per cent cash commission in addition to 6 per cent per annum interest and allotting to the correspondent banks which participated with it only 3 per cent cash commission in addition to 6 per cent per annum interest.

The net results of this transaction, it appears, were as follows:

Member banks' average borrowings from the New York Federal Reserve Bank in June, 1920.....	\$3, 891, 813
Amount of this bank's participation in loan on ——— stock before deducting \$305,750 cash commission.....	1, 525, 000
Net amount loaned to Mr. ——— and his secretary after deducting \$475,000 participation allotted to eight other banks, and also after deducting \$305,750 cash commission received from Mr. ———, in addition to 6 per cent per annum interest, for the loan made to him direct on his own note and on the loan made on the "dummy" note of his secretary.....	1, 219, 250
Interest and commission collected by New York member bank for making the aforesaid net loans of \$1,219,250.....	344, 416

These figures, therefore, show that this particular bank borrowed this net amount of \$1,219,250 from the Federal reserve bank of New York at 6 per cent per annum, and loaned it or the equivalent to its customer for 5 months and 10 days at the rate of about 63 per cent per annum.

Or if we consider separately the dummy loan of \$1,000,000 made to Mr. ———'s secretary or stenographer (all of which it appears was loaned by the member bank)

and the \$525,000 participation in the \$1,000,000 loan made to Mr. ——— direct and retained by the member bank, it will be seen that this bank received, in interest and commission on its participation in the \$1,000,000 direct loan to Mr. ———, the equivalent of about 200 per cent per annum interest for the 5 months and 10 days that the loan was outstanding.

And on the dummy loan to Mr. ———'s secretary it received in commission and interest the equivalent of about 20 per cent per annum for the same period 5 months and 10 days.

If we consider the ——— loan separately it appears that the member bank borrowed from its reserve bank the net sum of \$265,000 at 6 per cent per annum for 5 months and 10 days, at a cost of \$7,066, and loaned the same amount, net, \$265,000, to Mr. ———, collecting from him for its use for 5 months and 10 days, the sum of \$259,750, which is equivalent to about 200 per cent per annum interest.

In other words the member bank paid the reserve bank \$7,066 for the use of \$265,000 for 5 months and 10 days and collected from a customer for accommodating him with a loan of like amount, the sum of \$259,750, thereby making a net profit of \$252,684 on the transaction.

The final result of the two loans was that the national bank here referred to paid the reserve bank for interest on \$1,219,250 (net amount kept of both loans) approximately \$52,513, and exacted from its customer for the same amount of money (part of which was for the direct loan to Mr. ——— and part for the dummy loan) the sum of \$344,416, or a net profit on the two transactions of \$511,903.

It is worthy of note that the extortion practiced on this particular customer by this bank and by other banks with which he was dealing at that time were active factors in taking them close to disaster, if current reports on this subject are correct.

Is not this incident another strong argument in favor of the recommendation which I have recently made to Congress, that banks obtaining accommodations from reserve banks should be prevented from charging their customers more than a reasonable and moderate advance above the rates they pay to the reserve banks? In this instance money borrowed from the Federal reserve bank actually was being used in crushing an important citizen, the head of great enterprises.

Every business man knows that the inevitable, logical result of such unscrupulous extortion, as these here brought to your notice, is ruin for the victim of them. The crash which the banks exacting such tribute—with the unconscious assistance of the Federal reserve bank—created to conserve and protect our commerce and finances—did so much to precipitate, might have been far-reaching. It might have thrown thousands of employees out of work, forcing distress on their families and destroying their power to buy from our merchants and manufacturers and pay their rent to real estate owners. It would have added very seriously to the dangers to our welfare already existing. The Reserve Board can not with impunity condone or sit silently by while its funds are being used for wrecking purposes—it may make itself, it seems to me, particeps criminis, accessory before and after the fact.

In my letter to you of December 28, 1920, I called your attention to the manner in which certain banks in New York City were borrowing huge sums of money, not merely to supply legitimate demands of business and commerce or in order to enable them to accommodate correspondent banks in the interior, but for the purpose of promoting speculations and market manipulations; and I brought to your notice a number of instances where institutions borrowing most heavily from the New York reserve bank were making enormous loans to their own officers and to the officers of other member banks for the promotion of their individual speculations. I called your attention to one particular instance where a large bank, debtor to the New York reserve bank for more than \$100,000,000, was lending to its head officer and to the members of his immediate family about ——— million dollars, or more money than this member bank was lending to all of its national bank correspondents throughout the entire country.

I also called your attention to another banking institution in New York City, to which the Federal reserve bank was lending more than \$100,000,000, which was advancing huge sums to various speculative syndicates, in which its own active officers were largely interested, and in a letter I pointed out to you the methods which were being used to camouflage and conceal the actual interest of the bank's officers in these speculative syndicates which were absorbing such large sums supplied by the reserve bank of New York.

In my letter to you of January 12, 1921, in discussing this aspect of the situation, I said:

"I feel confident that these secret methods by which the officers of the bank made use of the funds of the institution, can no more be approved by you than they can be by this bureau."

In the letter which I wrote you on January 28, 1920, more than a year ago, I called your attention to the fact that the funds of the reserve bank of New York were being largely used, or misused, in lending enormous sums to a certain banking institution in New York City which had become conspicuous for its speculative operations and which was already being much criticised by conservative bankers. I pointed out to you that the New York reserve bank was, at that time, lending an amount nearly six times its own capital, that is to say, six times the capital of the reserve bank of New York to that one member institution, and I showed you that the money which the New York reserve bank had loaned to that one borrower on December 31, 1919, amounted to nearly twice as much as the aggregate amount of loans and discounts which the Federal reserve bank of Dallas was lending at that time to all of its member banks in that great district, embracing the entire state of Texas and parts of the states of Louisiana, Oklahoma, New Mexico, and Arizona.

It appears that in order to make these huge loans to those institutions the New York Federal reserve bank had found it desirable to rediscount or borrow, about the time of my letter to you of January 28, 1920, over \$118,000,000 from seven other Federal reserve banks, including among others, the reserve banks of Dallas, Chicago and Atlanta, whose resources available for their own member banks were to that extent lessened.

I said to you in my letter of January 28, 1920, to which I have referred: "This is a concentration of the funds of the system with one debtor bank conspicuous for its speculative operations and promotions which, in my judgment, is not only not justified, but distinctly dangerous and I feel it my duty to register my strong dissent from a continuance of such conditions as these, by writing you as I am doing, as an ex-officio member of the board."

That was more than 18 months ago.

Representative MILLS. What was the date of that letter?

Mr. WILLIAMS. January 28, 1920.

Representative MILLS. January 28, 1920?

Mr. WILLIAMS. Yes.

Representative MILLS. Just read that again, will you?

Mr. WILLIAMS (reading):

I said to you in my letter of January 28, 1920, to which I have referred:

"This is a concentration of the funds of the system with one debtor bank conspicuous for its speculative operations and promotions, which, in my judgment, is not only not justified, but distinctly dangerous and I feel it my duty to register my strong dissent from a continuance of such conditions as these, by writing you as I am doing, as an ex-officio member of the board."

I also said in that same letter: "With such facts before us * * * as I have here undertaken to bring to your attention our responsibility becomes serious and very real." and I asked you to bring the matter to the attention of the board.

I have additional reasons now for believing that the funds advanced during the past year by the reserve bank of New York to that particular institution and also to other banks in that district have been used to a wholly unjustifiable extent for the promotion of stock deals and syndicate operations upon which extortionate interest and commissions have been exacted and in many of which syndicate deals and operations the officers of this heavy debtor institution have been directly and indirectly interested.

The Federal Reserve Board and the reserve bank of New York are empowered by law to make examinations of all member banks and I have several times urged upon you the desirability of having such an examination made of this leading debtor of the Federal reserve system, either by the examiners of the board or by the examiners of the Federal reserve bank of New York, in order that the New York reserve bank, at least, might have an intelligent understanding of the condition and operations of that institution and of the purposes for which the huge sums of money which it was lending to that member bank were being used. The importance of having such data is too obvious for discussion here.

Thus far, however, as far as I am informed, no such examination has ever been undertaken by the board or the New York reserve bank, although I learn, indirectly, that one or two of the board's examiners or the reserve bank's examiners have accompanied the State examiners on certain occasions in their examinations.

Meanwhile, I hear indirect reports which indicate that the member institution above referred to during the past year has been making large loans on time for speculative or other ventures for which it has charged, in certain instances, as high as 50

per cent per annum interest for money at the same time it was obtaining funds from the reserve bank at 5½ to 7 per cent per annum. You can ascertain whether these reports are correct or whether they are exaggerated.

A New York man, usually well-informed, recently referred to an instance where it was reported the head of a large manufacturing concern which employed thousands of men, found himself in need during the past year of \$5,000,000 for which he offered abundant collateral; but upon applying to the New York banks was forced, in order to get funds, to pay cash commissions of about \$1,000,000 in addition to 6 per cent per annum interest for the loan which was repaid in less than six months—the money being obtained, I understand, largely from member banks which were borrowing from the reserve system at 6 per cent. I do not think such rapacity should be tolerated.

I again repeat the recommendations which I have made on several previous occasions that the examiners of the board or the bank of — be authorized and directed to make such an examination of the affairs of a certain leading debtor of the reserve bank of — as may be necessary for a proper understanding of its methods and practices and operations, and also to develop to what extent the funds for this institution are being used or have been used for the promotion of the speculative undertakings and syndicate operations of its own officers and directors and of the officers of other member banks which are also borrowing heavily from the reserve bank of —.

The manner in which certain New York banking institutions have borrowed enormous sums from the Federal reserve bank of New York at rates of from 5 to 7 per cent and have taken advantage of the necessities of needy borrowers in trying times by accommodating them with time money at rates, in some instances as high as 50 per cent per annum, and in at least one instance about 200 per cent per annum, is, in my opinion, uneconomic, unconscionable, and barbarous, and I am not willing, as far as I am concerned, to have such operations pass unnoticed or without protest.

Our reserve board will not hereafter be able to escape heavy public censure on the excuse that it was not advised of the details of such transactions. Such examinations as I urged the board to undertake more than a year ago would, I believe, have brought to light methods and practices calling for drastic action and remedy, and in my judgment it would have been the duty of the board if it had possessed a knowledge of the facts which it can now obtain if it desires them, to have refrained from granting enormous loans to institutions continuing or proposing to continue such operations as some of those to which our attention has more than once been directed.

As I have pointed out on other occasions the records of this office show that the artificially fixed money rates in New York City have had the effect of drawing to New York City from all parts of the country many hundreds of millions of dollars which, from the standpoint of the public welfare, could be better employed if they had been permitted to remain in their own respective communities to be loaned there for legitimate business, and within the legal rates of interest permissible in the several States.

The reports of this office show that on December 29, 1920, the national banks alone in New York City, held, for account of correspondent banks in all parts of the country, an aggregate of approximately \$800,000,000; while the total amount of money which all the national banks in New York City were lending to their correspondent banks in all parts of the country, directly and indirectly, amounted to less than \$280,000,000.

Official records also show that in addition to the deposit balances carried in New York national banks for outside banks, the local New York banks were lending in Wall Street, for outside customers and correspondents, hundreds of millions of dollars drawn thither from all parts of the country to take advantage of the high interest rates, maintained there partly, it has been alleged, for the express purpose of enticing money from other sections. My Annual Report for 1920 (p. 144) shows that the loans made by New York City national banks for account of all correspondent banks on May 4, 1920, amounted to more than \$600,000,000.

The official reports indicate that the total amount of money which the national banks in New York City have to the credit of their correspondent banks in all parts of the country, plus the funds which the New York national banks have loaned in Wall Street for account of their correspondent banks in all sections of the country, exceeds in the aggregate the total amount of money advanced to all member banks either on bills payable or on rediscounts by all of the Federal reserve banks, excepting only the Federal reserve bank of New York, but including the 11 reserve banks of Boston, Philadelphia, Chicago, Cleveland, Richmond, Atlanta, Dallas, St. Louis, Minneapolis, Kansas City, and San Francisco, with more than 8,800 member banks. These figures impress me as being significant and worthy of the study of the board.

I understand that the records also show that very recently four banking institutions in New York City were found to be borrowing from the New York reserve bank about three times as much money as all the national banks of the country, more than 7,500

had ever borrowed at any one time on their bills payable or on rediscounts, prior to the inauguration of the Federal reserve system.

I am told that the claim has been made in behalf of the New York banks that the money which they borrow from the reserve bank of New York is largely for the purpose of meeting the demands made upon them for accommodation by banks, merchants, and individuals in other parts of the country, but an analysis of the situation does not support this theory.

The reports of January 31, 1920, show that the total amount of money loaned by all the national banks in New York City to all borrowers outside of the Eastern States amounted to only \$743,000,000, of which one hundred and five millions were loaned in the New England States, one hundred and sixty-nine millions in the Southern States, two hundred and ninety-one millions in the Middle States, forty-two millions in the Western States, thirty-four millions in the Pacific States, and something over one hundred millions in foreign countries, our insular possessions, and Alaska (see p. 214, 1920, annual report).

On the same date the money deposited in the national banks of New York City by other banks in all parts of the country aggregated \$896,000,000.

Representative MILLS. Why did you pick out that particular date?

Mr. WILLIAMS. We did not have those figures available for all dates. It is only about once a year that I think we got it.

Representative MILLS. You only have them for one date a year?

Mr. WILLIAMS. I think so.

Representative MILLS. Well, it is in your report, isn't it?

Mr. WILLIAMS. Yes.

Representative MILLS. Well, are you not familiar with your own report?

Mr. WILLIAMS. I think it is once a year.

Representative MILLS. You are not sure?

Mr. WILLIAMS. Why, yes; I can not say whether we may not have at one time called for it in January and another time in December, but I think we have it only once in 1920.

Representative MILLS. Will you glance at your reports and see if you have the figures for more than one date?

Mr. WILLIAMS. The report is of January 31, 1920. Well, this is the report for 1920. I think that is the last, without looking it up.

Representative MILLS. You are giving figures for January, 1920.

Mr. WILLIAMS. Yes; and this is the report for that year.

Representative MILLS. But I am asking you for the whole year. You have given one particular date.

Mr. WILLIAMS. Well, I think that is the only report we had for that year.

Representative MILLS. Will you make sure?

Mr. WILLIAMS. I think that is so. There is page 214, Mr. Mills. You can find it yourself. I did not have time to look through the whole report, but I think that is correct. If not correct, I will be glad to put in any other figures.

The CHAIRMAN. Was there any similar report made, or any similar call made for information in January, 1921?

Mr. WILLIAMS. I sent out in February, 1921, a call to the national banks requesting them to advise me the amount of money which they held for account of depositors in each particular State of the Union. And I would respectfully suggest to the committee that if they should be able to get that information from the comptroller's office it would be exceedingly illuminating to them. I resigned as comptroller before the reports which I called for were received and com-

piled. I do not know whether they have been compiled or not, but if they have not been compiled I desire to say to this committee that I think the information which they contain will be very helpful to you.

The CHAIRMAN. Was this call that you refer to now a call for the same information that is contained in the report of January, 1920?

Mr. WILLIAMS. In part. This particular information which I called for in February had never been called for in that precise form before.

The CHAIRMAN. Will you state now just what the questionnaire asked for?

Mr. WILLIAMS. I would suggest that a telephone request to the Comptroller of the Currency would furnish you with the blanks in the form in which they were sent out. I don't know whether I have a copy here or not. But I think it would be interesting to the committee.

The CHAIRMAN. I thought you could tell us what it contained.

Mr. WILLIAMS. I can tell you what it calls for. It requires the banks to show the location of their principal depositors. For example, if that is compiled it would show how much of the money, how much of the individual deposits in the New York banks are for account of individual depositors in the West or in the East or in the South or in New York State itself.

The CHAIRMAN. Was this particular call confined to New York banks?

Mr. WILLIAMS. I think that was a general request. My impression is that it was for all banks, certainly all reserve city banks. There are about sixty odd reserve cities, and my impression at the moment is that it was for all banks. It was either, I think, for all banks or for all city reserve banks, but I think it was for all banks.

(The blank form is here inserted in the record, as follows:)

[Treasury Department, Comptroller of the Currency, Form 2137-B, Feb. 18-21.]

TREASURY DEPARTMENT,
OFFICE OF THE COMPTROLLER OF THE CURRENCY,
Washington, D. C., February 25, 1921.

To the president or cashier:

Sir: You are requested to forward to this office, in accordance with the provision of section 5211, U. S. R. S., a special report on this blank form showing the geographical location by States of your depositors, the number of accounts of depositors located in each State, and the aggregate deposit balances, exclusive of bank deposits, at the close of business on Monday, February 21, 1921.

In reporting balances to the credit of individuals, the State in which the depositor resides or in which his checks are usually dated should be credited with the balance.

In instances where deposit balances of firms or corporations are subject to the order of an officer or employee of the firm or corporation, which maintains several accounts, the State in which the office or place of business is located, of the officer or employee authorized to draw on such accounts should in this report be credited with such deposit balance.

Respectfully,

JNO. SKELTON WILLIAMS,
Comptroller of the Currency.

Statement showing deposit balances in national banks, according to the location of the depositor, rendered by the.....National Bank of, as of Monday, February 21, 1921, in response to request from Comptroller of the Currency dated February 25, 1921.

States.	Number of deposit accounts			Aggregate deposit balances.			States.	Number of deposit accounts			Aggregate deposit balances.		
Maine.....							Ohio.....						
New Hampshire.....							Indiana.....						
Vermont.....							Illinois.....						
Massachusetts.....							Michigan.....						
Rhode Island.....							Wisconsin.....						
Connecticut.....							Minnesota.....						
Total, Northeastern States.....							Iowa.....						
New York.....							Missouri.....						
New Jersey.....							Total, Middle States.....						
Pennsylvania.....							North Dakota.....						
Delaware.....							South Dakota.....						
Maryland.....							Nebraska.....						
District of Columbia.....							Kansas.....						
Total, Eastern States.....							Montana.....						
Virginia.....							Wyoming.....						
West Virginia.....							Colorado.....						
North Carolina.....							New Mexico.....						
South Carolina.....							Oklahoma.....						
Georgia.....							Total, Western States.....						
Florida.....							Washington.....						
Alabama.....							Oregon.....						
Mississippi.....							California.....						
Louisiana.....							Idaho.....						
Texas.....							Utah.....						
Arkansas.....							Nevada.....						
Kentucky.....							Arizona.....						
Tennessee.....							Alaska.....						
Total, Southern States.....							Total, Pacific States.....						
							Hawaii.....						
							Total, United States.....						

I,, of the above-named bank, do solemnly swear that the above statement, to the best of my knowledge and belief, is true, and fully and correctly sets forth the information called for by the Comptroller of the Currency in his request of February 25, 1921.

Correct.—Attest:
 [To be attested by not less than three directors other than the officer verifying the report.]

.....
 (President or cashier.)

 Directors.

[Place for official seal to be affixed by officer before whom acknowledged. See act of Feb. 26, 1881. Notary must not be an officer or director of the bank.]

State of.....
 County of.....
 Sworn to and subscribed before me this..... day of, 1921; and I hereby certify that I am not an officer or a director of this bank.

Notary Public.

NOTE.—This report must be sworn to by the president or cashier (oaths made by other officer will not suffice), attested by not less than three directors, and forwarded to the Comptroller of the Currency with the least possible delay.

Representative MILLS. Where will I find your figure of \$800,000,000 on deposit in this report?
 Mr. WILLIAMS. (Reading:)

The reports of January 31, 1920, show that the total amount of money loaned by all the national banks in New York City to all borrowers outside of the Eastern States amounted to only \$743,000,000.

You will find that on page 214, 1920, annual report.

Representative MILLS. I found that.

Mr. WILLIAMS. Now, what is the other one you want?

Representative MILLS. You gave some other figure of 800 million and some, I think.

Mr. WILLIAMS. (Reading:)

On the same date, the money deposited in the national banks of New York City by other banks in all parts of the country—

Representative MILLS. You have included eastern States there?

Mr. WILLIAMS. (Reading:)

The money deposited in the national banks of New York City by other banks in all parts of the country aggregated \$896,000,000.

Representative MILLS. You showed two sets of figures.

Mr. WILLIAMS. I use the same figures I have given here.

Representative MILLS. In the first item, in other words, you have excluded the Eastern States, and in the second you have included them?

Mr. WILLIAMS. In the first statement I have given figures by districts.

Representative MILLS. In the \$896,000,000 item you have included all Eastern States?

Mr. WILLIAMS. It gives it in detail by divisions.

Representative MILLS. Now wait a minute. Will you please read that statement again.

Mr. WILLIAMS. (Reading:)

The reports of January 31, 1920, show that the total amount of money loaned by all the national banks in New York City to all borrowers outside of the Eastern States—

Representative MILLS. Yes.

Mr. WILLIAMS. Outside of the Eastern States. That word "outside" was emphasized, was put in caps.

Representative MILLS. Yes, outside of the Eastern States.

Mr. WILLIAMS. Amounted to only \$743,000,000.

Representative MILLS. Yes.

Mr. WILLIAMS. Of which one hundred and five millions were loaned in the New England States.

On the same date the money deposited in the national banks of New York City by other banks in all parts of the country aggregated \$896,000,000.

Representative MILLS. Yes.

Mr. WILLIAMS. I made that distinction there very clear.

Representative MILLS. So that in the first figure you have excluded the Eastern States.

Mr. WILLIAMS. I am stating that very positively.

Representative MILLS. But in the second figure you have included Eastern States.

Mr. WILLIAMS. Yes, it is precisely as given in the report.

Representative MILLS. Exactly; but do you think it fair when you are using the figures as a basis of comparison to exclude as important an item as the Eastern States?

Mr. WILLIAMS. It is fair if you state precisely the basis on which the comparison was made. I don't know whether the details which were accessible to me enabled me to do anything else.

Representative MILLS. Well, now let us hear your conclusion.

Mr. WILLIAMS. (Reading:)

Therefore, we find that the balances carried in New York City banks by other banks alone, exceeded the aggregate of all loans made by all New York City national banks to all borrowers in all other parts of the country outside of the Eastern States, including banks and everybody else.

That is very explicit.

Representative MILLS. Exceeded by how much?

Mr. WILLIAMS. Exceeded. It did not show by how much.

Representative MILLS. Now, let us include the Eastern States and let us see what the result will be.

Mr. WILLIAMS. I have not the figures.

Representative MILLS. You have them in your report. Now, include the Eastern States in your items and see what the result will be.

Mr. WILLIAMS. What figures do you want?

Representative MILLS. I want you to use exactly the same figures for the same items. In other words, if you are going to include Eastern States in one item I want you to include them in the other item and see what result you reach.

Mr. WILLIAMS. Let me call your attention to the fact that in one case I give the deposits from banks only, but the loans are to both banks and all individuals. These reports of which I speak and for which I called would have enabled us to make a comparison on approximately the same basis. The information had not been compiled, and therefore I could not use it.

Representative MILLS. Well, now, you have assumed to make a comparison in which you have included Eastern States in one item and excluded them in the other. I ask you to include Eastern States in both items, and then give us the figures.

Mr. WILLIAMS. Suppose you state precisely what the comparison is that you want.

Representative MILLS. I want you to include the Eastern States in your first item. If you will give me that paragraph of your letter I will do it myself. If you will give me your letter and your report I will do it.

Mr. WILLIAMS. Suppose you get exactly what you want.

Representative MILLS. May I have the copy of your letter? Now, if we include the Eastern States it will appear that the total money loaned by all the national banks in New York City to all borrowers would amount to \$2,489,000,000. On that same date money deposited in the national banks of New York City by other banks in all parts of the country aggregated \$896,000,000. So that the loans and discounts made by New York banks exceeded the deposits of all other parts of the country.

Mr. WILLIAMS. Do you call the Eastern States "all other parts of the country?"

Representative MILLS. Yes.

Mr. WILLIAMS. Why not---

Representative MILLS. Now, let me finish my statement.

Mr. WILLIAMS. Go ahead.

Representative MILLS. The loans and discounts made by New York banks exceeded the deposits of all other parts of the country by \$1,593,000,000.

Mr. WILLIAMS. The statements that I have asked for would give the deposits from other parts of the country to the credit of individuals and others in New York City national banks. That amount, I think, would probably add to the \$896,000,000 carried in New York national banks by banks from all over the country somewhere from one to two billion dollars. As I think it is very desirable that the committee should have a complete picture of the case, I would respectfully again ask that that information be gotten, so that you may have the correct picture.

Representative MILLS. I think we ought to have a complete picture. We would be more apt to have a complete picture if we compare items that can be compared, and not exclude any one particular item.

Mr. WILLIAMS. Shall I proceed, Mr. Chairman?

The CHAIRMAN. Proceed.

Mr. WILLIAMS. (Continuing reading letter of February 19, 1921:)

If we assume that the money sent on to New York from other banks was used for their outside accommodation, it is clear that the New York City national banks were using all the funds they obtained from the reserve banks for their own local purposes, and this money was not being sent away to relieve the needs of the rest of the country, as has been suggested.

It is also interesting in this connection to note that the official figures show that on July 31 last the New York City national banks had received from their correspondent banks and were lending from them, largely in Wall Street loans, the sum of \$524,000,000.

Some of this money may have been used for loans to outsiders, but presumably the great bulk of it was loaned in New York City.

Representative MILLS. You say presumably. Do you state that from your own knowledge, or is that an assumption?

Mr. WILLIAMS. I have reason to believe that it is correct.

Representative MILLS. On what do you base that?

Mr. WILLIAMS. On general information.

Representative MILLS. On general information?

Mr. WILLIAMS. Yes; from information obtained as Comptroller of the Currency, and otherwise.

Representative MILLS. Well, now, wait a minute. Is that accurate information based on examinations of national banks?

Mr. WILLIAMS. That is my judgment based upon the information which has been accessible to me. I don't know why you want to be so technical about that matter.

Representative MILLS. Because we have had this trouble all through, Mr. Williams, that I have wanted to know when you were expressing an opinion or when you were stating a fact, and you have been unwilling to tell me when you were speaking from personal knowledge or when you were merely expressing an opinion.

Mr. WILLIAMS. Well, I have submitted to questioning on several matters which I regard as trivial, upon which you enlarged. I am willing for the committee to pass upon the relevancy and pertinency and importance of those particular matters which I regard as quibbles.

Representative MILLS. I want to know when you are stating facts and when you are stating opinion. That is what I want to know.

Mr. WILLIAMS. If you will follow me closely, you will find out.

Representative MILLS. Unfortunately I have been following you closely but I have not been able to find out. Now will you state whether you are stating a fact or an opinion?

Mr. WILLIAMS. Of what?

Representative MILLS. Of this \$500,000,000.

Mr. WILLIAMS. [Reading:]

Some of this money may have been used for loans to outsiders, but presumably the great bulk of it was loaned in New York City.

That is my judgment based upon information which has been available to me.

Representative MILLS. That is an opinion, then?

Mr. WILLIAMS. An opinion, based upon facts, yes. [Continuing reading:]

In addition to drawing funds to New York City from other sections by the allurements of high interest rates and otherwise, let me remind you that at times during the past year, in fact almost continuously through the year, the New York Federal reserve bank has gotten from other parts of the country by rediscounting its bills and acceptances considerable sums of money from nearly all the other Federal reserve banks, including among others, the reserve banks of Dallas, Kansas City, Richmond, Atlanta, and San Francisco, as well as the nearby reserve banks.

The board took exception to my including Richmond in that list. In looking the matter up I found that the loans at that particular time were not made directly to the New York reserve bank by the Richmond bank, but were made to Boston, and Boston loaned to New York, and I also found that about that time, or not very far from it, the reserve bank of Richmond did actually loan or rediscount for the reserve bank of New York. [Continuing reading:]

Furthermore, it is well known that the banks in New York City hold on deposit hundreds of millions of dollars belonging to individuals, corporations, and others in all parts of the country.

Representative MILLS. Before you proceed further I would like to examine you a little as to this proposition of New York rediscounts as indicating the drawing of funds to New York. Now in the first place, during the year 1920 isn't it a fact that deposits were being withdrawn from New York to other parts of the country?

Mr. WILLIAMS. During what year?

Representative MILLS. 1920.

Mr. WILLIAMS. I prefer you to consult the official figures and see that.

Representative MILLS. Well, you are assuming, and so make a statement, that through rediscounts money was being drawn to New York.

Mr. WILLIAMS. I asserted that.

Representative MILLS. Now in making that statement you—

Mr. WILLIAMS (interposing). I also made a statement that there was over \$500,000,000 being loaned in Wall Street for other banks.

Representative MILLS. Now in making that study of the drawing of the funds to New York, haven't you taken into consideration the movement of deposits?

Mr. WILLIAMS. Oh, yes.

Representative MILLS. Well, now, will you please—

Mr. WILLIAMS (interposing). I took into consideration the facts as they existed, whether relating to the movement of deposits or not.

Representative MILLS. Well now, will you tell me whether that study did not reveal that during the year 1920 deposits were being withdrawn from New York?

Mr. WILLIAMS. Well, some deposits were being withdrawn from New York, and other deposits were being lured there by the high interest rates which were being paid.

Representative MILLS. Yes.

Mr. WILLIAMS. The high interest rates to which I refer apply with a good deal of emphasis to the latter part of 1919, when interest rates in New York went as high as 30 per cent.

Representative MILLS. Yes, we went into that yesterday. Now is it not a fact, however, that your study revealed that during the course of the year 1920 some \$1,000,000,000 was withdrawn in deposits from New York banks?

Mr. WILLIAMS. If you wish me to give you actual figures on matters which I am not discussing I shall be very glad to get them.

Representative MILLS. But we are discussing them. You are assuming to discuss the movement of money to and from New York.

Mr. WILLIAMS. Yes; and I give figures to prove it.

Representative MILLS. And I assume that you would not come here and discuss that subject without having made a study of it.

Mr. WILLIAMS. Yes.

Representative MILLS. Now, I am asking you whether it is not a fact that the deposits during the year 1920 in New York City were diminished by some \$1,000,000,000?

Mr. WILLIAMS. It is a fact that from December 31, 1919, there was a heavy falling off in deposits, not only in New York, but in all the banks of the United States—in all parts of the country.

Representative MILLS. Well, now, Mr. Williams, I am asking you this question—

Mr. WILLIAMS. I am not prepared to say offhand the relative—

Representative MILLS. This is not offhand. You have studied it, Mr. Williams?

Mr. WILLIAMS. Well, I can give you the information if you want it. I am not prepared to state at this moment, without looking at the records, what the relative falling off in each one of the different districts was, or in each of the 60 division reserve cities, or each of the 8,000 country banks.

Representative MILLS. All right. Now assuming that I am correct, and that deposits were being withdrawn from New York City, wouldn't that account for these so-called discounts that you have mentioned?

Mr. WILLIAMS. They were being withdrawn from other banks as well as New York; and other banks were not able to draw money by offering the high rates of interest which were possible under the laws in New York State.

Representative MILLS. Mr. Williams, you are just as well able as I am to understand a question. Now, will you not please listen to this question and answer it? If it is a fact that \$1,000,000,000 worth of deposits, more or less, were withdrawn from the city of New York during the course of the year 1920, would not that largely account for the rediscounts with other Federal reserve banks by the New York Federal reserve bank?

Mr. WILLIAMS. If there is a heavy withdrawal of deposits in any section of the country it would suggest the probability of increased discounts and bills payable from those banks.

Representative MILLS. And if I am correct in my statement that there was a withdrawal of deposits, that would account for these discounts?

Mr. WILLIAMS. If there was a heavy withdrawal of deposits from New York of \$1,000,000,000, or any other large amount, and the loans are not proportionately reduced, it would be only natural that the New York banks should reinforce themselves by rediscounting with the reserve bank. Does that answer your question?

Representative MILLS. As well as I expect it will be answered.

Mr. WILLIAMS. All right.

Representative SUMNERS. The fact that the deposits in the New York banks at a given time decreased, unless it is ascertained what happened in the banks of the country at large, would not necessarily indicate a shift in the money from New York to some other place?

Mr. WILLIAMS. Well, now, if you want to know, another pertinent fact to which I have not referred heretofore, I believe, let me suggest to you that a statement given out under the auspices of the Chamber of Commerce of the city of New York last autumn, I think it was, indicated that there were approximately \$1,000,000,000 of frozen credits or canceled orders in foreign countries, largely arising from the business of this country with other countries. I also call attention to the fact that certain institutions in New York City made very heavy loans in connection with their foreign trade, amounting to tens of millions of dollars, and that a great deal of that money was then and has been tied up in those foreign countries. I have felt that the extent, under the circumstances, to which money was sent abroad during the past 18 months was hardly justified.

Representative MILLS. Do you apply that same criticism to the exporting of agricultural products?

Mr. WILLIAMS. I am not speaking of the money which was directly connected with the exportation of our own products, but I am speaking more especially of the funds from this country which were transferred to foreign countries in connection with operations of our banks in those foreign countries.

Representative MILLS. For what purposes?

Mr. WILLIAMS. Well, that is a large proposition. I will not go into detail. I do not think it would be well for me to discuss publicly all the details of some of those transactions. I should be very glad to give the committee more information on that subject in executive session, if they want it.

Representative MILLS. Generally speaking the foreign credits were for the promotion of our export trade, were they not?

Mr. WILLIAMS. What?

Representative MILLS. I say, generally speaking the foreign credits granted were for the promotion of our export trade?

Mr. WILLIAMS. No, I won't say what proportion was for our export trade and what proportion was for our import trade.

Representative MILLS. I do not quite get that.

Mr. WILLIAMS. I say, I don't know how much of it was in connection with our import trade and how much of it was in connection with our export trade.

Representative MILLS. You mean, we granted credit to foreigners on goods sold to us?

Mr. WILLIAMS. To foreign branches of American banks; large sums of American credits were used in connection with that business.

Representative MILLS. In any event, it was for the promotion of foreign trade?

Mr. WILLIAMS. Of foreign trade, yes.

Representative MILLS. And you think that was a mistake?

Mr. WILLIAMS. I don't say that foreign trade is a mistake. I think foreign trade may be conducted on a sane basis or an insane basis.

Representative MILLS. You think that the credits given foreigners in order to promote foreign trade during the last year were excessive?

Mr. WILLIAMS. In certain particulars they were, as some institutions have found out to their sorrow.

Representative MILLS. You mean that the credit of our foreign debtors was not good?

Mr. WILLIAMS. I think that money was loaned with a prodigal hand in some foreign countries which ought not to have been loaned.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. May I ask you if you think in general—

Mr. WILLIAMS. May I get through with this letter now, or do you prefer to question me now?

The CHAIRMAN. I want to get through with that letter just as quickly as you do. I want to know whether you think that the efforts of the banks of New York to promote foreign trade of the country during 1920 and 1919 were ill advised?

Mr. WILLIAMS. I think that the banks of New York have performed magnificent service both in domestic and foreign trade, as a rule. I take pleasure in testifying to that fact, but I also think that there have been particular cases where there has been gross mismanagement in the handling of funds.

The CHAIRMAN. I understood your statement was to the effect that there had been an actual exportation of credits amounting to about a billion dollars.

Mr. WILLIAMS. A what?

The CHAIRMAN. An actual exportation of credits.

Mr. WILLIAMS. No, what I stated was that the Chamber of Commerce of New York put out a statement showing that in connection with the period of deflation and halting of world business about, I think, three billion dollars of business was tied up by frozen loans or cancelled orders, or inability of consignees to accept goods, or refusal of goods, and about one billion dollars of that involved foreign trade, including huge credits in foreign countries, which were no longer available.

The CHAIRMAN. A billion dollars for what purpose?

Mr. WILLIAMS. Presumably in connection with foreign trade. How much of it was in connection with loans or advances I do not know.

The CHAIRMAN. Do you mean capital advances?

Mr. WILLIAMS. Well, I imagine principally in connection with the movement of goods.

The CHAIRMAN. All right. Proceed with your letter, if you will, Mr. Williams.

Mr. WILLIAMS (reading):

Furthermore, it is well known that the banks in New York City hold on deposit hundreds of millions of dollars belonging to individuals, corporations and others in all parts of the country. Among other large balances from the outside which are carried in banks in New York City are the funds of oil companies, coal companies and transportation companies. The freight and passenger fares paid by farmers, merchants and business men in all parts of the country, instead of being permitted to remain in their local banks, are largely drained to New York City for deposit in banks there under the direction of New York financiers who so largely exercise control, through stock proxies, rather than by real ownership, over the railroad properties.

I must also again remind you that the official records show that the Federal Reserve Bank of New York was lending, not long since, to six or seven big banks and trust companies in New York City, whose funds were heavily employed in all kinds of speculative deals and ventures, including many in which their own officers were heavily interested, about as much, or more money than the seven reserve banks of Minneapolis, Richmond, Kansas City, St. Louis, Dallas, Atlanta, and San Francisco were lending to the more than 5,000 member banks, covering about three-fourths of the territory of the entire country.

You claim as an ameliorating condition that there are several districts where the member banks have borrowed a higher percentage of what you call their "basic line" than the New York member banks have borrowed; but allow me to remind you that the "basic line" in those other districts have been reduced and that the "basic line" in New York greatly raised by the huge sums of money drawn away from the districts of the West, the Central West, and the South, and to some extent from New England and piled up in New York City because of the enticing interest rates maintained there at a heavy cost to the whole country as I have heretofore shown in public statements.

Let me here suggest that if the banks, individuals, and corporations in other parts of the country would keep their money at home and use it there instead of sending it to New York for interest considerations, the member banks in those other sections could pay off, largely or entirely, all the loans to reserve banks and create far easier and healthier money conditions generally than we now have.

I have shown you, Gov. Harding, in this letter and other recent letters, that the reserve bank of New York has been lending funds at 5 per cent to 7 per cent per annum to member banks which have then passed them on to customers at times at such outrageous rates as 50 per cent and 75 per cent per annum or more—while the Reserve System in other parts of the country has actually charged member banks, in exceptional cases, for the use of money, sorely needed by farmers and business men, as high as 50 per cent and 75 per cent per annum—while the member banks paying these exorbitant rates to the reserve bank are prohibited by law from charging their customers over 8 per cent.

I pointed out to you one instance where a small national bank in the cotton section was charged by its reserve bank an average rate of about 45 per cent per annum for about two weeks' use of \$112,000 in the crop-moving season. A national bank examiner also brought to my attention the case of another struggling country bank in Louisiana which was, at that time, being penalized at the rate of 41 per cent per annum for reserve deficiency which, the examiner stated, was costing this small bank about \$1,500 monthly. He also brought to my attention another bank which, before the suspension of the so-called progressive rate in that district was being required to pay upon necessary accommodations a penalty of from \$900 to \$1,000 weekly above the normal 6 per cent rate.

I do not believe that rules and policies which bring such results as these can be successfully defended. The so-called "progressive" rate system has now been happily abolished in half of the districts in which it has existed and I earnestly urge that it be done away with in the other half without further delay. I do not believe that it should be allowed to continue another day. The penalties for reserve deficiencies which have recently been relieved to some extent should be still further revised and brought within tolerable limits.

The high rates charged by the reserve banks are being given as an excuse for all kinds of unconscionable rates which are being exacted from the customers of banks. I beg leave now to urge an immediate reduction of rates in all districts to a 6 per cent basis except on Liberty bonds and a reduction of the rate on loans secured by Liberty bonds now in the banks which were subscribed for at par, to 4½ per cent. With the Federal reserve banks carrying a reserve of 50 per cent or more and with an unused

lending power of about \$1,500,000,000, or ten times as much as the maximum amount which the national banks of the country ever borrowed at any time prior to 1914, I do not think we can justify ourselves under existing conditions in charging on loans secured by Liberty bonds already in the banks, 1½ per cent more than the bonds bear.

A reserve of 50 per cent in such times as these, is, in my opinion, as I have frankly told the board not long since, not a thing to boast of. I recall that there were banks in some parts of the country which subjected themselves to severe criticism and public censure in the early part of this administration because of the high reserves they insisted on maintaining when the business of the country needed the use of the money.

Measures should also be adopted to prevent member banks from charging their customers for accommodations granted them, as has been done in some instances, from five to ten times as much interest as they themselves pay their reserve banks—which means a profit of 500 to 1,000 per cent.

Such facts as I have laid before you must be kept in view in considering and dealing with this deeply important subject. Nothing will be accomplished by ignoring and passing lightly by such realities as I have endeavored here to bring to your attention. I have given plain, straight figures, which I hope everybody can understand.

It seems to me that one of the chief basic principles, one fundamental purpose of the Federal reserve act is being violated. The law of gravitation, by which the larger and heavier mass draws to itself and absorbs all the smaller and lighter objects, is as strong in finance as in nature. The brains and will of man and the powers of nature itself are employed continually to defeat or regulate this tendency. The Federal Reserve System, directed by brains and courage, will promote the orderly and timely diffusion of capital to meet needs, as is intended. In the absence of such direction the small funds and accumulations everywhere in the country must be drawn more and more to New York and put at the service of those who, sometimes, use the power so given, as in instances I have related, to destroy instead of building, to kill rather than revive and stimulate.

I will thank you to submit this letter to the Federal Reserve Board for its information and consideration.

Yours, very truly,

JOHN SKELTON WILLIAMS.

P. S.—As bearing upon the suggestion that the New York banks borrowed from the reserve banks to accommodate borrowers in other sections, I ask attention to the following instance:

The official figures show that one large New York banking institution on December 29, 1920, held on deposit for other banks in all parts of the country the sum of over \$129,000,000.

This same bank also reported that there were, on the same date, loans outstanding (largely Wall Street loans) which it had placed for account of its correspondent banks, amounting to over \$107,000,000.

The amount of money which this banking institution was lending on direct loans and rediscounts to other banks in all parts of the country (including \$8,600,000 in New York City) was only about \$33,500,000.

The total amount which this bank was lending on the same date to all other borrowers in the entire United States outside of New York State, as of the same date, amounted to about \$95,000,000.

Therefore the balances from other banks carried by this bank practically offset all loans made by this bank in the entire country, outside of New York State; and to the \$107,000,000 of loans which it placed for its bank correspondents, located all over the country, is to be added large additional amounts sent on to New York by its customers and corporations residing in other parts of the country to be loaned in New York.

Under these circumstances, the suggestion that the money which this bank was borrowing from the Federal reserve bank on December 29, 1920, about \$100,000,000 was being used to accommodate borrowers in other sections of the country can hardly be sustained.

J. S. W.

The CHAIRMAN. Mr. Williams, may I ask you now how long it will take you to complete your statement?

Mr. WILLIAMS. Mr. Chairman, may I inquire how long you will probably desire to question me about it?

The CHAIRMAN. Why, that is within the control of the members of the committee, and not in the control of the chairman.

Mr. WILLIAMS. I have engagements at a distance from here to-morrow, and I shall have to leave to-night. If we do not get through to-day, I should ask you to call me at some other time convenient to your committee, and I shall try to attend.

The CHAIRMAN. I was very much in hopes that we would get through by now, but as I said before, I want to give you every opportunity to present everything that you wish to present.

Mr. WILLIAMS. I think I can finish this afternoon, Mr. Chairman.

The CHAIRMAN. It seems to me that a good deal of matter which is extraneous to the purpose of the commission is going into the record, which undoubtedly will extend the hearings at very great length, if they are going to be gone into on the other side. I was in hopes that the testimony would be confined to matters which relate directly to the policy of the board during the last 18 months, and the policies which ought to be adopted.

Mr. WILLIAMS. I think I can finish this afternoon, if it is agreeable to you to hear me.

The CHAIRMAN. Very well, the commission will stand in recess until 2 o'clock this afternoon.

(Thereupon, at 1 o'clock p. m., an adjournment was taken until 2 o'clock p. m. of the same day, Wednesday, August 3, 1921.)

AFTER RECESS.

At 2 o'clock p. m. the commission reassembled, pursuant to the taking of recess.

The CHAIRMAN. Mr. Williams, the typewritten copy of the testimony will be available here the day following the day when the testimony is taken, and it will be available to you.

Mr. WILLIAMS. Thank you, Mr. Chairman. Shall I proceed?

Representative MILLS. Mr. Williams, I want to cover a few points in this letter of February 19. You remember that you referred to a particular bank which, in June, was borrowing on an average of \$3,891,813 from the Federal reserve bank in New York City?

Mr. WILLIAMS. Yes; and I think I stated that that was a very moderate line for that bank.

Representative MILLS. Do you happen to know what its resources with the Federal reserve bank were at that time?

Mr. WILLIAMS. I do not; I imagine that they were full. I took occasion to state that I thought the amount which the bank was borrowing was small, compared with other banks.

Representative MILLS. Assume that it had deposits amounting to some \$14,000,000 with the Federal reserve bank at that time, do you think that the Federal reserve bank in New York City would have been justified in refusing to rediscount paper to the extent of \$3,000,000?

Mr. WILLIAMS. I did not criticise the reserve bank for the amount of money it was loaning to that bank. On the contrary, I stated that I thought it was moderate.

Representative MILLS. They would not have been justified in denying them that credit at that time, would they?

Mr. WILLIAMS. I would need a little more information than that bare fact before I answer.

Representative MILLS. Assume that they were only borrowing \$3,800,000, and had assets of \$14,000,000; do you not think that the Federal reserve bank was justified in letting them have that amount?

Mr. WILLIAMS. For proper purposes.

Representative MILLS. Assuming they were justified in letting them have the money, how was the Federal reserve bank to blame in any way for subsequent action of that bank—their doing something which you criticize as improper, and I agree with you?

Mr. WILLIAMS. You agree with me that it was improper action?

Representative MILLS. Very clearly. Now, how could the Federal reserve bank in any way have controlled it?

Mr. WILLIAMS. If it was made before the Federal reserve knew anything about it, it is obvious they could not have controlled it, under such circumstances as that. If, however, a bank is in the habit of making speculative loans, engaging in syndicate operations of all sorts in which its principal officers are participating, and does it during a series of weeks, and months, and years, in such an event as that it behooves the Federal reserve bank to exercise some restraining power.

Representative MILLS. That is a fact, and for all we know they were exercising that power. Now, let us stick to this particular instance and have an explanation made of it. You do not think that the Federal reserve bank of New York could be blamed for this particular transaction? Much has been made of this instance, and I want to know if you think the Federal reserve bank of New York could be blamed for this particular transaction?

Mr. WILLIAMS. I do not know what knowledge it had, if any, of the facts of that loan. If the New York reserve bank was aware that that loan was being made under such conditions as this, and on such terms, it should not have extended the credit to the bank that was making the loan.

Representative MILLS. For that specific purpose?

Mr. WILLIAMS. Yes, sir; for that specific purpose.

Representative MILLS. But from all you know, you absolve the New York reserve bank from any blame, so far as this particular transaction is concerned?

Mr. WILLIAMS. I am not passing on that question.

Representative MILLS. Do you know that it is in any way to blame?

Mr. WILLIAMS. I am not passing on that question. I have not sufficient facts at the present time to justify me in expressing an opinion on that subject.

Representative MILLS. Have you any knowledge to lead you to believe it was in any way to blame?

Mr. WILLIAMS. That is a rather hypothetical question.

Representative MILLS. I do not think it is a hypothetical question; I think it is a very direct question.

Mr. WILLIAMS. I will say this, if it will give you any satisfaction—

Representative MILLS (interposing). I am not looking for satisfaction; I am looking for the facts.

Mr. WILLIAMS. I thought you would be satisfied with facts.

Representative MILLS. I will be satisfied with facts, if you will give them to me for a change—

Mr. WILLIAMS (interposing). What do you mean by "for a change"?

Representative MILLS. Because I have had great difficulty in getting them from you for the last few days.

Mr. WILLIAMS. You have had nothing but facts.

Representative MILLS. However, go ahead, if you will answer my question.

Mr. WILLIAMS. If the Federal reserve bank of New York had any reason for thinking that the loan was made for that purpose, they should be blamed for advancing money for that purpose.

Representative MILLS. Very well. Now, do you know whether they had any such information?

Mr. WILLIAMS. I do not.

Representative MILLS. Now, let me ask you whether, short of putting an examiner in the bank to pass on the individual loans made by the member bank, whether the New York reserve bank would be in a position to determine whether that bank was making proper loans or not, at proper rates of interest, dealing with individual cases now?

Mr. WILLIAMS. When other reserve banks in other districts receive applications from member banks, especially country banks, for loans and advances, they have a way of finding out for what purpose the money is to be used.

Representative MILLS. Do you think, from your knowledge of the situation in New York City, that it is practicable for a New York bank to ascertain in every individual case of paper rediscounted for what purpose that money is to be used?

Mr. WILLIAMS. I think it is possible and practicable for them to ascertain in a general way the character of the loans, the character of the business of banks to which they are loaning scores of millions of dollars, if not hundreds of millions of dollars.

Representative MILLS. Don't you also know, as a matter of fact, they do ascertain in a general way what is the character of the business and purpose?

Mr. WILLIAMS. Then if they do ascertain in a general way what is the character of the business, I am at a loss to understand why certain credits were given to certain banks under certain conditions, when funds were being used for all sorts of speculations and being loaned to the officers themselves.

Representative MILLS. Now, let me ask you, if there were any improper loans to officers, if it was not your function as Comptroller of the Currency to see that those loans were paid up?

Mr. WILLIAMS. No; I had no authority under the law, as Comptroller of the Currency, to prevent a bank from loaning its own officers money. I have repeatedly requested or suggested a law from Congress to restrain the banks from loaning to its own officers, but thus far the suggestion has not been acted upon.

Representative MILLS. If Congress has not seen fit to pass a law to prevent the loaning of money by a bank to its own officers, on what authority would the Federal reserve bank deny such a loan?

Mr. WILLIAMS. Common sense and prudence.

Representative MILLS. Let me ask you if as Comptroller of the Currency you have used your influence with any banks to see that such loans were cleared up?

Mr. WILLIAMS. I have.

The CHAIRMAN. In what way?

Mr. WILLIAMS. By having the national-bank examiner appear before the board of directors and giving them information on which they could act intelligently, and also in other ways, by correspondence direct sometimes. Also, in some cases, having the directors of the banks come to Washington for hearings.

Representative MILLS. While you think that the law permits such loans to be made, if the Federal reserve bank discovers that a loan has been made to an officer, do you think that it would be justified, on its own initiative, in denying further credit until that loan was cleared up?

Mr. WILLIAMS. It depends on the character and size of it and the frequency of such loans.

Representative MILLS. Assuming it was a large loan, amply secured by Liberty bonds, what would you say?

Mr. WILLIAMS. I should say that the president of a bank, if he wanted to borrow the entire capital of that bank, should be restrained so far as the Federal reserve bank can restrain him.

Representative MILLS. And you think, without authority of law, until that loan is cleared up, they should deny further credit?

Mr. WILLIAMS. My theory is that all national banks are to use certain discretion; they should not shovel out millions and millions of money, without discretion; we presuppose the exercise of a certain amount of prudence.

Representative MILLS. I have asked you if the Federal reserve bank would have been justified, under those conditions, in saying they would deny further credit?

Mr. WILLIAMS. I think it would be justified in diminishing or restraining loans to its own officers.

Representative MILLS. Supposing it had done that, would it then have done its entire duty?

Mr. WILLIAMS. It depends on the conditions. I can conceive that sometimes what might be regarded as a large loan would be justified, but I think those banks should not, as a rule, loan to their officers, especially in a sum equal to or larger than the amount of the capital of the bank, which is sometimes done.

Representative MILLS. But you think, when the law does not forbid it, then the officers should exercise a discretion—

Mr. WILLIAMS. Yes; unquestionably.

Representative MILLS. If the law says a loan may be legal—

Mr. WILLIAMS (interposing). Yes; a loan may be legal and rotten.

Representative MILLS. Assume it is not rotten.

Mr. WILLIAMS. It may be unfair; it may be a larger proportion of the bank's resources than should go to any one interest.

Representative SUMNERS. Is it your position that merely because the thing is not prohibited, that not necessarily is it approved?

Mr. WILLIAMS. Certainly.

Representative MILLS. Now, you have assumed to criticize the New York reserve bank because it did not examine a particular institution at your request; that bank was examined by the State banking department, was it not?

Mr. WILLIAMS. I assume that it was; I know that it was examined at certain times; I do not know how often it was examined.

Representative MILLS. It was probably examined as often by the State banking department as you would have examined it?

Mr. WILLIAMS. I do not know. I think the national examinations are more frequent than the State examinations.

Representative MILLS. If the Federal reserve bank had its own examiners accompany the State bank examiners, would not it have done all it could do?

Mr. WILLIAMS. It would not.

Representative MILLS. Why not?

Mr. WILLIAMS. I speak as the result of experience. I do not think that the presence of one or two officers with the State bank examiner—in the case to which I assume you refer—they accompanied the State examiner for a few days and got a very imperfect view of the condition of the bank.

Representative MILLS. How do you know that?

Mr. WILLIAMS. I do know.

Representative MILLS. How do you know?

Mr. WILLIAMS. I know because I have made inquiries.

Representative MILLS. Do you know how long those examiners were there?

Mr. WILLIAMS. I think I have stated in one of my letters that they were there a few days.

Representative MILLS. The mere fact that you have stated it in one of your letters does not—

Mr. WILLIAMS (interposing). That was based upon my knowledge of the fact.

Representative MILLS. Do you know when they were there?

Mr. WILLIAMS. At what time?

Representative MILLS. At the examination of this institution?

Mr. WILLIAMS. At what time?

Representative MILLS. The time referred to in your letter.

Mr. WILLIAMS. At the time referred to in my letter I stated they were there a few days.

Representative MILLS. Do you know that to be a fact?

Mr. WILLIAMS. I got it reliably. I stand for it; if it is to be questioned, I can check it up.

Representative MILLS. Where did you get the information?

Mr. WILLIAMS. I stand for it. I regard it as reliable.

Representative MILLS. You were not present then during the examination?

Mr. WILLIAMS. No, sir.

Representative MILLS. Then it is hearsay?

Mr. WILLIAMS. No; it is not hearsay; it comes from one who knew. I stand for it.

Representative MILLS. How do you know he knew?

Mr. WILLIAMS. He is a man of character whose statements can be relied upon.

Representative MILLS. Do you know, as a matter of fact, that anything heard from a third party is hearsay, and not—

Mr. WILLIAMS (interposing). Not if a man participates in it.

Representative MILLS. But if a man sees a murder committed—

Mr. WILLIAMS (interposing). I do not care to discuss these technical question with you.

Representative MILLS. I know you do not care to discuss it.

Mr. WILLIAMS. That is a very technical point.

Representative MILLS. It is not a technical point, Mr. Williams, but it is a very important one.

Mr. WILLIAMS. Then it is shown by the written record, and you have access to those records, and you can get the number of examiners who were present at that examination.

Representative MILLS. We will get it.

Mr. WILLIAMS. All right; get it.

Representative MILLS. What I want to know now is what you know about it.

Mr. WILLIAMS. If those statements are inaccurate; if they are incorrect, I should like to know it. I do not believe they are.

Representative MILLS. I think that when a man makes serious charges against institutions and individuals, that he has no right to resent it when asked upon what he bases those charges.

Mr. WILLIAMS. I told you I base it upon the fact that there were examiners there for a few days, and they did not stay for the whole time. If you deny that, then I will give the evidence.

Representative MILLS. I do not deny anything; and you base that report upon a statement you received from a third party?

Mr. WILLIAMS. I base it, Congressman, upon information which I have received, which is sufficient for me; whether or not it is sufficient for you is not material to me at this moment, because you have the opportunity of checking it up, which I have not.

Representative MILLS. What I want to know is whether you are testifying from your own knowledge, or from information you have received from a third party.

Representative SUMNERS. I want to submit to the Chair that it is perfectly apparent that the witness could not have been present, in all human probability, at the examination of this bank. The witness has stated that on the statement and testimony of a man whom he regarded as reliable he has given this statement. He has stated that four or five times, and Mr. Mills can not, I assume, procure any additional facts from him on that point.

Representative MILLS. I do not know whether I can or not, but I am entitled to try.

Representative SUMNERS. I submit the witness has answered four or five times.

Representative MILLS. I would like to ask Mr. Williams if he will give me the name of his informant?

Mr. WILLIAMS. I will not; I decline to do that, under the circumstances, at this time.

Representative MILLS. You decline to give the name of your informant to the commission?

Mr. WILLIAMS. Yes; and if you can disprove it, I want to know it.

Representative MILLS. I am not anxious to disprove anything; I am anxious to get the facts.

Mr. WILLIAMS. There are more important matters than that particularly technical matter.

Representative MILLS. I know, and you know perfectly well that I tried yesterday to exclude these matters and confine you to agricultural credits, and that I was overruled. It is not by my wish we are going into all these charges that you have made, I can assure you.

Mr. WILLIAMS. I told you where you can have your answer, and I think there is no question you can have your question conclusively answered.

Representative MILLS. Now, you have made the statement here again that the "head of a large manufacturing concern which employed thousands of men found himself in need during the past year of \$5,000,000 for which he offered abundant collateral; but upon applying to the New York banks was forced, in order to get funds, to pay cash commissions of about a million dollars in addition to 6 per cent per annum interest, for the loan which was repaid in less than six months;" do you make that statement of your own knowledge, or from hearsay?

Mr. WILLIAMS. On the strength of the statement of a responsible man from New York, from whom I got it, and from whom I quote.

Representative MILLS. Do you know whether he knew it of his own knowledge or not?

Mr. WILLIAMS. I imagine that he did not speak lightly.

Representative MILLS. Well, was he giving you gossip, or did he actually know of this particular transaction?

Mr. WILLIAMS. He usually knew what he was talking about. I can inform you where you can probably find out whether there is any basis for that statement of the gentleman, if you desire to know.

Representative MILLS. But all you know about it is that some man told you that such a thing had happened?

Mr. WILLIAMS. A very responsible lawyer in New York, who has never been in official life, so far as I know.

Representative MILLS. But you do not know whether he himself had personal knowledge of this particular transaction?

Mr. WILLIAMS. I did not catechize him as to his knowledge.

Representative MILLS. Nor as to the source of his information?

Mr. WILLIAMS. I did not; I was satisfied to take his statement.

The CHAIRMAN. Are you willing to say who gave you the information; who you got the information from?

Mr. WILLIAMS. If it is denied, I am willing.

Representative MILLS. Of course; it is impossible to deny it; no one knows of this transaction, and there is not sufficient information here to identify it; it can not be denied or controverted. There is nothing so unusual about a loan of that size in New York City.

The CHAIRMAN. In order that the commission may get the facts about this matter, I am going to ask you who gave you the information upon which that statement is based.

Mr. WILLIAMS. I suggest that if you inquire of the officers of the institution which has been referred to here, they can throw some light upon it.

The CHAIRMAN. I do not think that answers my question.

Representative MILLS. Now, you say "the manner in which certain New York banking institutions have borrowed enormous sums from the Federal reserve bank of New York at rates of from 5 to 7 per cent and have taken advantage of the necessities of needy borrowers in trying times by 'accommodating' them with time money at rates, in some instances as high as 50 per cent per annum, and in at least one instance about 200 per cent per annum, is, in my opinion, uneconomic, unconscionable, and barbarous, and I am not willing, so far as I am concerned, to have such operations pass unnoticed or

without protest." Do you know any instances, of your own knowledge where that was done?

Mr. WILLIAMS. I have reason to believe it was done, and I think if you wish to find out some other cases where excessive rates were charged to such borrowers, if you will look at the records you would develop it.

Representative MILLS. I am asking you whether you know of it of your own knowledge.

Mr. WILLIAMS. I have knowledge sufficient for me, to justify the statement which I have made.

Representative MILLS. Do you know of any other instances?

Mr. WILLIAMS. I could furnish other instances, if it were necessary, I think.

Representative MILLS. Will you furnish other instances?

Mr. WILLIAMS. The comptroller's office contains the sworn statements sent in by national banks in New York as to excessive interest rates. I refer you to those files. I have not access to them at the present time.

Representative MILLS. You have no knowledge at the present time of any other instances?

Mr. WILLIAMS. I have knowledge where you can get the information.

Representative MILLS. You have made the statement; have you any knowledge of other instances?

Mr. WILLIAMS. I refer you to the files of the comptroller's office, on the strength of which I have made the statement.

Representative MILLS. But I am asking you whether you have any specific knowledge to-day of the other instances of that character.

Mr. WILLIAMS. I refer you to the files of the comptroller's office, and the sworn statements sent in by the national banks as to the excessive rates of interest which they have charged on some of their loans. Through the comptroller's assistance you can get replies to the questions you have asked me.

Representative MILLS. But outside of the two instances cited in this letter, you have no knowledge of any other instances to-day?

Mr. WILLIAMS. The files of the comptroller's office will furnish the instances.

Representative MILLS. But to-day, I am asking you, you have no knowledge of other instances?

Mr. WILLIAMS. When there are files on record to which you can refer, I am not going to tax my memory to give you instances, when you can go to those files and get them yourself.

Representative MILLS. Then without taxing your memory you could not answer the question and give other instances?

Mr. WILLIAMS. I decline to answer, beyond referring you to the files, the source where the information can be obtained—the best source of information.

Representative MILLS. In other words, you refuse to give us evidence of your own charges, but you ask us to find it for you?

Mr. WILLIAMS. No; I refer you to the official records.

The CHAIRMAN. If you will give us, Mr. Williams, sufficient information upon which to ask for specific records, we will ask for them.

Mr. WILLIAMS. Mr. Chairman, if you will ask the comptroller to furnish you the sworn statements sent in to the office from the national banks in August, 1920, I think it was, showing the loans

upon which they charged excessive rates of interest, I think they will give you much data.

Representative MILLS. You mentioned that last spring, as I recollect it, there was some \$700,000,000 available credit, did you not?

Mr. WILLIAMS. I have not the records before me to which I referred in order to make the reference, if I made such a reference. You have the letter before you.

Representative MILLS. I do not know whether it was mentioned in this letter, or not, but I recollect on two or three occasions you mentioned the figure of \$700,000,000 available.

Mr. WILLIAMS. Oh, you mean in reserve banks?

Representative MILLS. Yes.

Mr. WILLIAMS. Yes; I made that statement in the address at Bangor, Me., in June, 1920, that the Federal reserve banks had an unused lending power of \$700,000,000 or more.

Representative MILLS. Did you mean by that statement that that unused lending power was not being made use of by the deliberate policy of the Federal reserve banks?

Mr. WILLIAMS. No; I made the statement for what it was worth, that if there was need for more money, the Federal reserve banks were in position to furnish it, and there need be no fear about abundant money for the movement of the crops. My statement was made in June, just before the usual crop-moving time.

Representative MILLS. You did not mean to make the statement that the Federal Reserve Board was hoarding that \$700,000,000?

Mr. WILLIAMS. Was hoarding it?

Representative MILLS. Yes.

Mr. WILLIAMS. No; I did not.

Representative MILLS. That is all.

Mr. WILLIAMS. Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes; you may proceed, Mr. Williams.

Mr. WILLIAMS. I desire to read, Mr. Chairman, a letter written by me under date of February 26, 1921, to Gov. Harding, of the Federal Reserve Board. [Reading:]

WASHINGTON, D. C., February 26, 1921.

HON. W. P. G. HARDING,
Governor Federal Reserve Board.

DEAR GOV. HARDING: My letters to you of January 17 and February 19, 1921, on matters which I regard of much importance, are still unanswered.

At to-day's meeting of the board you claimed that there were certain inaccuracies in my letter to you of the 19th instant and I informed you I would be happy to have you advise me promptly of any errors or mistakes that you might think you have discovered in that communication, and that I should be most pleased to correct them if your contentions could be sustained. I now again urge that you point out to me promptly all inaccuracies, if any there be, which you may think exist.

You called attention to the following paragraph on page 8 of the letter:

"In addition to drawing funds to New York City from other sections by the allurements of high interest rates and otherwise, let me remind you that at times during the past year—in fact, almost continuously through the year—the New York Federal reserve bank has gotten from other parts of the country by rediscounting its bills and acceptances considerable sums of money from nearly all the other Federal reserve banks, including among others the reserve banks of Dallas, Kansas City, Richmond, Atlanta, and San Francisco, as well as the nearby reserve banks."

You claimed that that statement was capable of an interpretation which would mean that the New York reserve bank was borrowing "almost continuously" through the year from every one of the reserve banks mentioned.

I informed you that that was not my meaning, and was not a fair interpretation of the statement. My meaning was that the New York reserve bank "at times during the past year—in fact, almost continuously through the year—has gotten from other parts of the country by rediscounting its bills and acceptances considerable sums of money from nearly all the other Federal reserve banks, including among others from time to time the reserve banks of Dallas, Kansas City, Richmond, Atlanta, and San Francisco, as well as the nearby reserve banks." The insertion of the words "from time to time" will make my obvious meaning clear, I think, even to the most captious critic.

Let me also add that the only just criticism of the statement to which you called attention is that it was too moderate. I will now amend the paragraph in which I say that the New York reserve bank was, during the year, obtaining funds from other reserve banks by rediscounting its bills and acceptances "almost continuously" and make it read "continuously." From the official figures furnished me by the reserve board, and I understand given weekly to the public, it appears that from January 1, 1920, to January 26, 1921, the funds which the New York reserve bank obtained each week from other reserve banks by rediscounting bills and selling "acceptances" were as follows.

Then follows a list by weeks, beginning with January 2, 1920.

Representative MILLS. Does that table show the bills rediscounted by the New York bank for the other districts?

Mr. WILLIAMS. This table does not; this table is bills rediscounted and acceptances sold by the New York reserve bank to other reserve banks.

Representative MILLS. And it does not show the bills rediscounted by the New York bank for other banks?

Mr. WILLIAMS. No.

The CHAIRMAN. Does that table include bills sold to other reserve banks?

Mr. WILLIAMS. I think it does include bills sold to other reserve banks. This was obtained from a memorandum furnished me by the Federal Reserve Board, and the captions, I think, are quoted verbatim from that memorandum furnished me, which was returned to the Federal Reserve Board. They can give you any additional information that you want. This is a statement made by me of facts which I deduced from a memorandum which was furnished me by the Federal Reserve Board.

The CHAIRMAN. Do you think that the sale of bills from one bank to another, amount to the same thing as the borrowing of the first bank from the second bank?

Mr. WILLIAMS. Not necessarily. If the New York bank loads up with acceptances to accommodate its customers and finds that it has need to cash in on those acceptances and writes out to some other bank and asks them if they want to take them off their hands, that is one thing; if the Chicago bank writes to the New York bank and tells them, "We are looking for acceptances; can you accommodate us by selling us some of your acceptances?" that is another thing.

The CHAIRMAN. This statement makes no distinction, however, between—

Mr. WILLIAMS (interposing). This statement does not. I asked them to furnish me that, and they advised me that I was not at that time a member of the board, and would not furnish it.

Representative MILLS. They have not denied you any information that was available to any other member of the public, have they?

Mr. WILLIAMS. A member of the public?

Representative MILLS. Yes.

Mr. WILLIAMS. They denied me the information as to the number of meetings I had attended. Still, that is a small matter, and I do not care about that.

Representative MILLS. But you do not mean to say that the Federal Reserve Board has denied you any information that was available to the public?

Mr. WILLIAMS. I think they have denied me information which should be furnished me as a former member of the board, of matters which occurred during the time I was a member of the board.

Representative MILLS. They have not denied you any information that would be available to any other member of the public?

Mr. WILLIAMS. If I had not been a member of that board?

Representative MILLS. Yes.

Mr. WILLIAMS. I am not discussing that.

The table is as follows [reading]:

Week ending—	Bills re-discounted and acceptances sold by New York reserve bank to other reserve banks.	Week ending—	Bills re-discounted and acceptances sold by New York reserve bank to other reserve banks.	Week ending—	Bills re-discounted and acceptances sold by New York reserve bank to other reserve banks.
1920.		1920.		1920.	
Jan. 2.....	\$32,357,000	May 21.....	\$2,371,000	Oct. 8.....	\$15,784,000
Jan. 9.....	29,943,000	May 28.....	2,371,000	Oct. 15.....	28,870,000
Jan. 16.....	100,317,000	June 4.....	2,371,000	Oct. 22.....	49,305,000
Jan. 23.....	68,606,000	June 11.....	2,371,000	Oct. 29.....	61,382,000
Jan. 30.....	75,649,000	June 18.....	1,355,000	Nov. 5.....	59,583,000
Feb. 6.....	72,077,000	June 25.....	5,394,000	Nov. 12.....	57,736,000
Feb. 13.....	68,389,000	July 2.....	14,926,000	Nov. 19.....	32,049,000
Feb. 20.....	58,213,000	July 9.....	24,940,000	Nov. 26.....	24,502,000
Feb. 27.....	55,308,000	July 16.....	24,940,000	Dec. 3.....	16,038,000
Mar. 5.....	73,374,000	July 23.....	32,451,000	Dec. 10.....	14,323,000
Mar. 12.....	88,826,000	July 30.....	32,551,000	Dec. 17.....	6,917,000
Mar. 19.....	23,203,000	Aug. 6.....	29,122,000	Dec. 23.....	6,917,000
Mar. 26.....	34,096,000	Aug. 13.....	41,013,000	Dec. 30.....	6,917,000
Apr. 2.....	4,341,000	Aug. 20.....	33,459,000		
Apr. 9.....	2,371,000	Aug. 27.....	40,923,000	1921.	
Apr. 16.....	2,371,000	Sept. 3.....	74,425,000	Jan. 7.....	4,273,000
Apr. 23.....	2,371,000	Sept. 10.....	54,664,000	Jan. 14.....	2,263,000
Apr. 30.....	2,371,000	Sept. 17.....	25,354,000	Jan. 21.....	11,747,000
May 7.....	2,371,000	Sept. 24.....	13,404,000	Jan. 27.....	51,828,000
May 14.....	2,371,000	Oct. 1.....	9,882,000		

You also stated at to-day's meeting that the Richmond bank should not have been included among the five banks named as having furnished money to the New York reserve bank by rediscounting its bills and acceptances. In looking over the particular period to which I referred, I think that apparently the Richmond bank should be omitted from the list of those furnishing money during that period directly to the New York reserve bank. But your own official records will show that the Richmond bank did in the year 1920 furnish money in the manner stated to the reserve bank of Boston—over \$5,000,000—and during that same month the reserve bank at Boston was furnishing funds to the New York reserve bank—over \$3,500,000. Under such circumstances I think, you will see that the point you make as to Richmond is too trivial for further comment.

Then a few months after that I learned the Richmond bank had been also loaning direct to New York through the purchase of bills.

(Continuing reading:) Another criticism which you advanced was that in my letter of the 19th instant I should have mentioned the reserve carried by the member bank in New York City, which increased its bills payable in June last by something over \$2,000,000 about the same time that it made a loan of \$1,000,000 to a customer on stock collateral liberally margined, upon which it charged an extortionate commis-

sion and which, taking into consideration the payment of the loan within less than six months, and the allotment of participations in it to correspondent banks—at a greatly reduced commission—figured out an interest charge of about 200 per cent per annum on the net amount of that loan retained by the member bank. In fact, it was suggested in the board meeting that the member bank could have made the loan of \$1,000,000 by drawing down its reserves, if it cared to do so, without borrowing. In my opinion that suggestion is not even a palliative, as the bank by such action would have subjected itself to the double criticism of running below the reserve it is required by law to maintain and impairing its ability to make loans to other customers at decent rates for legitimate business, while at the same time exacting an unconscionable interest and commission from the unfortunate borrower upon whom the charge was imposed.

At to-day's conference complaint was made that I had not directed attention to the fact that the New York bank at times during the year had rediscounted loans for other banks.

I am advised that it is true that for a period of not over five-twelfths of the year 1920 the New York reserve bank was rediscounting for other reserve banks, but during the entire year the New York reserve bank was obtaining money from the other reserve banks as shown above. It was suggested by some one in the meeting to-day that perhaps the New York reserve bank was buying and furnishing to other reserve banks bills and acceptances as an accommodation to these lending banks rather than as an accommodation to the New York bank; but with the knowledge I happen to have of the situation I am not inclined to give very great weight to the theory.

Gov. — of one of the reserve banks, impressed me as particularly unhappy over what he construed as an implication in my letters to you, that the reserve bank of — had not kept itself properly informed as to the condition and operations of certain member banks in the — district to which it had been particularly liberal, if not "prodigal" in granting loans, or if it was informed had perhaps not acted with the wisdom and discretion expected of it. The senior officer of this particular member bank to which the — reserve bank was dispensing funds so lavishly had admitted to this office, as the record shows, and as you were promptly advised when this statement was made, that this same bank had itself been granting loans as he expressed it "with reckless prodigality." In discussing the use which this same bank made of the funds which they had borrowed from the reserve bank, Gov. —'s aim seemed to be to evade all responsibility so far as the reserve bank was concerned, apparently seeking to justify his evasion with the assertion that the chief national bank examiner did not give him notice of the conditions which existed in that bank. The chief examiner of the — district has furnished me a memorandum as to the extent to which the Federal reserve bank of — was placed on notice as to conditions in the bank referred to at the time of the examination in October, 1919. Supplementary to my letter to you of January 12, 1920, on this same subject I ask your attention to the following extracts from the memorandum furnished by this examiner.

Representative MILLS. Mr. Williams, do you think there is anything to be gained by going into this particular controversy which you had with the Federal Reserve Board and with the governor of this particular reserve bank?

Mr. WILLIAMS. It has a very direct bearing on the whole proposition in my judgment.

Representative MILLS. Don't you see it is perfectly impossible for the charges which you make and the facts which you seek to bring out to be met unless names are given and the particular institutions are dealt with, which is not at all the function of this commission?

Mr. WILLIAMS. Perhaps when I get through you will get more information on that point.

Representative MILLS. What is there to be gained by this commission going into the question of whether you disclosed all of the facts in your original examiner's report to the governor of this particular reserve bank, or whether the facts were not disclosed until seven or eight months later by a further examination and report which it did not stamp? How is that going to help this commission in dealing with the question of agricultural credits?

Mr. WILLIAMS. This matter deals with other subjects besides that?

Representative MILLS. Well, I am asking you as to that particular subject of controversy.

Mr. WILLIAMS. It is a matter of judgment, Congressman. You have your opinion.

Representative MILLS. And it is your honest opinion that you are contributing something of value to the subject of agricultural credits by asking this commission to investigate those particular transactions of a New York national bank?

Mr. WILLIAMS. May I answer that by stating that at yesterday's conference I presented a statement which showed that the New York, Chicago, and St. Louis national banks were being furnished with accommodations through bills payable and rediscounts amounting to about 24 per cent of their total loans and rediscounts, while at the same time the country national banks, whose loans and rediscounts were much larger, were being furnished with only about 10 per cent? I think the matters which I have been touching upon here have a very direct bearing upon the question of the fair and proper distribution of the reserves of the Federal reserve system among the large banks and the country banks and the question of supplying the necessary funds for agricultural credits.

Representative MILLS. I am not going into that question. I am asking you as to the particular transaction, which you are about to discuss—that particular controversy with reference to two reports made by your bank examiners, one made in 1919 and one in August, 1920.

Mr. WILLIAMS. I will say this, that for the protection of the bank the memorandum embodied in this letter relative to the bank's loans should be omitted, and I am not going to read that.

Representative MILLS. That is all I am questioning—if you omit that.

Mr. WILLIAMS. I do; I am omitting that memorandum. [Reading:]

These facts, showing the condition of the bank in 1919 at the time of examination, and the character of the business which the bank was then carrying on—

Representative TEN EYCK. Wait a minute. I would like to know whether that is a reference that might be useful for the commission whereby we could help the agricultural industry. I want to be assured that something is not being suppressed here that will not, indirectly or inadvertently, lessen the information that we desire. If we can be assured of that, I am willing to have it cut out.

The CHAIRMAN. The Chair has not seen the letter.

Mr. WILLIAMS. I would state that that deals more with the internal condition of a pretty large bank which has been, it is true, a beneficiary of loans through the reserve system.

Mr. TEN EYCK. That is perfectly satisfactory to me.

Mr. WILLIAMS (reading):

These facts, showing the condition of the bank in 1919 at the time of examination, and the character of the business which the bank was then carrying on were promptly placed before the——reserve bank in 1919 and in the light of subsequent events were clearly sufficient to put the Reserve bank on notice especially when the borrowings, which prior to October, 1919, had been intermittent became continuous and increased. From January 1, 1920, the bank was steadily borrowing large sums, the

monthly average of which increased from ——— million during January, 1920, to ——— million in May, 1920, and to about ——— million in September, 1920, nearly every month showing an increase over the preceding month.

The facts of these increasingly large borrowings were daily available, not to this bureau but to the ——— Federal reserve bank, and are presumed to have been or at least ought to have been the subject of careful consideration and discussion when the bank referred to requested, as it so frequently did, further advances.

It is also worthy of note that the examiner's report of October, 1919, which the ——— reserve bank had before it early in December, 1919, showed that the loans which this bank at that time was making to its chief executive officer and his immediate family and to ——— amounted to a sum which is more than twice the aggregate of all loans which this member bank was making as of the date of the November 15, 1920, call to all of its national bank correspondents throughout the entire country. These facts were furnished to and are in possession of the Federal reserve bank of ———.

Had the ——— reserve bank, with its intimate knowledge of the steady increase of this member bank's borrowings from the reserve bank, brought the matter to the attention of this office and suggested the advisability of an examination to get at the character of the loans or investments which made necessary these heavy drafts upon the reserve bank, an examination would have been made promptly.

The records show that the bank at the time of the August, 1920, examination, despite the warnings and admonitions of the Federal Reserve Board as to the restriction of credit for nonessentials and for speculative purposes, greatly increased their loans on highly speculative securities, such as the ——— loans and the loans (including the so-called dummy loan) of over \$5,000,000 to ——— who, besides being a director in the ——— Bank, was also, at the time of the 1919 examination, a director in the *Federal Reserve Bank of New York* ——— and its eligible paper on hand November 16, 1920 ———.

The CHAIRMAN. Was this the same bank that you referred to this morning and yesterday?

Mr. WILLIAMS. This is one of several banks which have been referred to particularly. This is not the State institution which has been referred to from time to time.

The CHAIRMAN. I know, but your testimony this morning referred to some bank that loaned a million dollars or three million dollars, or something of that kind.

Mr. WILLIAMS. This is not that bank.

The CHAIRMAN. This is another bank?

Mr. WILLIAMS. Yes. [Reading:]

as shown by this report of condition, a copy of which was sent to the reserve bank of ———, was less than ——— or scarcely ——— per cent of its deposits outstanding at that time. The chief examiner has also recently mentioned to me the case of another large bank in ——— whose heavy borrowings from the ——— bank had been criticized by him, but the president, I am told, proceeded to justify himself on the theory that his loans, although large, appeared to be satisfactory to the reserve bank, and indicated that that approval was enough for him.

At to-day's conference, as far as I could discover, no adequate or reasonable explanations were forthcoming from governor ——— or anyone else as to the generally unsatisfactory conditions along several lines, to which I felt it my duty to direct attention in my recent correspondence with you. The time of the meeting was largely taken up with trivialities and with ineffectual efforts to find some ground for directing criticism against the administration of this bureau, especially the chief examiner's office in ———. Much stress was laid upon the omission of the examining force to examine each of the national banks in New York City twice during the year.

In answer to this criticism, let me call your attention to the fact that while every bank in New York City did not receive two examinations during the year, the examinations which they did receive were particularly thorough, painstaking, and effective, and involved much additional time on the part of the examiners. The statements made with such emphasis and feeling at to-day's meeting, by someone, that none of the national banks in New York City were examined twice in the year 1920 is simply untrue; the records show that a considerable proportion of the national banking capital of that city was subjected to two thorough examinations in the year named.

I think that the large institution which was examined twice represented about 20 per cent of the banking capital of that city.

The CHAIRMAN. That large percentage of banking capital that you say was represented there—was that in one bank?

Mr. WILLIAMS. Yes; as I have just stated. [Reading:]

The unusual difficulties attending general business during the past year and the large number of insolvencies among business houses, especially during the past six months of the year, made the work of the examiners particularly exacting. In one large bank which was the subject of discussion to-day the examination was begun on August 27 last, and the difficulties which were experienced in tracing down various important transactions and operations delayed the completion of the investigation, which involved several special hearings accorded to five or six officers of the bank before the comptroller and a searching inquiry into many matters of vital importance to the bank.

The work upon this bureau during the year was increased by the nationalization of several large State banking institutions, involving some 15 or 20 branches, all operated as separate banks. The burden was further increased by the necessary absence for six months in South America of the chief examiner of the district on official work in examining the foreign branches of one of the large New York national banks. The working force of the office was required to meet additional strain by examinations made of certain large foreign banks and securities companies in this country not formerly required of this force.

That the banks in the New York district, however, were not neglected and did receive the attention which they needed from this bureau is indicated by the fact that since the beginning of my administration as Comptroller of the Currency, more than seven years ago, there has not been a single failure of any national bank in the Federal reserve district of New York which has involved one dollar's loss to any depositor.

Representative MILLS. Do you attribute that to your examinations, or to the soundness of the banking methods of those banks?

Mr. WILLIAMS. I think the examining methods have contributed very largely to the soundness of the banking methods.

Representative MILLS. But is not that very creditable to the soundness of the banks in New York City?

Mr. WILLIAMS. I think it is very creditable. I intended to make a reference here as to whether the medicine had worked or not—to an anecdote which is told of Lincoln, when certain critics complained that Gen. Grant was drinking entirely too much whisky. His reply, as you all recall, was, "You had better find out what kind of whisky he uses and go and buy some of it yourself." I think the kind of "liquor" which has been given to the banks in New York by our examiners seems to have had curative qualities.

Representative SUMNERS. Mr. Williams, in that connection then, so far as the general supervisory and administrative policies of the regional bank in that district are concerned, I understand you are not criticizing them?

Mr. WILLIAMS. Well, yes; I am frank to state that I do not think the New York Federal reserve bank has been administered to the best advantage of the district.

Representative SUMNERS. During the time these extraordinarily large loans you have referred to were being extended to certain institutions, were other institutions able to offer securities of equal soundness denied relatively the same accommodations by the bank?

Mr. WILLIAMS. I do not know of any privation among the banks in New York City. I do not recall any complaints of that sort. [Reading:]

The attention of the examining force from time to time was devoted to the work of saving a number of banks in different parts of the district, which, through mismanagement of their officials, had become involved in serious troubles; and I am happy to

report that these efforts were in every case successful. One particular instance with which the New York reserve bank officers are familiar, necessitated about two months of the almost undivided time of a resident New York examiner, who subsequently, during the absence of the chief examiner in South America, was the acting chief of the district and who gave this more urgent matter precedence over the work of examining the banks in New York City to which he had been especially assigned, and which otherwise he would have examined.

I think I should state at this time that in looking over Gov. Harding's testimony before the Banking and Currency Committee on June 1, I find that Gov. Harding has strayed into making a very inaccurate statement in connection with that particular institution. I shall probably, at the proper time, before the proper committee, correct some of the statements made by Gov. Harding at that time and give the facts in the case.

In this connection I think it is also pertinent to say that the examiners attached to the comptroller's bureau have sometimes been very much embarrassed and annoyed by interference from the examiners attached to the reserve system. On that point I wish to read just here a letter which I addressed to Gov. Harding, under date of August 13, 1921, before resuming the reading of this letter of February 26, 1921, as this letter refers to this particular subject of cooperation between national bank examiners and Federal reserve examiners in handling national banks.

The CHAIRMAN. I think we had better have one letter at a time.

Mr. WILLIAMS. Very good; I will read it after I get through with this. It refers to this particular point. [Reading:]

As you well know, the examination of the large New York City banks with their affiliations and ramifications including, as they do, foreign-exchange departments, which are practically separate entities, necessitates skilled examiners and assistants who have been specially trained for this work, and such examinations can not be satisfactorily made by untrained men. Examinations such as those that have been conducted in the New York banks, involving, in individual cases, sometimes two, three, or four months' time by examiners, are of infinitely more value than the pro forma examinations, however frequent, such as have been made heretofore. Although during the past year the banks in New York City did not all receive two detailed examinations from examiners, all were required to make and send to this office one more report of their condition and operations than was actually required by law or than they were ever required to make under any previous administration.

The tremendously increased efficiency of national bank examinations under the present comptrollership is evidenced not only by the diminished failures of banks under most trying conditions, but also by the voluntary action by clearing-house associations in a number of important cities which have given up their clearing-house examinations because of, as has been frankly stated, the highly efficient character of the examinations of our national bank examiners.

The governor of the reserve bank of New York at to-day's meeting of the board stated that the information contained in the confidential reports of national banks in the New York district were withheld from the New York reserve bank. I informed him in reply that his statement was incorrect, and I told him that the officers of the reserve bank were a long time ago specifically informed that they or their duly authorized representatives would be permitted access to the confidential reports of the examiners. I now confirm that statement, for I have personal knowledge that such authority was given them. Chief Examiner Smith, with whom I have conferred on the subject, also tells me that there is no foundation to Gov. Strong's statement above quoted. The chief examiner likewise informs me that although the reports of examination of New York banks are always sent to the Federal reserve bank under sealed cover and marked "confidential," he knows that these reports are consulted at their pleasure by other officers of the bank, and the chief examiner has from time to time discussed the contents of these reports with the officers of the bank, who have often had the reports before them when banks were being discussed with the chief examiner.

Gov. Strong also stated to the board that it was his understanding that the reports of examination were sent to the reserve bank upon the express understanding that they

should be accessible only to himself and to Chairman Jay. I asked him to repeat his statement, and upon his reiterating that such was the case I asked him, in your presence, whether he had been observing that confidence, to which he said he had been pledged and which he said had been made a condition of the bank's receiving the reports. With some hesitation, he admitted that he had not observed the agreement he claimed to exist.

I will also add that the cooperation and aid which this bureau and its examining force have extended to the reserve bank of New York is illustrative of our attitude in all other districts, and of this there is abundant evidence, although these other districts have been more appreciative of the cooperation given.

A letter from the chairman of the board of one of the leading and most successful Federal reserve banks, and himself a man of particularly high standing, which was received some time ago, said:

"* * * Permit me to say, without any attempt of praise or flattery, that on the rostrum and in private conference I have uniformly maintained that the present comptroller has done more to raise the standard of national banking in this country and to secure more efficient examinations of the banks under his jurisdiction than any of his predecessors. Not every administration of the comptroller's office has been so alert as the present one to correct abuses or to head off dangerous tendencies and practices."

You presided at to-day's conference to which I have referred, and Governor _____, of the _____ reserve bank, was present by invitation, as I understand it, to explain, if he could, criticisms of the Federal reserve bank of _____, which it is claimed are involved in my recent correspondence with you. I can not forbear expressing my amazement at what impressed me as being excessive forbearance on your part as chairman in permitting Governor _____ to assume the attitude which characterized his appearance before us. He challenged the correctness of official figures which are given to the public by the board, furnished me by the board, and, relying on their correctness, used by me in my correspondence with you. I refer particularly to the inter-reserve banks' dealings in bills discounted and acceptances as shown in the board's weekly reports from January 2, 1920, to January 28, 1921. I also understood him to state to the board with much vehemence that in the matter of giving out statements to the public in connection with the _____ bank's operations or this controversy he would do as he pleased, regardless of any views or instructions from the Reserve Board. His angry statement that he 'had no time to waste' on the discussion of certain subjects which were brought up in the conference also impressed me as being distinctly discourteous to the board and its members. However, such matters are merely incidental and concern you more than they do me.

My surprise at what impressed me as the meekness with which the defiance and asperities of governor _____ were received by the board, to which he is supposed to be subordinate, is increased by recollection of the rather different attitude taken toward myself, a member of the board, equal in authority with any other member who is not an officer. I have endeavored to be uniformly courteous and deferential while performing what seemed to me to be the high duty of calling attention to serious evils and dangers. It is a cause of deep regret to me that my well-meant labors in pointing out what seemed to me to be defects and weak places in our system and policies, and possible errors of administration, appear to have caused resentment rather than desire for information or purpose for reformation.

It also seems to me that more interest has been developed and expressed in the persons to whom my copies of my letters may have been given than in the question whether the statements were accurate and the errors indicated could be corrected if they existed. What I have said was in plain black and white and expressed as clearly as my ability permits. So far as I can recall, no progress has been made, if attempted, toward disproving what I have written.

Imperative demands for names of those to whom I have given facts and figures have no more to do with the real issue than have the nibblings at unimportant details and efforts to suggest that I have not performed my official duties promptly. The whole and only point is whether the assertions I have made are correct, and if they are correct, whether anything is to be done to right existing wrongs.

I see no excuse for ill temper. My assumption has been that we are mature men intrusted with vastly important duties and capable of discussing them, and our performance of them, and candidly and calmly. I have been somewhat disappointed to find myself regarded, apparently, as hostile to the board or some of its members, and the target for unjust criticisms and observations unhappily close to limits beyond which I can permit no man to go anywhere or under any conditions. Having this in mind I could but marvel at the submission of the board to Gov. _____'s angry and mutinous attitude and language. It appeared to me like that impatience of and disregard for constituted authority of which we hear so much as threatening the peace of society.

This aspect of the matter, however, is strictly your affair as presiding officer. I feel that I am within my rights and within the proprieties in alluding to it and remarking on the difference between the reception of my courteous representations supported by carefully gathered facts, and the uncomplaining acceptance of Gov. _____'s decidedly, and I judge intentional discourtesy and declarations of indifference to the board's directions and dignity.

Yours, very truly,

JOHN SKELTON WILLIAMS.

Representative MILLS. Well, now, Mr. Williams, the law requires two examinations a year, does it not?

Mr. WILLIAMS. Yes.

Representative MILLS. So that if two examinations were not made the law was violated?

Mr. WILLIAMS. The provisions of the law were not strictly complied with; a certain amount of reason was exercised. It may be that the water in a reservoir is intended to protect all portions of the city, but if there should be a big fire in one district we would use more of the water for that district, although it might not be its pro rata portion. I found that there were banks in certain parts of the country which demanded closer attention, and it was more important to give them two and sometimes three or four examinations than certain banks at which the examining force had already spent five months in making one examination that year.

Representative MILLS. You stated in that letter that you found unsatisfactory conditions in a particular institution in October, 1919, and you suggest that the New York Federal Reserve Bank should have requested you to make an examination of that institution, and had it done so—

Mr. WILLIAMS. If they desired it.

Representative MILLS. And had it done so you would have made an examination.

Mr. WILLIAMS. I think if I had been running the Federal Reserve Bank of New York and I had before me a copy of the October, 1919, examination of that bank, furnished me by the Comptroller of the Currency, and that particular bank should be increasing its borrowings from ten or twenty to fifty or one hundred millions, I would make it my duty to find out what the conditions were in that bank to which I was being asked to make these huge advances, whether the comptroller made the report or not.

Representative MILLS. You think you would have requested the comptroller to make another examination?

Mr. WILLIAMS. Or I should have ascertained from the bank whose report I had before me whether these matters of criticism which the comptroller had complained of were being rectified and corrected or whether things were getting worse. If I were handing out blocks of fifteen, twenty-five, or fifty millions of dollars, obviously I would.

Representative MILLS. When did you next examine this institution?

Mr. WILLIAMS. The next examination of the institution to which I assume you refer was begun in August, 1920.

Representative MILLS. And how often was it examined in 1920?

Mr. WILLIAMS. In 1920 the examination lasted about five months.

Representative MILLS. But it was only examined once?

Mr. WILLIAMS. Obviously, you could not examine it three times if every examination lasted five months.

Representative MILLS. I am asking you whether it was examined more than once.

Mr. WILLIAMS. It was examined for about five months in 1920.

Representative MILLS. It was examined once in 1920?

Mr. WILLIAMS. Continuously for five months.

Representative MILLS. And the law provides it shall be examined twice?

Mr. WILLIAMS. Yes.

Representative MILLS. And the comptroller's office found what it considered unsatisfactory conditions 10 months before?

Mr. WILLIAMS. It found conditions which it thought were sufficient to put the New York bank on guard if that bank should have occasion to call on them for excessive amounts of money or large loans.

Representative MILLS. But you, the very officer of the Government who is charged with the responsibility of examining national banks, did not reexamine that bank for 10 months?

Mr. WILLIAMS. Perfectly correct, and thoroughly justified in that course.

Representative MILLS. And you assume to criticize another officer for failing to request you to perform the duty with which he is charged?

Mr. WILLIAMS. No, not at all. The reserve bank which was dispensing these huge sums to that bank, if it had exercised what I regard as the proper prudence, would have informed itself as to whether these matters of criticism were being corrected, regardless of any examination and report by the comptroller's office.

Representative MILLS. Now, I want to go back to the question of that questionable loan, the 25 per cent loan which we have talked so much about. When was that loan first called to your attention?

Mr. WILLIAMS. You mean the loan referred to sometimes as the 200 per cent loan?

Representative MILLS. Yes, and which we finally decided was 25 per cent.

Mr. WILLIAMS. How do you make the 25 per cent?

Representative MILLS. Let us not go over that again. We have sufficiently identified the loan in our minds. When was that first called to your attention?

Mr. WILLIAMS. In the summer of 1920 some reference was made by the chief national bank examiner in New York to a loan which he had found in that bank upon which excessive rates of interest had been charged. I did not know what the details were, but the loan was mentioned to me as excessive.

Representative MILLS. Then it was first called to your attention in midsummer, 1920?

Mr. WILLIAMS. Yes. I thereupon sent out, in August, 1920, a questionnaire to that bank and to other banks in New York City, requesting them to give me information in regard to loans upon which excessive interest was charged. The table was quite a comprehensive one. It applied both to call loans and to discounts and time loans. It called upon the banks, as I recall, to state the amount of money upon which they were getting in excess of 12 per cent for each particular month of the year.

Now, I am perfectly willing to go into this in open session—

Representative MILLS. No; I do not want you to go into that whole matter; I just wanted to ask you when you first called the attention of the governor of the New York bank to this questionable transaction.

Mr. WILLIAMS. The committee is certainly entitled to the information. I hesitate a little about giving facts which may reflect upon individuals who claim that certain things were done without their full knowledge. I am perfectly willing to tell the committee the whole facts, if you want them.

Representative MILLS. I am asking you a very simple question. When did you first call this particular transaction to the attention of the governor of the New York reserve bank?

Mr. WILLIAMS. May I speak to the chairman a moment on this question?

(Mr. Williams thereupon conferred privately with the chairman and Representative Mills.)

Representative MILLS. I will withdraw the question.

Mr. WILLIAMS. I stated, Mr. Chairman, I was perfectly willing to go into this in executive session. I think the committee is entitled to know everything I know. I hesitate to proceed further, unless it is the desire of the committee, on that particular point.

The CHAIRMAN. The question is withdrawn.

Representative MILLS. Mr. Chairman, I offer in evidence a report prepared by a subcommittee of the Federal Reserve Board, and adopted by the board, in answer to Mr. Williams's letters of February 21 and 28, which I would like to have inserted in the record at this point.

The CHAIRMAN. Without objection, it will be inserted in the record.

(The report submitted by Representative Mills is here printed in full, as follows:)

FEBRUARY 28, 1921.

To the FEDERAL RESERVE BOARD:

The executive committee has carefully reviewed the various letters which have been addressed by the Comptroller of the Currency during the past 12 months to the Governor of the Federal Reserve Board, all of which letters were brought promptly upon receipt to the attention of the board and were given such consideration as they seemed to merit. The errors of statement and the erroneous inferences and conclusions have already been pointed out in replies made to these letters and in discussions with the comptroller at board meetings and need not be reverted to in this report.

An analysis of the comptroller's letters and of the facts brought out at recent meetings of the board at which the comptroller was present reveals, however, a very serious situation which the Federal Reserve Board can not ignore. The Comptroller of the Currency admits that he has violated the laws of the United States in not examining a considerable number of national banks, including banks in New York City, at least twice in each calendar year, as required by section 5240, Revised Statutes, United States. In one case cited by the comptroller in his letters of December 28, 1920, January 12, 1921, and February 19, 1921, had he obeyed the law conditions which he states are very serious might have been in a large measure avoided. The comptroller has attempted to shift the responsibility for these conditions party upon the Federal Reserve Board and more particularly upon the Federal reserve bank of New York, and his claim that the Federal reserve bank of New York should have corrected the conditions complained of through its power to refuse discount accommodations falls to the ground when the facts, even as stated by him, are examined.

In the case of bank in question the comptroller's own examiner reported to him in October, 1919, certain conditions and transactions which, while perhaps not in direct violation of law, yet were not consistent with good banking practice and clearly required careful scrutiny from time to time of the bank's methods of doing business. These criticisms were not contained in the regular report of the examiner, copy of which was furnished the Federal reserve bank of New York, but were inserted in the so-called "yellow sheet," a supplementary and confidential report. This "yellow sheet" was never sent to the Federal reserve bank of New York, nor did the report

which was sent point out the conditions of which the comptroller now complains. This examination was made on October 3, 1919.

It is pertinent to inquire in what manner did the comptroller discharge his plain duty with respect to this bank. Did he place it upon the special list of frequent examinations? No. Did he follow up the criticisms of his examiner by making an early examination during the following year, 1920? No. Did he call the attention of the Federal Reserve Board or of the Federal reserve bank of New York to the conditions existing in this particular institution? No. On the contrary, he failed to make another examination until August 27, 1920, an interval of more than 10 months, and in the report of this second examination his examiner stated to him that the conditions previously complained of had grown steadily worse during the interval. Did the comptroller at once call this serious condition of affairs to the attention of the Federal Reserve Board or to the Federal reserve bank of New York? No. He said nothing about it to members of the Federal Reserve Board until December, 1920, and the records show that the report of August 27, 1920, was not sent to the Federal reserve bank of New York until January 7, 1921, after a lapse of more than four months.

The comptroller now claims that the Federal reserve bank of New York should itself have corrected these serious conditions, of which it had never been informed and of which it had never been put on notice, by an arbitrary exercise of its power to refuse discounts to the bank in question. Such a plea of confession and avoidance scarcely deserves being dignified by a reply. But this is not all—under the laws of the United States, as above pointed out, the Comptroller of the Currency is required to have every national bank examined at least twice in each calendar year (and oftener if considered necessary). In the case of the bank in question the comptroller violated this law and in fact examined this bank but once during the year 1920. An examination made early in the year 1920 would quickly have revealed that the conditions complained of in October, 1919, were becoming worse, and presumably they could have been instantly corrected.

In his letter addressed to the board under date of February 19, 1921, the comptroller calls attention to a loan which was made by another national bank in New York City during the month of June last, and points out that this bank, which was borrowing a moderate amount from the Federal reserve bank of New York, made the loan at a very exorbitant rate of interest, if the commission charged be included as an interest charge. The comptroller did not, however, bring this matter to the attention of the Federal Reserve Board until after the loan had been repaid and, in fact, not until his letter of February 19, 1921, was written. It develops that the Federal reserve bank of New York was not advised of this circumstance by the Comptroller of the Currency until the governor of that bank heard the comptroller refer to it in a discussion which was had in the board room on Saturday, February 26, 1921, yet the comptroller takes the position that the Federal reserve bank of New York was negligent in not knowing of this transaction and that it should have prevented it without any knowledge what ever of it by the exercise of its power to refuse discount accommodations to the bank.

The responsibility for these conditions, therefore, is directly upon the Comptroller of the Currency and has never for a moment been shifted from his shoulders. He has largely contributed to these serious conditions by his failure to perform properly the duties of his office and by his direct violation of the laws of the United States. In his greed for statistical information he has exercised his powers to the limit, if, indeed, he has not transcended them, but he has deliberately failed to obtain and to report facts of the highest importance regarding the credits and operating methods of certain national banks. The only excuse for his failure to carry out the law which has been offered by him is that his chief examiner at New York City had to be sent to South America and that his examining force was overworked and that he could not make two examinations of the bank in question.

Your committee is of the opinion that the comptroller should have at once increased his examining force, and it is certain that the board, which has never failed to cooperate with him, would undoubtedly have given prompt approval to any such request in order that these serious conditions might have been promptly remedied. Further investigation has, moreover, revealed the astounding fact that of all the national banks in New York City only 17 were examined twice during the year 1919, and that apparently not more than one national bank in New York City has been examined twice during the year 1920, as required by law, and that bank is not the one whose condition is made the subject of complaint by the comptroller in his letters to the board. The Federal Reserve Board has always acted promptly and favorably upon requests made by the Comptroller of the Currency for additional examiners.

As bearing upon the question of the examination of other banks than those in New York City, a letter recently received from the Federal reserve agent at Chicago contains animadversions upon the value of the reports of examination of national banks in the Chicago Federal reserve district, and your committee recommends that an

immediate investigation be undertaken in all Federal reserve districts as to the thoroughness and efficiency of national bank examinations.

Whatever may be the duty or responsibility of Federal reserve banks as to regulating the internal affairs and banking practices of the national banks through the power to refuse discounts, as claimed by the comptroller—and as to this your committee may later file a report based upon its consideration of this subject—it is evidence that such a power can not be exercised effectively without the most thorough cooperation of the comptroller in order that the Federal reserve banks may know all that he knows. This is a condition which most certainly does not exist at the present time. The abstracts of reports sent by the comptroller to Federal reserve banks most certainly do not reveal all the comptroller knows as to the condition of the banks examined, and the Federal reserve banks could certainly not be charged with responsibility for the internal conditions of the national banks unless and until the so-called "yellow sheet" is transmitted promptly and regularly to the Federal reserve banks, and until examinations are made as frequently as the law requires.

Your committee has already cited one conspicuous case where important information has been withheld from the Federal reserve bank of New York by the Comptroller of the Currency. It has cited other cases involving practically all of the national banks in New York City when the comptroller deliberately put it out of the power of the Federal reserve banks of New York with its present examining force to secure much needed information as to banking conditions and practices by failing to observe the laws of the United States which require not less than two examinations in each calendar year. Only recently, as above stated, the Federal Reserve Board has received a letter from the Federal reserve agent at Chicago seriously impugning the efficiency of examinations made by the national bank examiners in that district. If thorough investigation as above recommended be made of the methods and efficiency of national bank examinations and of the value of the reports of these examinations, and it be found that the charges preferred are well founded, it is the opinion of your committee that it will be necessary to institute regular examinations by the Federal reserve banks themselves, thus duplicating the examinations now made by national bank examiners under the direction of the Comptroller of the Currency. Such a duplication of examinations would be very expensive and would seriously interfere in many cases with the routine operations of the national banks and inconvenience their customers and the public, and it is believed that Congress would quickly intervene and wipe out all examinations made by direction of the Comptroller of the Currency or that it would at least place the whole matter of examinations exclusively under the control and jurisdiction of the Federal Reserve Board and the Federal reserve banks. In such circumstances the Federal reserve banks being both lenders and examiners, would always know what the comptroller now knows but what he does not always reveal—the conditions and practices of the national banks—and could govern themselves accordingly.

The foregoing report was submitted by your committee to the Federal Reserve Board at the meeting held on the afternoon of February 28, and was read by its chairman to the board at that meeting. In view of the statement of the Comptroller of the Currency that his letter of February 26, 1921, which was delivered by the comptroller to the secretary of the board at the same meeting, answered in detail every criticism contained in the foregoing report of the committee, the report was referred back to the committee for such revision as might be deemed necessary in view of the statements contained in the comptroller's letter above referred to.

Your committee by unanimous vote now resubmits its report to the board, with the statement that it has examined carefully the letter of the comptroller, dated February 26, 1921, and that it finds nothing in the comptroller's letter to justify any change therein. On the contrary, it feels that this letter confirms the statements made in the report.

In the comptroller's letter of February 26 he called attention to some of the remarks made by the national-bank examiner in his report of the examination made of the ——— National Bank of New York, as of October, 3, 1919, which statements he claims were clearly sufficient to put the Federal reserve bank on notice, and then proceeds, on page 5, to set up the extraordinary defense that if the Federal reserve bank had asked him to have another examination made during the early part of the year 1920 that the examination would have been made promptly. This is a clear admission (1) that his examining force was adequate to make any necessary examinations, and (2) that he did not consider that the report of the examination of October 3, 1919, which he claimed should have been a danger signal for the Federal Reserve Bank of New York, disclosed conditions that required him to have another examination made at a time when it should have been made if the law was to be complied with.

It appears to the committee that the comptroller is also evasive in his statement on page 6 that "a considerable proportion of the national banking capital of New York City was subjected to two examinations during the year 1920." He says that "the statements made by some one" that none were examined twice in 1920 "is simply untrue," and defends his charge of untruth by stating that "a considerable proportion" of the national banking capital was examined twice. The facts as ascertained by your committee are as follows: The chairman of the board of directors of the Federal Reserve Bank of New York states, in a letter dated February 16, 1921, that the Federal Reserve Bank of New York received reports of two examinations of only 17 of the 29 national banks in the Borough of Manhattan during the year 1919, and that during the year 1920 it did not receive a second report of any of these banks. He states, further, that he understands that a second examination of one of the larger national banks in the Borough of Manhattan was undertaken in the late autumn, but that the report of this examination has not yet been filed with the Federal Reserve Bank of New York.

As has already been stated, the only excuse which has been offered by the comptroller for his failure to have two examinations made of the particular national bank in New York City whose condition is the basis of his criticism of the Federal Reserve Bank of New York is that his chief national-bank examiner in New York City had to be sent to South America and that his examining force was so overworked that two examinations of the bank in question could not be made.

In his letter of February 26, on page 6, the comptroller again refers "to the necessary absence for six months in South America of the chief examiner" of the New York Federal reserve district. Let us examine further into the facts. The —— National Bank was examined as of October 3, 1919. Certain conditions and tendencies were revealed as a result of this examination which the comptroller now thinks should have put the Federal reserve bank on notice. The chief national-bank examiner of the New York district did not sail for South America until June 26, 1920. (See letter of Comptroller of the Currency to the board, dated June 22, asking for an increase of salary for Messrs. Smith and Mulloney to cover increased expenses while in South America.) Your committee is at a loss to understand why the examination of this particular bank was not made in March or April, 1920, which would have given the chief national-bank examiner an opportunity of completing the examination before sailing for South America on June 26.

It also develops that the only examination of the —— National Bank which was made during the year 1920 was of August 27, 1920. The chief national-bank examiner of the New York district did not return to New York from his South American trip until after the 1st of January, 1921. It is evident, therefore, that the absence of the chief national-bank examiner did not interfere with the examination of this bank beginning August 27. Thus it appears that no examination of this bank was made during the first half of the year 1920, while the chief examiner was in New York, that an examination was made during the absence of the chief examiner, and yet the claim is set up that it was impossible to make two examinations because of the examiner's absence during the last half of the year and that an examination would have been made promptly at any time had the Federal Reserve Bank of New York requested it.

Your committee desires to point out, further, that no limitations are placed by law upon the power of the Comptroller of the Currency to employ an adequate examining force. National-bank examiners are not paid out of specific appropriations made by Congress. They are appointed by the comptroller upon the approval of the Secretary of the Treasury and their salaries are approved by the Federal Reserve Board. The board has never failed to approve the recommendations which have been made by the comptroller for the compensation of his national-bank examiners, and the responsibility for neglect or failure to secure an adequate number of examiners in order that the plain requirements of the law as to frequency of examinations may be complied with rests solely upon the Comptroller of the Currency.

In conclusion, your committee desires to express its regret at the necessity of filing this report, but when an ex officio member of the board criticizes the board and one of the Federal reserve banks under its supervision for the existence of serious conditions in a member bank under his own supervision and seeks to hold the Federal Reserve Board and the Federal reserve bank solely responsible therefor, it appears to the committee that it is the solemn duty of the board to point out clearly that the sole responsibility did and does rest upon the Comptroller of the Currency for his failure to obey the law.

W. P. G. HARDING.
EDMUND PLATT.
D. C. WILLS.

I hereby certify that the foregoing report was brought up for action at a regular meeting of the Federal Reserve Board, held on Wednesday, March 2, 1921, at which all members of the board were present except the Secretary of the Treasury.

The report was adopted and order filed by vote of all members present, except the Comptroller of the Currency, who refrained from voting.

W. W. HOXTON,
Secretary of Federal Reserve Board.

The CHAIRMAN. Proceed, Mr. Williams.

Mr. WILLIAMS. While reading the letter which I read last, there was some reference to the aid which was given by certain Federal reserve examiners in straightening out the affairs of a certain small member bank in New York State, in which the credit for the work done was apparently given to the Federal reserve bank and its examiner in New York. I shall give the facts in that case at some other time, if the committee will permit me, but in that connection I will read this letter which I wrote to Gov. Harding on January 13, 1921, relating to the interference of the reserve banks in the Northwest with two country national banks in that section [reading]:

WASHINGTON, January 13, 1921.

MY DEAR GOVERNOR: I inclose with this a letter received from Chief National Bank Examiner BROWN of the Minneapolis district, dated December 10, which explains itself.

It appears that Oscar A. Carlson, apparently an examiner for the Federal reserve bank of Minneapolis, has taken upon himself the responsibility of closing two national banks in that district, wholly without authority so far as my information goes. Chief National Bank Examiner Brown, whose letter I inclose, is one of the ablest, most experienced, and most reliable men in our service. Chief Examiner Brown advises that in a letter from National Bank Examiner Buckles, the latter writes as follows:

"I am told by the officers of the bank that Carlson suggested closing the bank and one of the officers suggested that they should communicate with me first, to which Carlson is reported to have responded, 'To hell with Buckles; I will look after that.'"

I respectfully ask that this matter be investigated immediately by the board. Perhaps it may be well to have Mr. Carlson report to Washington. Chief Examiner Brown will be here next week.

This office has been doing everything humanly possible to maintain the solvency of all national banks, to aid them in every way, and to prevent unnecessary suspensions. If this employee of the reserve bank of Minneapolis has assumed to usurp the authority of the directors of the bank and of this office—and it seems from his own written statement to the chief examiner that he has done so, for in his letter to Chief examiner Brown he says, "I found it necessary to close up the banks at Opheim and Cut Bank,"—I am sure you will agree with me that prompt and vigorous action on the part of the board is called for.

Sincerely, yours,

JOHN SKELTON WILLIAMS.

Hon. W. P. G. HARDING,
Governor Federal Reserve Board.

I retired from the office of Comptroller of the Currency before I received a complete report on that incident, but I think that is pertinent in connection with the other incident to which I referred.

I shall now read, with your permission, Mr. Chairman, a letter which I addressed under date of March 26, 1921, to Gov. Harding [reading]:

RICHMOND, VA., March 26, 1921.

Hon. W. P. G. HARDING,
Governor Federal Reserve Board, Washington.

DEAR GOVERNOR HARDING: In my letters to you of October 18, December 28, January 17, February 19, and February 26, 1921, written in my then official capacity as Comptroller of the Currency, I directed your attention and that of the Federal Reserve Board to the dangers of certain then existing policies and regulations of the Federal Reserve Board and of the Federal reserve banks, and I urged that prompt steps be taken to revise policies then in force and to remedy ills and mitigate and curb

suffering which, influenced more or less by the actions and rulings of the board, had become extensive and was spreading.

My several letters referred to were clear, plain, and unequivocal, and demanded action. The statement and arguments in my lengthy letter of January 17, 1921, and subsequent letters, as well as in a number of previous letters, are still unanswered, and I do not believe you can truthfully refute or explain away the important statements and complaints which I have thus laid before you. You and your other colleagues on the board, instead of addressing yourselves to a correction of the trouble which had become an active cause of intense suffering among the masses of the people, now proceed, as I stated in my letter of March 2 to evade the main issue and try to cover your retreat by attacking my administration of the comptroller's bureau.

Even there your main or only basis of attack appears to be the charge, from my standpoint flimsy and fallacious, that the examining force under my supervision did not make as many examinations of national banks in the year 1920 as the law directed. Your charge has been, I believe, completely answered in my letter to you of February 26 and in my oral statements before the board, in which I had the satisfaction of showing you that, although for good reasons, during the year to which you referred the number of bank examinations made was a small fraction—perhaps 10 per cent—less than called for by a strict interpretation of the law, yet the comptroller's bureau actually obtained from the banks under its supervision—examined and abstracted about 8,000 more reports of their condition—about 20 per cent more than the law required, or than were ever gotten under any previous administration.

Despite your carping criticism, the official figures show that in safety and immunity from bank failure, in growth and in net earnings, the record of the banks for the seven years they have been under my supervision has been by far the best since the beginning of the national banking system 57 years ago.

I can not feel that retirement from office relieves me of duty, incumbent on every citizen, of exposing evils and dangers in the administration of our Government of which I happen to know and entering my protest against continuance of them. Nor does it relieve me from the duty or estop me from the right of defending my record as an official, of which I am proud and believe I am entitled to be.

I can only regret, on their own account, that members of the board whom I had held in sincere regard should join in approving a report which is not only patently unjust but is built upon flimsy pretexts, the shallowness of which were, as I have stated, fully exposed and explained by me in letters and oral statements before that report was voted on by the board. This is proved by the record of the committee's meetings, which minutes, I am informed, the board has ordered to be kept secret.

The report I referred to here is, I assume, the report which Congressman Mills has placed in the record, and which I am pleased to have in the record, as it is answered. I would state also that that report was also answered by me orally before the board at the meeting, I believe, at which it was adopted, a stenographer being present and supposed to have taken down a verbatim report of the proceedings. Gov. Harding, before the stenographer was first brought in, assured the committee that copies of that report would be furnished to the two retiring members of the board—Mr. Wills and myself. I understand that Gov. Harding has since then claimed that he did not give that assurance, and at any rate he has failed to respond to my request that a copy of that report be furnished.

The CHAIRMAN. In that connection, let me ask you if the board did not subsequently take action which, in effect at least, prohibited giving copies of this report to members of the board or anybody else.

Mr. WILLIAMS. When I raised the question at a subsequent meeting that the report had been promised one or more members of the board, it did raise the point which you refer to, that the board could control it despite the governor's promise, or whatever promise he might have made.

Representative TEN EYCK. I would like to know what report Mr. Williams says was denied.

Mr. WILLIAMS. That was a stenographic report of the meeting of the Federal Reserve Board on February 28, 1921, a copy of which I several times requested and should still like to have.

Representative TEN EYCK. Mr. Mills, when did you file that?

Representative MILLS. I have not filed any such report.

Mr. WILLIAMS. That is not the report. I referred to the committee's report as the one which you filed. I would like to have the stenographic report of the reserve board's meeting on February 28.

Representative TEN EYCK. What I am getting at, Mr. Williams, is this: I may not have been present, but I do not now recall that Mr. Mills made a request to file a report.

Mr. WILLIAMS. Just a moment ago he put in a report.

The CHAIRMAN. Mr. Mills asked to have inserted in the record a report of a committee of the Federal Reserve Board with reference to difficulties which arose with respect to examinations and the furnishing of the reports of those examinations to the Federal Reserve Board.

Representative TEN EYCK. I thought that was the report you referred to this morning that was withheld for a while.

Mr. WILLIAMS. Continuing the letter of March 26, 1921:

The far more serious complaints touching board policies and reserve-bank supervision and management which it became my duty to lay before the board in writing never have been refuted or explained away by you or by the board, either orally or in writing, and stand essentially unchallenged.

In my letter to you of February 26, 1921, which was read before the board in my presence, I said:

"At to-day's meeting of the board you claimed that there were certain inaccuracies in my letter to you of the 19th instant, and I informed you I would be happy to have you advise me promptly of any errors or mistakes that you might think you have discovered in that communication, and that I should be most pleased to correct them if your contentions could be sustained. I now again urge that you point out to me promptly all inaccuracies, if any there be, which you may think exist."

I again call upon you to indicate to me any inaccuracies which you may suppose to exist in any communication which you have received from me. The official records, as a matter of fact, will prove that in registering my dissent as to unwise policies I have, from consideration for my former colleagues, been perhaps too conservative and have understated rather than overstated the matters complained of.

It was with genuine regret that I found it necessary to differ on important matters with my colleagues on the board, but I have never been able to indorse or accept the doctrine quoted, seemingly with a large degree of approval, during a debate on board policies several months ago by a certain eminent member of the board at that time, that it was "more important to be unanimous than right."

In my letter to you of March 2 I asked that you furnish me with a transcript of the stenographic report of our meeting of March 2 containing my statement before the board, in which I pointed out glaring errors contained in the report of your committee, which report, I understand, was submitted and approved at the board meeting of March 2, the vote approving same having been passed after I left the meeting.

You replied under date of March 3, saying that I "will be accorded exactly the same privileges with respect to the stenographic minutes of yesterday's proceeding that will be given to any other member of the board." You also stated "the board, however, adhered to the position it took yesterday, that no copies or transcripts of the proceedings or any part of them should be given out." I ask that you inform me precisely what the "privileges" are to which you refer, which you say will be accorded to me to the same extent they are accorded to other members.

At the board meeting in February at which the official stenographer was first brought in—I think it was the meeting of February 26—

I now think it was the 28th, however [reading]—

the clear and definite understanding upon which the meeting proceeded was that each member of the board, including the two members whose membership on the board would soon cease—Mr. Wills and myself—would be furnished with a verbatim

copy of the stenographic report of the meeting. As soon as it was agreed by resolution, passed unanimously, that the minutes should be stenographically reported, and before we proceeded to the subject for which the meeting had been called, you definitely stated to the board that the two retiring members should be furnished with a copy of the transcript, and upon that assurance we went ahead. All members of the board except the Secretary of the Treasury were present and by their silence acquiesced in your statement. Your promise having thus been accepted without objection by anyone, I can not imagine that you or these gentlemen who accepted and united in that promise would deliberately disregard and annul it. It would have been competent for you at any time during the meeting to move that the meeting adjourn or that a further stenographic report of the meeting be suspended, but I respectfully submit that your promise, accepted in good faith, that you would furnish the report to the retiring members, is essentially binding in honor and in morals, and I would dislike to suppose that you would disregard your obligation as a mere "scrap of paper."

I note your statement that it probably will be two or three weeks from the date of your letter, March 3, before the work of transcribing the stenographer's notes will be completed. The delay is rather unusual, and it is now more than three weeks since March 3, but I can not believe that you would finally fail or refuse to see to the fulfillment of the promise.

At one of the last board meetings which I attended you declared that you regarded my recent letters remonstrating against board policies and urging changes, as "attacks" upon the board, and you angrily threatened, to quote the language employed, to resort to the use of "poison gas" in the event I should continue what you construed as my "attacks."

The CHAIRMAN. Mr. Williams, I hardly think that is material or of any particular interest. I am perfectly willing that you should read any part of the letter that does not have some bearing—

Gov. HARDING. Mr. Chairman, if personalities are to enter into this thing I demand that my reply be filed. I am unwilling that these things should come up before this audience and be disseminated over the country, because there are distinctly two sides to it. I deny that I ever made any such promise. It has been denied before. If these personalities are going into this record I want my reply to go into the record.

Mr. WILLIAMS. Mr. Chairman, I am going to ask permission to read Gov. Harding's reply of April 4, 1921. I have it before me and intend to read it in.

The CHAIRMAN. I suggest that the commission is not particularly interested in that phase of the proposition.

Mr. WILLIAMS. Mr. Chairman, I was reading there a statement where I stated that Gov. Harding had threatened, in the event I should continue my attacks, to use poison gas. He denies, as I understand it, something else—

Gov. HARDING. I deny that, too, Mr. Chairman. What I said, and it will be substantiated by every member of the Federal Reserve Board, was that I was not after trouble or warfare. I wanted to fight these things out and work out the problem before us. I told Mr. Williams that I was not afraid of him, that if he wanted to fight I would fight him; that I would fight fair if he wanted to himself, but if he wanted to use poison gas I would fight him that way. That can be substantiated by six members of the Federal Reserve Board.

The CHAIRMAN. Proceed, Mr. Williams.

Mr. WILLIAMS (reading):

At one of the last board meetings which I attended you declared that you regarded my recent letters remonstrating against board policies and urging changes, as "attacks" upon the board, and you angrily threatened, to quote the language you employed, to resort to the use of "poison gas" in the event I should continue what you construed as my "attacks." I promptly informed you that as far as I and my administration of the comptroller's office were concerned or my relationship with the board I had nothing

whatsoever to conceal, and that you were quite at liberty to go ahead and publish anything you pleased so long as you confined yourself to the truth. In fact, I rather urged publicity for our correspondence. I also informed you, in the presence of the board, that whatever methods of attack you might adopt I should certainly not use "poison gas" or any other plan or method not consistent with honor and fair play, and I should not expect you to adopt unworthy methods of attack. However, I am of course abundantly ready for any attacks from you or anyone else, whatever form they may take; and your threat of "poison gas," etc., impresses me merely as an evidence of desperation on your part, which I beg to assure you gives me not the least annoyance or concern. My only regret will be the damaging reaction on you.

During the discussion in the board you insinuated with some gusto that you might desire to call the attention of the public to the dreadful fact that the national banks in Washington, including a particular bank in that city which, in the past, had been conspicuous for its disregard of the provisions of the national bank act and the regulations of the comptroller's office, practically all received two examinations during the past year, while a number of New York City national banks were examined only once, and you also stated, in a significant tone, that the national bank in Washington, above referred to, had been requested by the bank examiner to furnish a list of its loans to "public officials." I do not know why you should assume to assail the action of the examiner in requesting such a list as he did during the progress of his examination, openly, of the vice president of the bank with whom, it has been suggested, you have been, directly or indirectly, conniving in your eager but futile efforts to find something for which to criticize this bureau. You know very well, or are supposed to know, that the Federal reserve act expressly prohibits national banks from making loans to national-bank examiners. You also know, or had the means of knowing, that the national bank in question prior to the passage of the reserve act had not only made numerous loans to national-bank examiners, but had also made many loans to various other "public officials" connected with the Treasury Department and others, which, to express it most mildly, were of doubtful propriety, if not positively wrong, including loans to Assistant Secretaries of the Treasury and to one or more former Comptrollers of the Currency, under whose supervision the bank operated. Under these circumstances it was not only proper but the duty of the bank examiner, in the course of his examination, to determine whether or not improper loans, now expressly forbidden by statute, had ceased.

It is worthy of note in this connection that the particular bank in Washington which seems to be the subject of such solicitude on your part was during many months in 1920 borrowing millions of dollars of money from the Federal reserve system at 6 per cent or less, at the same time that it was lending millions in Wall Street at the high interest rates which prevailed there. The excuse that the money borrowed from the reserve bank was needed to buy United States certificates is too palpable to need comment in view of the amount of demand Wall Street loans held by the bank, at that very time, on which it was collecting fancy rates of interest.

Your criticism that my examinations of New York banks were too infrequent and lax is sufficiently answered by the record, which shows that among the millions of depositors in the national banks in the New York district not one of them lost a dollar by the failure of any national bank in that entire district during the seven years that I held the office of Comptroller of the Currency.

In connection with the discussion, or threat, or announcement, from you, referred to earlier in this letter, I can not but observe a statement in a New York newspaper a few days ago, since my resignation from the Federal Reserve Board, to the effect that a plan is on foot to bring about the disestablishment or removal of the Federal Reserve Bank of Richmond.

I do not know what support such a movement may receive from the Reserve Board.

As a member of the original organization committee, and as a member of the Federal Reserve Board for more than seven years, I take the liberty of stating at this time that in my judgment the experience of the past seven years abundantly vindicates the action of that committee in establishing the bank in Richmond. Furthermore, the record will show that the administration of the Federal reserve bank of Richmond has been one of the most creditable of any of the reserve banks; and in the judgment of the best informed men in the section which the bank is serving so efficiently, its removal would be indefensible.

Allow me also here to confirm the views which I expressed at the meeting of our board several weeks ago in opposition to the suggestion that you offered informally on that occasion, with your apparent approval, looking to the disestablishment of the Federal reserve banks of Atlanta and of Dallas. I am convinced that the proposition to close those banks and to attach the sixth and eleventh districts to other districts would work a grievous and unpardonable injury to a vast section of our coun-

try, and furthermore that the agitation of such a plan at this time will result only in harm.

The 12 Federal reserve banks as at present established have, I believe, vindicated fully their right to exist, and if properly supervised and administered they can be of untold value to our country and to the world, both now and in the years to come. I earnestly hope that they may never become the footballs of politics or the instrumentalities of unscrupulous or designing interests of any kind.

I trust any effort to close up reserve banks and centralize further the money of the country may be as abortive now as were the efforts to this end in 1915, in which I vividly recall you joined, and which attempt was frustrated finally by action of the White House and of the Attorney General. It is far more important at this time to provide the reserve banks which we have with wise supervision and management and to have them function efficiently and adequately than it is to agitate for their disestablishment, removal, or increase.

In view of the accumulated reserves in the 12 Federal reserve banks, whose unused lending power at this time, I understand, is about \$1,500,000,000, or ten times as much as the national banks of the United States ever borrowed on bills payable or rediscounts at any time prior to 1914, and the pressing need for funds for legitimate business from so many sections of the country, I hope the board may, without further delay, relax its credit restrictions and make it easier for the farmers, merchants, miners, manufacturers, and other business men to obtain their legitimate requirements, the bank accommodations upon which our progress and prosperity so largely depend. As the records will show, I have been urging upon the board for many months past the necessity for some relaxation.

It is pertinent here to remind you of my letter to you of January 17, 1921, in which, replying to your blunt suggestion that what had happened was simply "a balloon" had been "punctured" and that the gas or hot air had thereby escaped, I said:

"Instead of driving a hole into the bag and crashing to earth in wreck and ruin, we should handle the valve rope and ballast with anxious and ever alert care to effect a safe landing on good and solid ground. Our solemn duty, as of course you realize, is to conduct the operation regardless of political, sectional, or individual feelings, of pride, of opinion, prejudices, preferences, and even of precedent and hitherto accepted rules and forms."

These remonstrances were apparently unheeded by the board.

A month later, in a letter in which I protested against practices and policies which I believed were not only injurious to the public but were bringing discredit upon the board itself, I said, *inter alia*:

"I have shown you, Gov. Harding, in this letter and other recent letters, that the reserve bank of New York has been lending funds at 5 per cent to 7 per cent per annum to member banks which have then passed them on to customers, at times at such outrageous rates as 50 per cent to 75 per cent per annum or more, while the reserve system in other parts of the country has actually charged member banks, in exceptional cases, for the use of money, sorely needed by farmers and business men, as high as 50 per cent and 75 per cent per annum, while the member banks paying these exorbitant rates to the reserve bank are prohibited by law from charging their customers over 8 per cent."

The gross inequalities in the charges made by the Federal reserve banks under the regulations approved by the Federal Reserve Board are well illustrated in comparing the loans made to a small member bank in the Philadelphia district with a capital of \$25,000, which was allowed to borrow more than eight times its "normal" or "basic line" at 6 per cent per annum. With the case of a small member bank in Alabama, also with \$25,000 capital, which was "accommodated" during the last two weeks in September, 1920, with loans aggregating about \$112,000, sorely needed in connection with the movement of the cotton crop, and was charged for a portion of the money more than 80 per cent per annum, or an average interest rate for the two weeks' period of about 45 per cent per annum for the \$112,000.

The interest paid out to its reserve bank in excess of 6 per cent per annum, by this little member bank for funds borrowed to help its customers for those two weeks, amounted to more than a whole year's dividend at 7 per cent on the bank's entire capital stock.

In my opinion, under all the circumstances, the Federal reserve banks should be required to refund to their member banks all interest which they have collected from them in excess of 7 per cent per annum—if in fact they should not refund all interest charged in excess of 6 per cent per annum. It is my understanding that the Federal reserve banks of Richmond, Philadelphia, and San Francisco have never charged their member banks for interest more than 6 per cent per annum. This I consider distinctly creditable to the management of these three reserve banks.

Seven per cent, I believe, is about as high as has been charged during the past year by the central banks of issue in any civilized country; I can see no justification for our exceeding that rate here, where money is supposed to be more plentiful than anywhere else on earth, especially in view of the huge earnings reported by all of the reserve banks, whose profits for the past year were far in excess of 100 per cent on their paid in capital.

And I can see no justification for the action of the board in voting down the resolution offered by me some weeks ago to prevent the imposition by reserve banks upon member banks of interest in any case in excess of 10 per cent, or for the board's rejection of my further proposition to limit, for the time being, the rates charged by all reserve banks to 6 per cent—the maximum rates ever charged by Philadelphia, Richmond, and San Francisco. The record of the three banks referred to prove that inflation, so far as the reserve system is concerned, can be curbed by sound and proper management without resort to the absurd interest rates imposed by reserve banks under authority of the board, in certain other districts, in one exceptional case going as high as 87½ per cent per annum.

I regard as unfortunate the omission or neglect of the board or of the reserve bank of New York to keep properly informed—after repeated warnings from me—as to the use which was being made during the past year or so of the hundreds of millions of dollars which were being dispensed with lavish hand to certain member institutions which had already acquired an unenviable reputation because of the speculative character of their operations, and the speculations of their principal officers, who were using for their numerous deals funds gotten from the New York reserve bank by their own institutions, as well as funds borrowed by other member banks from the reserve bank.

I assume that if the New York reserve bank had known, as it should and could have known, at the time it was lending these speculative institutions huge sums—sometimes to one borrower an amount equal to several times the capital of the New York reserve bank itself—of the use made of the money so advanced, it would have exercised a more restraining hand. At least I hope it would have done so—for you now have unimpeachable evidence and admissions that funds of certain institutions in New York City which had been the principal recipients of these big loans from the New York reserve bank were dispensed with "reckless prodigality."

Not only were the funds of the New York reserve bank being thus employed by certain members of the system in feeding the fires of speculation, at a time when retrenchment was a duty, but the record shows that the resources of other reserve banks were being at times heavily drawn upon in enabling the New York reserve bank to provide the member banks referred to with these vast sums for speculative uses.

My letter to you of February 26, 1921, shows in detail from week to week for the year 1920, the extent to which the New York reserve bank was obtaining funds from other reserve banks by "bills rediscounted" and "acceptances sold" to these other banks, the aggregate on January 16, 1920, being over \$100,000,000 and as late as October 29, 1920, over \$60,000,000. The official record also shows that although the New York reserve bank was obtaining funds continuously through 1920 from other reserve banks, it was rediscounting for other reserve banks for less than five-twelfths of the time in that year. Has Gov. Strong ever sent to the board the information I urged him at the meeting of February 26 to produce, as to what proportion of the acceptances transferred by the New York reserve bank to other reserve banks in 1920 were primarily for the accommodation of the New York bank? I should like to see it. There is no reason why this information should be kept secret.

As Comptroller of the Currency I repeatedly urged upon the Congress the importance of legislation which should prevent national banks from lending to their own officers; but these recommendations have not yet been acted upon. The reserve board and the reserve bank of New York, on the other hand, had the power to exercise a restraining influence in regard to excessive loans from member banks to their own officers, or other loans for other speculative purposes, by keeping informed as to the extent of such abuses and by putting on the brakes when applications for new loans were made to the reserve bank.

I have brought to your attention, as an example, one instance where the president of one member institution in New York was borrowing for himself and for enterprises in which he was immediately interested—some of his loans carefully camouflaged—many millions of dollars from three member banking institutions in New York City, to each of which the Federal reserve bank of New York was lending more than \$100,000,000.

I also directed your attention to the case of a certain member bank—to which the Federal reserve bank was lending more than ——— millions—which was lending to its

own chief executive officer and his immediate family more than the bank over which he presided was lending to all of its national bank correspondents throughout the entire country. The Comptroller of the Currency has no power under the law as it now stands to prevent such loans; the Federal reserve bank in extending credit to the bank referred to, could have limited the amount of money which the borrowing banks could lend to their own officers for speculative or other purposes.

Officers of the Federal reserve bank are supposed to have some cognizance of such matters, especially when the speculative operations of the officers of their member banks has become common talk, as in this case, and they are expected to be governed accordingly in granting accommodations. Furthermore, the officers of the reserve bank of New York should have brought such situations as these to the attention of the directors of the Federal reserve bank of New York, who, I do not believe approve of such methods and operations, and who, presumably, would have taken prompt steps to effect remedies if they had known of them.

In calling your attention 14 months ago—January 28, 1920—to the fact that the New York reserve bank was lending an amount equal to more than five times the capital of the Federal reserve bank of New York to one particular institution in that city I urged upon you the board's "serious and very real" responsibility, and said:

"This is a concentration of the funds of the reserve system with one debtor bank conspicuous for its speculative operations and promotions, which, in my judgment, is not only not justified, but distinctly dangerous, and I feel it my duty to register my strong dissent from a continuance of such conditions as these, by writing you, as I am doing, as an ex officio member of the board. I trust you will find time to make a careful analysis of this situation.

"With such facts before us concerning the company's condition as I have heretofore undertaken to bring to your attention, our responsibility becomes serious and very real. I think it would be well to apprise the board of this situation."

Despite this warning, followed up by repeated recommendations from me that the board or the reserve bank of New York make an independent examination of that large debtor of the reserve system, no independent examination has ever been made up to this time, as far as I am advised, although I understand that one or two representatives of the reserve bank of New York accompanied the State examiners on their examinations for part of the time.

Why the board and the New York reserve bank should be ready to make independent examinations from time to time of smaller banks, but should shirk or stand aloof from examination of this particular debtor institution, the speculative character of whose operations stands out so clearly in the record—see my letters to you January 28, 1920, and February 28, 1921—I, of course, am unable to say.

Resuming the general subject of our correspondence, I think it proper at this time to refer to a statement made in my letter to you of February 14, 1921, in which I said:

"As far as I am concerned I have not the slightest objection to the board acting favorably upon the proposal which was made by one of our members a few days ago when the question came up that the board publish my letter to you and also the board's reply of the 13th ultimo. I will now go further and state that it is my personal belief that my letter of the 28th of December contains some information of an important character, to which I think the public entitled and should have before it. In fact, to make public this information I believe would be distinctly salutary and beneficial."

I also quote the following extract from my letter to you of March 1, 1921:

"I hope I have made my position clear. I will be glad to have the whole of my correspondence with the board made public, deleting such names or references as may cause individual hardships or injury."

At several board meetings when the question of giving publicity to this correspondence was discussed the board was informed clearly by me that while the letters referred to were not written with the intention of giving them publicity, and that while it was not, at the time they were discussed, my intention to make them public, I yet reserved complete freedom of action in regard to them and should use my discretion as to whether or not I should at any time give publicity to the letters or any of them, deleting such names or references as in my judgment it might be proper to omit for the protection of others.

I shall be pleased to have you present this letter at the next meeting of the Federal Reserve Board and have it made a part of the record, but in view of the intention I understand you recently expressed—while I was a member of the board—of assuming responsibility of withholding from the board any letters, however important, which I might have occasion to address to you officially as the governor of the board, which for any reason might not be presented directly to the board by me, in person, I shall

take the precaution to forward to each board member, including the Secretary of the Treasury and the Comptroller of the Currency, copies of this communication. Moreover, please be advised that I shall give this letter such further circulation and publicity as may, in my discretion, at any time seem desirable or for the public good.

Yours, very truly,

JOHN SKELTON WILLIAMS.

Mr. Chairman, I ask that there be inserted in the record the letter from Gov. Harding to me of April 4, 1921.

Gov. HARDING. A word there, Mr. Chairman, on a matter of personal privilege. That letter that Mr. Williams has just read does not contain any new matter for the information of this commission. He merely quotes from previous letters that he has written. But he also gives that letter a decided personal tinge that none of the previous letters had. He has read that letter here in a public meeting. That may go to the press. All right. He has made public most of the statements in there already. Now, my reply to that letter, dated April 4, which he now wishes to introduce, is a carefully studied reply and answer to a great many of these charges which have been made in the course of the cross-examination that has been going on by the members of this commission, and I respectfully ask, just as a mere matter of fair play, that I be given the privilege of reading that reply myself. I will promise not to interject a single word or make any explanatory statement—just to read the reply.

Representative SUMNERS. I think there should be no objection to that, Mr. Chairman. It will go in the record, anyhow.

Mr. WILLIAMS. I think it is entirely fair, Mr. Chairman, as far as I am concerned. I wanted the letter in the record.

The CHAIRMAN. Without objection, Mr. Harding will proceed and read the letter.

Mr. WILLIAMS. Mr. Chairman, I would like to state that I did not make a formal reply to Gov. Harding—to his letter of April 4, 1921. I consider, though, that it was practically replied to in an address which I made in Washington 10 or 11 days later, on April 15, 1921, before the People's Reconstruction League, in which I dealt with matters which were brought out in his letter. Copies of that address were sent to each member of the board. I should also like to have the opportunity before I close of commenting upon certain portions of Gov. Harding's letter which is about to be read.

STATEMENT OF HON. W. P. G. HARDING, GOVERNOR FEDERAL RESERVE BOARD.

Gov. HARDING (reading):

FEDERAL RESERVE BOARD,
Washington, April 4, 1921.

Mr. JOHN SKELTON WILLIAMS,
Care of Richmond Trust Co., Richmond, Va.

Sir: I acknowledge receipt of your letter of March 26, 1921. I note that you have taken "the precaution to forward to each board member, including the Secretary of the Treasury and the Comptroller of the Currency, copies of this communication." Because of the inference, which is clear, and because of the terms in which your letter is couched, the other members of the board have requested me to advise you that they must decline even to acknowledge the communication which you have addressed to them individually.

As the chief active executive officer of the Federal Reserve Board, I acknowledge your letter addressed to me as governor only because of the necessity of placing a flat contradiction of its misstatements and half truths upon a record composed largely of

letters with respect to which you have "reserved complete freedom of action" and about which you might use your "discretion as to whether or not I (you) should at any time give publicity."

You charge that the "statements and arguments" in your letter of January 17, 1921, are "still unanswered" and that the serious "complaints (in your various letters) touching board policies and reserve bank supervision and management * * * never have been refuted or explained away * * * by the board either orally or in writing and stand essentially unchallenged."

It seems from a review of the real facts that the gravity of your "complaint," if it may be dignified as a complaint, is not, as you state, that the Federal Reserve Board has in the past willfully failed to answer your "statements and arguments," or that it has failed in its public duty to give due weight to matters of public interest whether proposed by you or any other person, whether in public or private life, but rather that the other members of the board, in the exercise of their best judgment, have not agreed with your arguments or opinions not voted their approval of motions made by you embodying those opinions.

In other words, your letters of October 18, 1920, December 23, 1920, January 17, 1921, February 19, 1921, and February 26, 1921, were long and confused expressions of your views on various subjects. They contained no definite program and, while charging the board with certain responsibilities, made no specific recommendations except as noted herein. Apparently, those letters were intended not as a serious attempt to persuade the Federal Reserve Board of the merit of the views they expressed, or to procure any formal action, but as a means of making a record during the waning days of your tenure of office of ignorant, inaccurate, and misleading statements which you might, in your "discretion," at some time hand to the public with a purely sentimental and fictitious appeal to their sympathies and false hopes—not to their reason and better judgment. Your present letter of March 26 tends to corroborate these conclusions since it is ingeniously drafted, not as a fair unprejudiced exposition even of the record, as both you and the Federal Reserve Board know it, but as a biased presentation of facts and fancies which fully ignore the actual disposition which has been made of the issues under consideration.

It is solely to anticipate any misunderstanding that might result from your efforts that the Federal Reserve Board has instructed me to dignify your letter by a reply. Certainly you yourself must be fully aware that it is not true that the "complaints" you have made still "stand essentially unchallenged" or "unanswered."

What are the facts? In your letter of October 18, 1920, you offer but one remedy for the conditions which it sets forth, namely, a ruling that cotton factors' paper is eligible for rediscount. At that time, however, under advice of counsel that cotton factors' paper is ineligible for rediscount under the terms of the law and that it did not have, and has not now, the power to rule otherwise.

In your letter of December 28, 1920, you reviewed at length the reasons that prompted your belief that a lower discount rate was at that time desirable and took occasion also to refer to certain irrelevant circumstances (reviewed at greater length in your later letters) with respect to which you offered no remedies and made no recommendations whatsoever. Up to that time you had never offered a resolution looking to a reduction in the rediscount rates and even then had your real intention been to procure such action rather than merely to "make a record" you might have done so at any time in the usual method, available to every member of the board, including yourself—a formal motion at a board meeting. There never has been a time when the Federal Reserve Board evidenced any disposition not to give careful and courteous consideration to suggestions and recommendations made to it by any of its members in the usual course. It was only when the Federal Reserve Board insisted that you crystallize, in a definite recommendation, the many various views expressed in your letters that you made the motions quoted below at a meeting of the board on February 25, 1921. That was, of course, after you had written and sent each one of the letters above referred to, except that of February 26, 1921.

As you may remember, however, it was unanimously agreed at the meeting of February 25, 1921, to postpone discussion of action upon your motions until 10 o'clock on the morning of February 26.

The first motion was as follows:

"Moved that in view of all conditions, including the success of the 6 per cent rate in the Richmond, Cleveland, Philadelphia, and San Francisco districts, the Federal Reserve Board request all the Federal reserve banks, effective March 1, 1921, to adopt a maximum discount rate of 6 per cent."

It was the sense of the meeting that the action contemplated by this motion should not be taken at that time and that it should not be taken without reference to the judgment of the boards of directors of the several Federal reserve banks. It was

accordingly moved and voted that this motion offered by you should be laid upon the table.

The second motion which you made was as follows:

"Moved that the Federal Reserve Board requests the abolition as of March 1 of the progressive rate in all those districts where the progressive rate is now applied."

It was the sense of the meeting that the action contemplated by this motion should not be taken at that time and that it should not be taken without reference to the judgment of the boards of directors of the Federal reserve banks concerned. It was accordingly moved and voted that this second motion offered by you should be laid upon the table.

The third motion which you presented was as follows:

"Moved that effective March 1, 1921, the Federal reserve banks be requested to establish a rate of 4½ per cent upon member banks' loans secured by Liberty bonds in cases where the Liberty bonds were purchased originally by the member banks at par, such loans to be made on condition that the borrowers shall make reasonable reduction every 60 days, it being understood that the Federal reserve banks shall not grant such loans at said 4½ per cent rate when they are applied for to obtain new money not needed for essential purposes, or not needed to prevent the borrower from being driven to the necessity of selling bonds costing him 100. The above 4½ per cent rate shall also apply to discount by reserve banks of notes made by the customers of member banks when secured by Liberty bonds which were paid for at par and which belong to the borrowers as original subscribers."

In view of the fact that this third motion was clear-cut, it was acted upon at once, and defeated by the vote of every member present other than yourself.

The votes taken by the Federal Reserve Board with respect to the motions which you made were unfavorable to those motions at that time not because they originated with you but because each member of the board present, in the exercise of his free and honest judgment, believed that the action proposed by you would not then have remedied the serious conditions to which you referred and might then have resulted in conditions even more serious and more pitiable than those which you described. That action by the board with respect to your motions was a complete and definite disposition of the concrete questions presented in the letters under consideration.

Since your attendance at the board meetings was irregular after October 1, 1920 (the minutes show that of the 80 meetings held between October 1, 1920, and February 25, 1921, you were present during the entire time at 18 meetings, during a part of the time at 18 meetings, and absent at 44 meetings), it may be mentioned for your information that the rate policy of the Federal reserve system was a matter of frequent, careful, and fairly continuous consideration by the board during that period, as, in fact, it always has been. Your motions when presented, therefore, did not raise a new question as far as the other members of the board were concerned.

While it is difficult to pick out of the disordered mass of statements and details in your various letters any concrete or constructive suggestions other than those just referred to, so much of your space was devoted to a recital of the practices of certain of the larger banks in New York City that the natural presumption was that you intended to place before the board an issue with respect to the management and operation of those banks. But even this issue was so beclouded that it would have been difficult for the board or for the Federal reserve bank of New York, even if they admitted the accuracy of all of your statements (which they positively do not), to determine very clearly what course of action you would have had them pursue in the circumstances.

You have referred, among other things, in several of your letters to the fact that certain member banks which were borrowing large sums of money from the Federal reserve bank of New York were making large loans to their officers or directors, or to institutions in which those officers or directors were interested, or which were lending money with "reckless prodigality" or at "excessive rates" of interest to their customers.

In the case of the one particular member bank which is made the basis of most of your charges, the report of the examination evidencing the facts upon which you base those charges was not delivered by you to the Federal reserve bank of New York until January 7, 1921, some months after the examination was begun and after you had written your letter of December 28, 1920, addressed to me. The previous examination of that bank was, as you know, made in 1919, more than 10 months previous to the examination begun in the fall of 1920, and did not present any information calculated to put either the Federal Reserve Board or the Federal reserve bank of New York upon notice of the conditions which you now charge existed throughout the year 1920. If the 1919 examination had evidenced such conditions, there can seem to be no justification for your having failed for 10 months to institute a second examination (a delay which you are aware resulted in your violating the laws of the United

States, sec. 5240, U. S. R. S.) or to take any of the corrective steps which you actually did take after the examination made in the fall of 1920. You state in your letter of March 26, 1921, in referring to the large loans of this bank to its officers, that "the Comptroller of the Currency has no power under the law as it now stands to prevent such loans" and that the "Federal reserve bank in extending credit to the bank referred to could have limited the amount of money which the borrowing banks could lend to their own officers for speculative or other purposes."

The Federal Reserve Board has maintained and the Federal reserve bank of New York has maintained that it is not the duty of either the Federal Reserve Board or the Federal reserve bank of New York to control the internal management or policies of banks coming within the jurisdiction of the office of the Comptroller of the Currency by means of arbitrary restrictions of credit. The only possible corrective step which the Federal reserve bank of New York could have taken, even had it been aware of the facts subsequently reported in the 1920 examination, is that which you have now affirmatively stated in your letter of March 26, 1921, that is to withhold credit, but it is believed that you yourself did not seriously think that that would have been the proper procedure for the Federal reserve bank to take. In fact, you wrote a letter to me suggesting the importance of "prompt consideration * * * to the matter of amending the Federal reserve act so as to make it possible for the reserve banks in an emergency to render aid to and perhaps prevent the suspension of banks whose eligible paper represents but a small proportion of their deposit liabilities."

On January 6, 1921, at a personal conference in your office you showed a copy of your letter of December 28, 1920, addressed to me, to an officer of the Federal reserve bank of New York and in referring to the particular national bank under consideration you stated to him that you intended to recommend to Congress an amendment making possible the rediscount of paper now held to be ineligible in order to permit of even further extensions of credit that might be necessary to protect innocent depositors and creditors of such banks as this particular one which you cited as an illustration of the necessity of the amendment.

It is clear from your letter of January 5, quoted above, and from your discussion subsequent thereto that you realized the dangers which would result from the suspension of any large bank in New York City and that you were anxious to provide means for the further extensions of credit to such a bank. The inference in your subsequent letters and finally your statement in your later letter of March 26, 1921, that the Federal reserve bank of New York should or could have corrected details of the management of this bank or any other bank which might be making excessive loans to its officers or which might be charging excessive rates of interest, by refusing to extend further credit, were entirely inconsistent with your own expressed ideas and with the ideas and convictions of all of those most familiar with the scope and purposes of the Federal reserve act.

Furthermore, the Comptroller of the Currency is charged with the responsibility of the examination and supervision over national banks. That responsibility rests upon him and him alone. It is not believed that if the management of any national bank is guilty of any abuses or indiscretions that there is any reason in law or policy that the Federal reserve bank should undertake to correct that mismanagement in the manner which you have suggested. You know, or should know, that if a Federal reserve bank were to attempt to direct or control the affairs of any mismanaged member bank by declining arbitrarily to make further loans the result would be an aggravation rather than a lessening of the dangers caused by the mismanagement and might readily precipitate the conditions which you and all of us would deplore, conditions that might cause the greatest suffering and hardship on an innocent public. These are matters which were fully discussed at length in the board meetings of February 26 and 23, when all of those present expressed their views to be contrary to your own. A failure on the part of the board to agree with you or a failure to alter its convictions can not now properly be charged as a failure to "answer" or a failure to "challenge" your "complaints."

It is interesting to note in this connection that although you deny the power of the Comptroller of the Currency under the law to prevent such loans as those under discussion, nevertheless, you did take steps, subsequent to the last examination of the bank in question, which it has been understood were most effective in eliminating from the assets of that bank most of the loans that were criticized and which have been responsible for a rather drastic change in the policies of the bank. For that action you are to be commended, but your failure to act sooner can not now be made the basis of an argument that the Federal reserve bank should have done so by the extraordinary method you have since suggested, unless, indeed, it is assumed that the Federal reserve bank was upon notice of a gross neglect of your conduct of the duties of the office of the Comptroller of the Currency.

You inquire in your letter of March 26, 1921, whether the Federal reserve bank of New York has ever sent to the board the information you urged Gov. Strong at the meeting of February 26 or 28 to produce, that is, what proportion of the acceptances transferred by the Federal reserve bank of New York to other reserve banks in 1920 were primarily for the accommodation of those other banks and what for the accommodation of the New York bank. You say, "I should like to see it. There is no reason why this information should be kept secret." You are advised that the letter of the Federal reserve bank of New York, prepared upon my request made at a meeting which you attended, relative to the question of acceptances and to various other questions presented in your letters and considered at that meeting, has been duly received by the Federal Reserve Board and a copy transmitted to the Comptroller of the Currency for his information and in order to complete the official records of his office.

You can not be unmindful of the fact that you no longer have a right to ask for or expect information contained in official correspondence between the Federal Reserve Board and one of the Federal reserve banks. I will, however, inform you, with reference to the one question which you now raise, that is, with reference to the proportion of acceptances transferred by the Federal reserve bank of New York to other Federal reserve banks for its own accommodation, that less than one-seventh of the transfers which you stated in one of your letters represented continued borrowings by the Federal reserve bank of New York were sold by it for its own accommodations. All of the rest of those transfers were made upon the specific request or order of other Federal reserve banks and were not to accommodate the Federal reserve bank of New York, as you stated. This is further evidence of only one of the many ignorant and misleading statements contained in your correspondence on this whole subject.

It appears, therefore, that contrary to your expressed belief that the Federal Reserve Board has positively not let your "serious complaints touching board policies and reserve bank supervision and management * * * stand essentially unchallenged," every recommendation which you have made to the board was formally acted upon by it in authorized session. The rest of your correspondence is either trivial, irrelevant, or susceptible of no definite constructive interpretation unless it be an interpretation which challenges the conduct of your own office as Comptroller of the Currency and not the administration of either the Federal Reserve Board or the Federal reserve bank of New York.

Before concluding, the Federal Reserve Board desires to refer to a few other statements in your letter of March 26, 1921, which are not of very great moment but which can not pass unnoticed. It is denied that any of the members of the Federal Reserve Board have ever stated with reference to Federal Reserve Board policies that it was "more important to be unanimous than right" and you must know no member of the Federal Reserve Board ever made such a statement. It is denied also that I ever stated to the board "that the two retiring members should be furnished with a copy of the transcript" of the meeting of February 28, to which I assume you refer, or of the subsequent meeting of March 2, 1921. (No stenographer was present at the meeting of February 28, 1921, as you will remember.) An examination of the records of the meetings of February 28 and March 2, 1921, shows conclusively and beyond any question that each other member of the Federal Reserve Board present stated that no transcript of the stenographer's report of the hearing should be made for any board member, former board member, or for any other purpose, and that while I personally stated that you would be accorded the courtesy of an inspection of the record in my office, another member of the board stated that it should not be obligated even to that extent, that it should reserve the privilege of determining the rights of former members with regard to the report whenever the question should arise. Any proper motive that you may have with respect to the stenographer's minutes of those meetings may be satisfied by the privilege of inspecting the records in my office, the same and only privilege that the present members of the board have with respect to such records. That is the privilege that I advised you in my letter of March 3, 1921, would be accorded you.

In conclusion, the Federal Reserve Board feels constrained to say that your action in distributing privately copies of certain of your official letters addressed to me as governor of the Federal Reserve Board involved in this correspondence and in subsequently refusing to give to the board the names of the persons to whom you sent such letters concerning credit matters of the most confidential nature, convinces it of the futility of discussing with you questions of "honor and fair play," a subject referred to in your letter of March 26, 1921.

Respectfully,

W. P. G. HARDING, *Governor.*

Mr. WILLIAMS. Mr. Chairman, I should like to have the privilege of making a few comments upon the letter which has just been read by Gov. Harding.

Representative MILLS. Mr. Chairman, I understand that Gov. Strong desires the same privilege that was granted to Gov. Harding to read a communication in answer to specific charges made against the present management of the Federal reserve bank.

The CHAIRMAN. At this time?

Mr. STRONG. I beg your pardon?

The CHAIRMAN. Do you want to read a letter at this time?

Mr. STRONG. Mr. Chairman, I think in view of the character of the correspondence which Mr. Williams has read that it is desirable that replies to some of those letters should be read. Only one letter has been written by me on the subject of this correspondence, and I think it covers all of it. I would ask the privilege of reading it, if the committee could spare the time.

The CHAIRMAN. Without objection Mr. Strong may read the letter, so we may have the correspondence all in one place.

Mr. WILLIAMS. Mr. Chairman, may I state that I know nothing about the letter that is to be read myself. I don't know to whom it is addressed or to whom it refers.

The CHAIRMAN. May I ask, Gov. Strong, whether you know if this letter was brought to the attention of Mr. Williams in any way?

Mr. STRONG. I don't know whether it has been brought to the attention of Mr. Williams, Mr. Chairman.

Gov. HARDING. Isn't that the letter that was sent to the Comptroller of the Currency?

Mr. STRONG. Yes.

Representative TEN EYCK. May I ask whether there was any letter written before the letter that this one is a reply to?

The CHAIRMAN. This, I understand it, is a reply written by Gov. Strong to an inquiry made by Gov. Harding.

Mr. STRONG. That is right, sir.

The CHAIRMAN. Regarding some of the letters which Mr. Williams has presented, the reason for reading it now, as I understand it, is that it is contemporaneous with the time of these other letters.

Representative TEN EYCK. I am not questioning the reading of the letter. The only question I have to raise is whether we are bringing out information from an outside source now that has not been brought up by the testimony that we have already heard.

Mr. STRONG. It relates entirely to that, Congressman.

Representative SUMNERS. Is your letter with reference to the same subject matter which has been presented to the commission?

Mr. STRONG. Entirely; yes.

Mr. WILLIAMS. Gentlemen, as I have stated just now, I know nothing about the letter that is to be introduced. I don't know whether it has ever been mentioned to me directly or indirectly.

Gov. HARDING. Mr. Chairman, I will state that it is the very letter that he expressed a desire to have a copy of.

Mr. WILLIAMS. When did I express a desire to have a copy of it?

Gov. HARDING. In your letter of March 26 you said you should like to see it. You say in your letter:

Has Gov. Strong ever sent to the board the information I urged him at the meeting of February 26 to produce, as to what proportion of the acceptances transferred by the New York reserve bank to other reserve banks in 1920 were primarily for the accommo-

dation of the New York bank? I should like to see it. There is no reason why this information should be kept secret.

Mr. WILLIAMS. That is the letter which contains information which you declined to give me details of?

Gov. HARDING. That is the very letter that you expressed a desire to see.

Representative TEN EYCK. I think if this letter in question was referred to by the witness who is on the stand now, it is pertinent to go in the record.

The CHAIRMAN. It has been referred to, and as I understand the correspondence, Mr. Williams expressed a desire to see this particular letter.

Mr. WILLIAMS. Mr. Chairman, I think we had better have this record straight on that point. I think it would be well to read my letter. Gov. Harding has stated that I made some reference to some letter from Gov. Strong. I should like to read my letter in which I made the inquiry, if it is the one to which he refers.

Gov. HARDING. Mr. Chairman, Mr. Williams in his letter of March 26, 1921, inquired whether Gov. Strong has ever sent to the board "the information I urged him at the meeting of February 26 to produce, as to what proportion of the acceptances transferred by the New York reserve bank to other reserve banks in 1920, were primarily for the accommodation of the New York bank. I should like to see it. There is no reason why this information should be kept secret."

Mr. WILLIAMS. I should be very glad to see the letter, Mr. Chairman, and as far as I am concerned I have no objection to it.

Representative TEN EYCK. The only reason I brought the matter up, Mr. Chairman, was that I did not want to have new subjects brought into the discussion.

The CHAIRMAN. I understand this has relation entirely to the matters which have been discussed by Mr. Williams in the letters which he has read.

Mr. STRONG. Entirely, yes.

The CHAIRMAN. Without objection Mr. Strong's letter may be read into the record at this place. The Chair hears no objection. You may proceed, Gov. Strong.

STATEMENT OF HON. BENJAMIN STRONG, GOVERNOR OF FEDERAL RESERVE BANK OF NEW YORK.

Mr. STRONG. The letter is dated March 16, 1921, addressed to Gov. Harding of the Federal Reserve Board. [Reading:]

DEAR GOV. HARDING: The Federal reserve bank of New York begs to submit herewith, in accordance with the verbal request of the governor of the Federal Reserve Board to Gov. Strong, certain facts and comments with reference to the matters discussed by the Comptroller of the Currency in his various letters to the Federal Reserve Board under dates of December 28, 1920, January 17, 1921, February 19, 1921, February 26, 1921, and February 28, 1921, but particularly with reference to his letter dated February 26, 1921.

These various letters aggregate 51 closely typewritten pages, and contain, in almost confusing detail, what seems to be the views of the Comptroller of the Currency upon many unrelated dissociated matters. In the earlier letters of the comptroller there are long discussions of his own views upon general economic and social conditions in the United States, which, in his opinion, seem to prove "that the welfare of the country calls for the adoption of more liberal policies on the part of Federal reserve Board and the Federal reserve banks." He then argues from the many complaints

which he has received of the "restrictions on credit," that the Federal Reserve Board should "reduce the rate of interest which is being charged by Federal reserve banks on the loans of member banks secured by Liberty bonds from the present rates of 6 per cent and 7 per cent to a uniform rate of, say, 4½ per cent." "The present emergency," he says, "is so acute that I can not avoid the conclusion that a more liberal policy than is now being pursued would be justified. While there is a very great scarcity of credit in various parts of the country, we find that the reserves of the Federal reserve banks are now actually higher than they were a year ago."

To support his contention that a more liberal policy is justified, he states that "these banks (Federal reserve banks) have an unused lending power at this time (Dec. 28, 1920) without reducing the reserve requirements of about \$700,000,000," and that by reducing reserve requirements by only 10 per cent "their lending power could be increased to about \$2,500,000,000." The "pitiful tales" which come to him from national-bank examiners in different parts of the country are among the reasons which prompted his recommendation of a more liberal policy on the part of the Federal Reserve Board and the Federal reserve banks.

In his letter of December 28, 1920, he refers to the fact that he had given instructions "that so far as the authority of this office will permit, the banks under my supervision shall be urged to use in these critical times every proper means to prevent the selling out of honest debtors at sheriff's sales and the ruin of their families by extending them time and by giving them, wherever practicable, the opportunity to hold on to their farms and their farming implements, to the tools of their trade, or to the equipment of their business, whatever it is, and that these debtors be given a chance to recoup and to redeem their indebtedness and get again on their feet." He continues that "the member banks, called on to give time and to show consideration to debtors, will, naturally, demand and expect from the reserve banks consideration and forbearance, and, in the language of the poet, can properly say to their reserve banks 'The mercy I to others show, that mercy show to me.'" He adds that "such facts and conditions * * * demand definite and energetic action even if precedents must be disregarded, accepted rules suspended or waived, and new plans and methods devised."

These matters are referred to in some detail in order to illustrate the general frame of mind in which the Comptroller of the Currency began his correspondence with the Federal Reserve Board—a plea to that board for a liberalization of its discount policies which, in his opinion, was demanded in order further to remove the restrictions on credit, and thereby to save the people of the country from disaster and ruin which would result from the alleged "restriction on credit."

Subsequent to this original issue and throughout his various letters to the board, he compares the discount policy of the Federal reserve bank of New York with that of the Federal reserve banks in other sections of the country, not by any comparison of the respective needs and resources of those different parts of the country, but by a comparison of absolute figures entirely unrelated to the respective lending powers of the Federal reserve banks which he undertakes to compare. He calls attention, for instance, to the fact that about the middle of November, 1920, one bank in New York had borrowed over \$134,000,000 from the Federal reserve bank of New York, while, at the same time, the Federal reserve bank of Kansas City was advancing to 1,091 member banks in its district about \$20,000,000 less than this one bank in New York was obtaining from the Federal reserve bank of New York. He also refers to the fact that another banking institution in New York was borrowing at the same time about \$40,000,000 more than the aggregate which the Federal reserve bank of Minneapolis was lending to its 1,000 members in the great States of Minnesota, North and South Dakota, Montana and part of Wisconsin.

He continues to cite several instances in which single institutions in New York were obtaining sums larger than groups of member banks in other sections of the country were receiving from their respective Federal reserve banks, and then states, by way of recapitulation, that "the official figures tell us that four banking institutions in New York City at the time of the last call were borrowing from the reserve system an average of over \$118,000,000 each, or practically as much money as the Federal reserve banks of St. Louis, Kansas City, Minneapolis, Dallas and Richmond, all combined, were lending to the more than 4,000 member banks in 21 States of the Union, comprising more than one-half of the entire area of the United States."

I apologize for calling upon the committee to hear this once more.
(Continuing reading:)

In making all of these comparisons, however, the comptroller refers to absolute figures and refrains from stating what proportion of its own assets were being loaned by the Federal reserve bank of New York as compared with the proportion being

loaned by the Federal reserve banks in the interior of the country. Those are questions which are fully covered in convincing force by the Federal Reserve Board in its letter of January 13, 1921, addressed to the comptroller, in reply to his letter of December 28, 1920.

In that letter the board states, among other things, that while the five largest borrowers in New York City, so frequently referred to by the Comptroller of the Currency as borrowing huge sums from the Federal reserve bank of New York, had borrowed actually only 142 per cent of their basic line on November 15, 1920, the period referred to by the Comptroller of the Currency, nevertheless, all member banks (not merely the five largest borrowers as in the case of the New York district) in the Richmond district had borrowed 121 per cent of their basic line, in the Atlanta district 211 per cent, in the St. Louis district 117 per cent, in the Minneapolis district 126 per cent, in the Kansas City district 115 per cent, in the Dallas district 110 per cent. At the same time the five largest borrowers in the Richmond district were rediscounting 271 per cent of their basic line, the five largest borrowers in the Atlanta district were rediscounting 327 per cent, in the St. Louis district 152 per cent, in the Minneapolis district 263 per cent, in the Kansas City district 196 per cent, and in the Dallas district 167 per cent. In other words, the five largest borrowers in each of those districts located in that part of the country in which the Comptroller of the Currency states conditions to be so alarming were borrowing relatively much more than the five largest borrowers of the New York federal reserve bank, which the Comptroller of the Currency cites as being profligate in the granting of credits. The comptroller has consciously endeavored to create the impression that the large city banks in New York were being granted credit by the Federal reserve bank of New York in amounts out of all proportion to credits granted in the interior of the country, while he should have, and must have known, that these sums, though larger in absolute figures were relatively much smaller than the amounts being borrowed by the larger banks in these interior districts. The impression which he has tried to convey is one that he, because of his official position and because of his familiarity with the statistics concerned, must know to be absolutely false and misleading.

Mr. WILLIAMS. That statement of yours is false, Gov. Strong. If you make that deliberately it is a falsehood, sir.

Mr. STRONG. Mr. Chairman—

Mr. WILLIAMS. Mr. Chairman, I ask you to require the witness to keep within the bounds of courtesy and decency.

The CHAIRMAN. I suggest that if there is any objection to anything that is being read it is proper to address the chair and object to it. In view of several things that have already appeared in the record, I doubt if there is anything to criticize in what has just been read.

Mr. WILLIAMS. Well, I denounce it as a deliberate falsehood on the part of Gov. Strong.

Mr. STRONG. Mr. Chairman, this interruption suggests the opportunity that I might make a request of the committee, and that is, if it is proper for me to ask it, that the Comptroller of the Currency be required to make oath as to the correctness and accuracy of the statements which he has made, whether he has stated the truth, the whole truth, and nothing but the truth, and that shall include the statements made in the various public statements and correspondence and public addresses that he has submitted for this record. I shall be very glad to do the same.

The CHAIRMAN. Well, the Chair thinks that it is not feasible to follow that policy at this stage of the game. The question arose once with the commission, and it was determined that the witnesses would not be put under oath, and that unless the commission itself determines otherwise, the policy then determined upon will be the policy of the commission.

Mr. STRONG (continuing reading):

The comptroller asks, "If our reserve system has the funds to lend in such huge sums to the banks in New York for such uses, is it not difficult to understand why money should be so scarce in the interior, where the real wealth of the country is

being so largely provided, and where money is so distressingly needed?" In answer to his own inquiry, he says that the money scarcity in the interior of the country has been greatly aggravated, as I have already explained publicly, by the artificially fixed interest rates in New York City, which have had the effect of withdrawing money from legitimate business in various parts of the country to be loaned at fancy rates in Wall Street. This allegation will be discussed later on in this letter, but it should be stated now that the challenge that artificially high interest rates in New York City have the effect of withdrawing money from legitimate business in various parts of the country to be loaned at fancy rates in Wall Street, even if true, is one which might be corrected by a Federal reserve bank only by granting further credit, not by restricting existing credit, as the comptroller seems to imply that the Federal reserve bank of New York should have done.

Even the comptroller must realize that this is not only inconsistent with the general recommendations which he made to the Federal Reserve Board to reduce discount rates and to liberalize credits, but also that it would tend to do the very thing he deplores—*increase interest rates in New York—City*, for if the Federal Reserve Bank of New York should refuse to extend credits to those of its member banks which have the largest resources and which are the heaviest borrowers from it, the scarcity of credit available to the customers of those banks would of itself do more than anything else to create a wild and possibly disastrous increase in interest rates.

In his letter of January 17, 1921, addressed to the board, the comptroller refers again to the fact that interest rates of 20 per cent, 25 per cent, and 30 per cent charged by member banks in New York City, to which the Federal reserve bank was lending, "were wholly indefensible." But even if it could be admitted that the rare instances which the Comptroller of the Currency has quoted indicate that the general level of interest rates in New York has ever been at such figures as those which he quotes, nevertheless, the only possible action which could be taken by the Federal reserve bank of New York, and the only action which the comptroller has rather vaguely suggested that it should have taken, is a restriction of credit to those very banks whose shortage of lending power has made such rates possible.

All of these allegations of excessive interest charges, excessive loans to officers, and other evidences of mismanagement on the part of certain New York City banks to which the Federal reserve bank of New York is lending credit are obviously intended by the comptroller to indicate that the Federal reserve bank of New York, contrary to the very liberal policy upon which the comptroller himself has predicated his whole correspondence with the Federal Reserve Board, should have restricted its loans. But the comptroller knows, or should know, that such abuses on the part of national banks, if existing, come solely within his jurisdiction as Comptroller of the Currency, as chief of that bureau of the Government which is charged with the execution of the supervisory laws governing the operations of national banks. It hardly seems possible that any governmental official who has been connected with the Federal Reserve Board for the period that Mr. Williams has should suggest, not directly, for he has never made a direct suggestion to that effect, but inferentially, that the Federal reserve bank of New York should correct the details of the management or mismanagement of its member banks by a drastic policy of shutting off credit when, as he well knows, that action might precipitate the very "crash" which he, in his letter of February 19, alleges that the member banks, charging excessive rates of interest, "did so much to precipitate."

Furthermore, it can not be believed that one so jealous of his prerogatives as Comptroller of the Currency and of the exercise of the powers in that field over which he has had jurisdiction, can seriously mean that abuses over which he alone has had jurisdiction should be controlled or directed by means of an arbitrary shutting off of credit by the Federal reserve bank. Such a policy could only endanger the depositors of the institution to which credit was refused as well as the entire financial community without necessarily having the corrective influence which it intended.

Reverting now in particular to the comptroller's letter to Gov. Harding, dated February 26, 1921, it appears, as we hope to show, that the criticisms alleged in that letter are due to his ignorance of the operations of the Federal reserve banks and of banks generally, and that his inaccuracies and inaccurate conclusions likewise arise from such ignorance, all of which could have been readily corrected had the comptroller informed himself by inquiry either of the Federal Reserve Board or of the officers of this bank.

Without attempting to deal with inaccuracies which are manifestly unimportant, the board's attention is respectfully directed to the following specific points:

The comptroller states:

"You called attention to the following paragraph on page 8 of the letter:

"In addition to drawing funds to New York City from other sections by the allure-ment of high interest rates and otherwise, let me remind you that at times during the

past year, in fact almost continuously through the year, the New York Federal reserve bank has gotten from other parts of the country by rediscounting its bills and acceptances considerable sums of money from nearly all the other Federal reserve banks, including among others, the reserve banks of Dallas, Kansas City, Richmond, Atlanta, and San Francisco, as well as the nearby reserve banks."

You are aware that the Federal reserve bank of New York occupies no different position to the other Federal reserve banks than does a commercial bank to other members of a clearing house association. The Federal reserve bank of New York, through the gold settlement fund, is every day effecting settlements of balances with all of the other reserve banks arising from transfers of Government balances, from the sales or repayments of certificates of indebtedness, collection of income, and other taxes, payment of Government disbursements, including interest on the public debt, likewise those arising from the collection system operated for the member banks, and from the constant flow of deposits back and forth between the different sections of the country.

Had the comptroller understood the operations of the Federal reserve system, he would have realized that the sales of acceptances to which this paragraph of his letter referred were not "luring funds to New York by high interest rates," (which rates in one place he criticizes as "artificial") but these transactions in fact were necessitated by the almost constant withdrawal of funds from New York to other sections of the country, which movement has characterized the banking situation for the past year or more. These withdrawals of funds from New York result in heavy withdrawals of the gold reserves of the Federal reserve bank of New York through the gold settlement fund to other reserve banks, and sales of acceptances to other reserve banks when made at the instance of this bank are for the purpose of offsetting these withdrawals of its gold reserve. The deposit withdrawals are exhibited particularly in the deposits of the New York clearing-house banks which, in January, 1920, were \$5,372,000,000, and at the present time are \$4,297,000,000. Our investigations indicate that not only are deposits being withdrawn from New York for use in the interior of the country, but that the New York banks are being called upon to make large loans through the United States to industrial and commercial concerns, as well as to the railroads and the interior banks, the last mentioned we are told are frequently made in order to enable those interior banks to repay what they owe to their local reserve banks.

The comptroller's letter includes a tabulation of bills rediscounted and acceptances sold by the New York reserve bank to other reserve banks, by weeks, for the period from January 2, 1920, to January 21, 1921, inclusive, this being cited as evidence that this bank has been a continuous borrower from the other reserve banks during that period. The comptroller was obviously ignorant of the facts which could readily have been ascertained by him had he made inquiry either of the Federal Reserve Board or this bank. As you know, it has been the practice of the Federal reserve bank of New York to purchase acceptances for other reserve banks which had funds to invest practically ever since the Federal reserve system was established. The greater part of all bills sold to other reserve banks comprises, in fact, purchases of that character, rather than sales of bills made on our own initiative in order to improve our reserve position. The official figures of the bank disclose that between the period January 2, 1920, and February 11, 1921, this bank purchased and allotted to other Federal reserve banks, at their request, a total sum of \$883,678,000 of bankers' acceptances, such purchases occurring practically every week throughout the entire period. Within that same period of 50 weeks, there were only 12 weeks when this bank had occasion to sell bills to other reserve banks for the purpose of improving its own reserve position, the total of such sales aggregating \$137,664,000. In other words, less than one-seventh of the bills listed in the comptroller's letter were sold for the purpose of correcting our reserve position, all of the balance being sold upon orders from other reserve banks at their request.

But the comptroller's statements are misleading, inaccurate, and evidence ignorance not only in what they include but in what they omit to include. During this same period the Federal reserve bank of New York had occasion to rediscount commercial paper or notes secured by Government obligations with other reserve banks for the purpose of improving its reserve position to an aggregate amount of \$375,000,000, whereas the other reserve banks rediscounted such paper with us during this period for the purpose of improving their reserve position for an aggregate amount of \$478,630,000.

The comptroller emphasizes in his letter that during this period the Federal reserve bank of New York was continuously borrowing from other reserve banks. There is inclosed with this a chart showing the periods during which this bank was indebted to other reserve banks for money borrowed and acceptances discounted (as distin-

gushed from purchased on order) and the periods during which the other reserve banks were indebted to us for money borrowed here. In this connection it should be pointed out that very much of the credit pressure that has been exerted upon the commercial banks and trust companies in this city, and in turn upon this bank, during the past year or more, has resulted because of movements deliberately undertaken and promoted in various parts of the country to withhold produce from the markets, and later, when the inevitable period of liquidation arrived, as in the latter part of last year, because of the fact that borrowers in all sections of the country, including even the commercial banks themselves, have been forced to withdraw funds from New York and to borrow money in New York in order to carry commodities which then became unmarketable without serious loss to the owner.

Representative FUNK. What do you mean by that? Who deliberately withheld produce from the market?

Mr. STRONG. That is a large subject, sir. Do you wish me to go into it now?

Representative FUNK. Well, I would like to have your views on that. You have made a very emphatic statement.

Mr. STRONG. I would be very glad to go into it. Do you wish me to do so now? I would like to continue to read the letter, if I might, sir.

Representative FUNK. Very well, if you will mark the passage and take it up later.

Mr. STRONG I will do so. [Continuing reading:]

When I appeared before the Federal Reserve Board on February 26 to discuss the allegations contained in the various letters of the comptroller, I stated, and the members of the board confirmed, that the principal amount of bankers' acceptances included in the comptroller's figures were those purchased upon orders received from member banks. The comptroller's subsequent statement that "with the knowledge I happen to have of the situation I am not inclined to give very great weight to that theory" is merely another evidence of his desire to make the facts conform to preconceived conclusions without a proper consideration of the facts themselves.

Referring to the reports of examination of a certain national bank in New York City, the comptroller makes the following statement:

"Gov. Strong impressed me as particularly unhappy over what he construed, perhaps very properly, as an implication in my letters to you, that the reserve bank of New York had not kept itself properly informed as to the condition and operation of certain member banks in the New York district to which it had been particularly liberal, if not prodigal, in granting loans, or if it was informed, had perhaps not acted with the wisdom and discretion expected of it: The senior officer of this particular member bank to which the New York reserve bank was dispensing funds so lavishly, has admitted to this office, as the record shows, and as you were promptly advised when this statement was made, that this same bank had itself been granting loans, as he expressed it 'with reckless prodigality.' In discussing the use which this same bank made of the funds which they had borrowed from the reserve bank, Gov. Strong's aim seemed to be to evade all responsibility so far as the reserve bank was concerned, apparently seeking to justify his evasion with the assertion that the chief national bank examiner did not give him notice of the conditions which existed in that bank. The chief examiner of the New York district has furnished me a memorandum as to the extent to which the Federal reserve bank of New York was placed on notice as to conditions in the bank referred to at the time of the examination in October, 1919. Supplementary to my letter to you of January 12, 1921, on this same subject, I ask your attention to the memorandum furnished by this examiner.

The facts in respect to the examination referred to are as follows:

An examination of the bank in question was made by the department as of October 3, 1919. The report of that examination was filed with this bank several weeks later. The next report of examination was made as of August 27, 1920, or nearly 11 months later. The facts disclosed by the last examination were brought to the attention of the Federal Reserve Board in a letter written by the comptroller on December 28, 1920, and the report of that examination was filed with the Federal reserve bank on January 7, 1921, or four months after it was started.

The report of October 3, 1919, was examined by Mr. Jay and Mr. Case, when it was filed. At the end of that report was included a schedule under which the examiner

is required to "list all items of criticism." Under this heading the following are listed:

- "1. *Excess loans.*—Unintentioned and promptly reduced.
- "2. *Deficient reserve.*—Temporary and promptly made good.
- "3. *Estimated loss.*—Promptly charged off.
- "4. *Bonds borrowed.*—Exceed limit section 5207; used as collateral. Officers claim to carry Liberty loans.
- "5. *Loans on own stock.*—Loans to clerks to buy stock which is held by _____ Securities Co.
- "6. *Real estate loans.*—Including \$100,000 acceptances.
- "7. *Excessive interest charged.*—Some loans at 8 and 9 per cent."

The report likewise contains a recapitulation of estimated losses, which includes \$1,884,000 of loans as slow, \$1,037,000 of loans as doubtful, with a probable loss, but the amount not estimated, and a total of estimated losses or bad debts of \$1,000,000, which it is noted was charged off at the close of the examination.

I am referring to the report of 1919. [Continuing reading:]

The examiner credits the bank with a capital of \$10,000,000, surplus of \$10,000,000, undivided profits of \$10,363,000, reserve for depreciation of \$1,000,000, reserve for taxes \$2,818,000, and states that the securities owned by the bank have a market value which is \$3,690,000 in excess of the book value. On page 3 of the report, under the caption "State general character of loans," the examiner replies "Good—exceptions noted." As to whether loans appear to be well distributed, the examiner says, "Generally well distributed; two excessive; larger lines listed." In reply to the question "State reason, if any, why bank should not declare a dividend at end of current dividend period, and whether last dividend was legal," he replied, "No reason why dividends may not be declared; last dividend legal." The facts as to this report were fully reported to you by Mr. Jay in his letter of February 16, 1921, at which time he did not have access to the so-called "yellow sheets," containing the confidential report made by the examiner to the comptroller, which is not filed with this bank unless reasons arise to call for it. Since then the writer has seen that confidential reports and finds in the copy furnished him that it discloses no reason for questioning the condition of the bank, but indeed confirms the conclusion in the general report that the bank's condition was not unsound. In reply to inquiry as to whether the bank is solvent, it says that it is. Replying to the inquiry as to the character of the management, the report says "safe."

It now appears that when the comptroller's examiners made the August, 1920, examination of the bank, conditions were disclosed which were not regarded as satisfactory.

I will now take the liberty of omitting three lines which I believe it would be unwise to read. And I think the comptroller will agree with me. I will show it to him. [Continuing reading:]

This is the report which was filed with us January 7, 1921.

It also appears that the comptroller now contends that what was contained in the report of October 3 constituted a sufficient notice to the Federal reserve bank of conditions in the bank in question to justify us, or require us, to discontinue extending credit to that bank. Another examination of the report of October 3 confirms the belief of the officers, entertained at the time when it was filed, that it gave no notice of any unusual conditions in the bank justifying such an extraordinary policy as that suggested by the comptroller. But even if the condition of the bank had been disclosed to be unsatisfactory by the report of October 3, we reiterate that the evils of mismanagement which might have caused those conditions should be corrected, not by the Federal reserve bank, nor by the Federal Reserve Board, but by the Comptroller of the Currency. In fact, if a Federal reserve bank were to attempt to correct the internal management of any mismanaged member bank by declining to make further loans, the result would be an aggravation, rather than a mitigation, of the dangers caused by that mismanagement, with possible disaster to innocent depositors and creditors.

The comptroller seems to feel that in some way he may avoid some part of the responsibility imposed upon him by law by sharing it with this bank. The facts are that we have never assumed any part of the responsibility that rests by law upon the comptroller. He is charged with the examination of national banks and supervision of banking. For a long time, when the reserve banks were first organized, he declined to furnish us with the reports of examination, and it was only after considerable delay and the most urgent representations by the governors of the reserve banks that he

finally consented to furnish them, and even then under conditions which withheld certain confidential information which was only made available to us upon request, and by calling at the office of the examiner.

The comptroller here again displays ignorance of the operations of the Federal reserve system and its relations with its members. His complaints are based upon the assumption that when a Federal reserve bank makes a loan to a member bank, the proceeds of that particular loan may be traced to some particular application by the borrowing member bank, which is, of course, not the fact. Member banks, particularly the large ones in New York City, every day have a great variety of transactions, making loans and having loans repaid, purchasing and selling foreign exchange, and possibly securities, receiving and paying deposits. The net result of a great variety of transactions is either a surplus reserve on deposit with us, or a deficiency in that reserve. In the former case they reduce their loans with us. In the latter case they increase them.

In order to ascertain the particular application made of funds borrowed from the reserve bank by member banks, it would be necessary for us to have representatives continuously in every borrowing bank—a wholly impracticable suggestion, implying, as it does, that the daily business of a member bank should be conducted either by a Federal reserve bank or, possibly, according to the comptroller's view, by the Comptroller of the Currency. We believe that the responsibility for the conduct of the business of the member banks rests with the directors and officers of those banks; that the responsibility for the supervision of those banks, for seeing that their business is in a safe condition and that it is conducted according to law, rests with the Comptroller of the Currency; that the function of the reserve bank is to supply these banks with credit; that we should do so in the form of loans which are authorized by the Federal reserve act and which will be repaid because they are good; and that the extension of credit to member banks shall be conducted fairly with due regard to the necessities of all member banks in the district.

In general the volume of credit extended, in our view, is regulated principally by the rate charged. The situation developed by the war, as well as the particular circumstances as to certain banks, have, and possibly always will necessitate, the officers of this bank making inquiry of banks which appear to be borrowing undue amounts, and, where justified, in restraining them from calling upon us too heavily. This we have always done since the borrowings of member banks have become so large. For the last two years or more regular meetings have been held at the bank, to which officers of member banks from all over the district are invited, when these matters are discussed and the views of the officers of the bank carefully explained.

In addition to these regular meetings, the Federal reserve bank has a staff of employees whose sole duty it is to visit different member banks throughout the district in an effort to discuss and explain the scope and purpose of the various functions of the Federal reserve system. In the case of the banks in New York City, they are questioned personally, and it has frequently been thought advisable for reasons of general policy to ask them to reduce their aggregate borrowings. Action of that character by the officers of this bank, however, has never been regarded as bank supervision such as would relieve the Comptroller of the Currency of his responsibility for the condition of member banks, and has never been intended as a corrective influence over the management of the detailed operations of these banks. As the comptroller well knows, when it has been discovered either by us or by his examiners that banks have gotten into a dangerous condition, we have tried by every means in our power to correct the conditions, not by restricting credit that might force a bank failure, but by such loans as we believe necessary to save the bank from failure. In no case have we failed of doing so.

I also wish to call the board's attention to the fact that exercise of the supervision which the comptroller apparently regards as a part of our duty would be a most unwholesome and unjustified method of administering the affairs of this bank. At the present time all national banks are examined by national bank examiners, all State banks are examined by State examiners, and all of these institutions in New York City of both classes, which are members of the New York Clearing House Association—being practically all of the important banks and trust companies—are likewise examined by the examiners of the New York Clearing House Association. To exercise the detailed supervision of these banks which the comptroller considers to be our function, would involve still a third examination, which, in the case of the larger institutions, would mean that for a very large part of the time their business would be subjected to the expense and inconvenience of almost continuous examination. Furthermore, we would have no occasion to deal with those banks which were not borrowers, or not borrowing enough to justify inquiry, but which might happen, by bad management or otherwise, to get into a dangerous condition.

Referring again to the case of the particular national bank in question, the board's attention is directed to the fact that the law requires the Comptroller of the Currency to make two examinations every year of every national bank. He claims that the report of October 3 informed us of conditions in that bank which required us at least to inquire as to whether further credit could properly be extended. If the conditions disclosed by the report of October 3 were of such a character, then, indeed, the duty rested upon the Comptroller of the Currency to make another examination in the spring of 1920, as required by law, and he did not do so until the end of August, 1920. Indeed, were the conditions so serious as he implies, it would seem to have been his duty to put the bank on the special list for special examinations in addition to those regularly required by law, whereas he did not even make those which the law required him to make.

The facts are that nothing in the report of October 3 justified any special caution in dealing with the bank in question and the comptroller himself must have known that because so recently as January of this year he had disclosed the conditions verbally to one of the officers of this bank, especially cautioning him that he must treat the information as confidential and not disclose it to his associates in the Federal reserve bank because he wished it to be brought to the bank's attention through the Federal Reserve Board. Had he believed that the report of October 3 had already put us upon notice as to those conditions, there would have been no occasion for his cautioning the officer of this bank that he should not mention it to his own associates.

I shall not refer to the memorandum furnished to the comptroller by the chief examiner of this district, quoted on page 4 of the comptroller's letter of February 26, 1921. The items therein listed as being criticized for one reason or another we fail to find, upon an examination of the statement, to be of a character such as to justify our conclusion that the bank was in an unsound condition, and if that was the case it was manifestly the duty of the comptroller himself to correct the practices which resulted in those loans and to have promptly brought that specially to the attention of the Federal Reserve Board.

On page 5 the comptroller implies that the increase in the borrowings from the Federal reserve bank during the year 1920 was in itself sufficient notice of conditions in the bank to justify our being on notice of the conditions about which he complains. The comptroller obviously is ignorant of or overlooks the fact that the great increase in loans in the New York banks during that period were originally due to the placing of the Victory loan in the spring of 1919, as well as to continuous heavy borrowings upon certificates of indebtedness by the United States Government.

The comptroller fails to state in connection with the borrowings of the bank in question that at the time of the examination the bank owned \$112,729,000 of United States Government securities, all but \$1,170,000 of which were war loans, and that \$40,000,000 of the \$48,312,000 of borrowings to which he refers were made for the purpose of carrying these bonds. He also failed to state in the third paragraph on page 5 of his letter that the loans to the chief executive officers of the bank and to their immediate families, and to the securities company allied with the bank, while aggregating a sum more than twice the aggregate of all loans which this bank was making as of November 15, 1920, to all of its national bank correspondents throughout the country, were, in point of fact, of this character: \$15,299,000, all secured, of which \$13,443,000 were secured by Liberty bonds and Victory notes, the remaining \$1,856,000 being secured by other collateral not criticized by the examiner. Over one-half of these loans were made to the securities company associated with the bank, which relationship is sanctioned by law. The board's attention is also directed to the fact that the loans to the executive officers of the bank were principally made upon the security of Liberty bonds and Victory notes. Of the total of \$4,439,839.22 of such loans reported, \$4,118,000 are reported as secured in that way.

The comptroller's letter states:

"Had the New York reserve bank, with its intimate knowledge of the steady increases of this member bank's borrowings from the reserve bank, brought the matter to the attention of this office and suggested the advisability of an examination to get at the character of the loans or investments which made necessary these heavy drafts upon the reserve bank, an examination would have been made promptly."

In general, the borrowings of the bank in question from this bank were upon the security of Government bonds or certificates of indebtedness, and it was well understood by the officers of this bank, by the Federal Reserve Board, and by the public generally, that the increased loans of national banks in that period were brought about as the result of Government borrowings. Nothing in the relations of that bank to the Federal reserve bank justified any other conclusion. On the other hand, the comptroller himself had received a report from his examiner which he claims drew his attention to unsatisfactory conditions. Had he obtained such material, it was

obviously his duty to bring it to the attention of the Federal Reserve Board or to this bank. The facts are that there was nothing in the report of October 3 which justified any suspicion of unsatisfactory conditions, and it is therefore believed that such conditions were not brought to the attention of the comptroller officially until the examination of August 27, 1920. Even then no action was taken by him to bring them to our attention until more than four months after the examination was started.

The comptroller on page 5 states:

"The records show that the member bank mentioned at the time of the August, 1920, examination, despite the warnings and admonitions of the Federal Reserve Board as to the restriction of credit for nonessentials and for speculative purposes, greatly increased their loans on highly speculative securities, such as the _____ loans and the loans (including the so-called 'dummy' loan) of over \$5,000,000 to Director _____, who, besides being a director in the _____ National Bank, was also at the time of the 1919 examination a director in the _____ Bank of New York, and its eligible paper on hand November 16, 1920, as shown by this report of condition, a copy of which was sent to the reserve bank of New York, was less than \$34,000,000, or scarcely 9 per cent of its deposits outstanding at that time."

It would appear from this statement in the comptroller's letter that he has relied for justification of his failure to examine this bank as required by law upon the assumption of authority by the Federal reserve bank to make examinations of member banks for the purpose of supervising their business and restricting credit granted to essential and non-speculative purposes, in a manner not contemplated by law. The officers of this bank and of other reserve banks have frequently discussed these matters with the Federal Reserve Board. We have never assumed to examine member banks (the board is aware that we have not undertaken to and has not expected or required us to do so) and have relied upon the examination made by the Comptroller of the Currency and by State authorities. The disclosure of the conditions complained of in the above quotation was not made in the report of examination of October 3 and could not have been disclosed except by further examinations, which the comptroller failed to make until August, 1920. He now seeks to escape his responsibility by placing it upon us.

As to the last part of page 7, in which the comptroller states that confidential reports of national-bank examinations in this district are available to us when desired, it is a fact that upon application to his examiner's office we are permitted to see them. You will, however, realize that unless the confidential reports of the examinations of all national banks are filed with us conditions revealed by such reports as to any particular bank will not come to our attention unless something in the limited report which is filed with us discloses such conditions. The Comptroller of the Currency has always refused to place that information in our hands voluntarily, and since it appears that his complaints in his letter of February 26, 1921, are based chiefly upon the report of the bank under consideration, as of October 3, we must deny that anything in that report placed upon us the responsibility to ask permission to see the confidential report. It should be said that even the examination of the confidential report, which I made when in Washington last month, disclosed nothing to indicate a condition in the bank under review which was dangerous.

I regret very much that the comptroller makes references in his letter to my attitude at the meeting of the Federal Reserve Board on February 26, which might suggest from what he writes that I was lacking in respect to the board. If, in any way that is true, I now apologize. The statement of which the comptroller complains was prompted by the fact that it was disclosed at that meeting that he had continued, in violation of the direction of the board, to send copies of his letter of December 28, 1920, addressed to the board, and of a most confidential nature, to some person or persons outside of his office, and that he reserved the right to continue to do so. This violation of propriety and evidence of his disloyalty to his associates prompted the reply of which he complains in his letter. If responsibility is to be found for the consequences of impatient disregard for constituted authority, it would appear to rest with the Comptroller of the Currency, who has sent copies of a letter relating to most confidential matters outside of his office without the knowledge or authority of his associates in the board.

I have before me a letter addressed to you by the Comptroller of the Currency relating to a State institution which is a member of the Federal reserve system in this city. Inquiries are being made for the purpose of ascertaining whether it is desirable to communicate with the board in respect to that matter, and, if so, a separate letter will be sent at a later date.

In conclusion, it appears to be evident that under the laws of the United States the Comptroller of the Currency is charged with the full responsibility of the examination of and supervision over national banks organized and operating under the

terms of the national banking act. That responsibility rests upon him and him alone and neither the Federal Reserve Board nor the Federal reserve banks are authorized or expected in any way to infringe upon the duties and prerogatives of the office of the Comptroller of the Currency. National banking institutions have repeatedly been held to be private corporations, organized by private individuals under the terms of Federal Statutes, and, while their constitutional justification is that they may be used for the public purposes of the Treasury Department when required, nevertheless the greater majority of their powers are private powers, as distinguished from public powers, which are exercised by each national bank as an individual corporation owned by private shareholders and managed by officers appointed by a board of directors elected by those shareholders. It is not believed that even the office of the Comptroller of the Currency should be expected to control the management of any national bank in all of its details, but whenever the management of any of these associations violates the law in any of its practices, or is guilty of such mismanagement that the interests of the public become endangered, the correction, if any, must be made by the office of the Comptroller of the Currency, and not by the Federal reserve bank of which the national bank is a member. That responsibility is imposed upon the Comptroller of the Currency by law and is one which can not be assumed by a Federal reserve bank, even if it were willing and anxious to undertake the task.

Finally, I desire earnestly to urge upon the Federal Reserve Board the importance of an early determination by Congress as to whether—

1. The office of the Comptroller of the Currency shall be abolished or continued;
2. If it is abolished, whether these duties may not be performed by the Federal Reserve Board;
3. If the office is not to be abolished, whether it may not be made subordinate to the Federal Reserve Board; and
4. If not made subordinate to the Federal Reserve Board, whether the Federal reserve banks should not have all information which becomes accessible to national bank examiners at once that the examination is made.

Very truly, yours,

BENJ. STRONG, *Governor.*

Hon. W. P. G. HARDING,
Governor Federal Reserve Board,
Washington, D. C.

STATEMENT OF JOHN SKELTON WILLIAMS—Continued.

The CHAIRMAN. All right, Mr. Williams.

Mr. WILLIAMS. Mr. Chairman, I shall not comment upon that letter at this time. If there is anything that seems to deserve consideration or attention from me I will take the liberty of communicating with you after having an opportunity of looking over the letter, which I understand now goes into the record.

May I comment upon Gov. Harding's letter, which was read by the governor a while ago?

The CHAIRMAN. I know of no reason why you should not comment upon it.

Mr. WILLIAMS. I mean to say, you are not proposing to adjourn as yet?

The CHAIRMAN. No; I want to finish with you to-night if I can.

Representative TEN EYCK. Just one question. There is one thing I would like to have Mr. Williams take up before he closes his testimony here. This morning he said he was going to make recommendations in relation to some of the changes that might be beneficial and assist the farming industry of the country, and I want to be sure that that goes in before he closes his discussion. That is all.

Mr. WILLIAMS. I have before me Gov. Harding's letter to me of April 4, 1921. In the second paragraph of his letter he says:

As the chief active executive officer of the Federal Reserve Board I acknowledge your letter addressed to me as governor only because of the necessity of placing a flat contradiction of its misstatements and half truths upon a record composed largely of letters with respect to which you have reserved complete freedom of action, etc.

That is in the nature of a general denial, but it is not a denial of the specific charges which I have made, or rather, it furnishes no proof of the inaccuracy of any statement which is embodied in my correspondence. I have made specific charges and complaints, and a general denial, I think, is hardly effectual.

On the second page of his letter, in the opening paragraph, he refers to five letters which he had received from me from October 18, 1920, to February 26, 1921, which he describes as "long and confused expressions of your views on various subjects." I am quite prepared to leave the character of those letters to the intelligence of this commission, and not to accept Gov. Harding's views as to their style or merits. He says:

They contained no definite program and, while charging the board with certain responsibilities, made no specific recommendations except as noted herein.

They did contain a definite program, and the recommendations speak for themselves.

He refers to some of the recommendations in the course of his letter. His letter is obviously inaccurate in that respect, as will be shown by the record.

I inserted at yesterday's meeting a memorandum filed by me with the reserve board as far back as August, 1920, and later again in October, 1920, which not only made a specific suggestion looking to the liberalizing of credits, but also urging a general revision of Federal Reserve Board policies, and a letting up of the policy of contraction from which the country had already suffered so much, and from which it was in danger of suffering more if continued.

I am taking the liberty of commenting upon these passages for the reason that I did not think it worth while at the time to make a formal acknowledgment of this letter, but contented myself with sending to Gov. Harding and to each member of the Federal Reserve Board a copy of an address which I made in Washington about 10 days after the receipt of his letter, which I considered answered his letter pretty effectually.

He also makes a general statement in the first paragraph of page 2 referring to my letters "as a biased presentation of facts and fancies which fully ignore the actual disposition which has been made of the issues under consideration." Well, of course there is no evidence to sustain that, and that charge is entirely and wholly unsupported. He says in the next paragraph:

Certainly you, yourself, must be fully aware that it is not true that the "complaints" you have made still "stand essentially unchallenged" or "unanswered."

My statement is not only true as of that time, but it is still true as of this date. He has not succeeded in disproving a single statement made by me in the series of letters addressed to him and which have gone into this record.

At the bottom of page 2 he again claims that I made no definite recommendations. The record disproves that completely, and I will not take up your time discussing his charge.

At the top of page 3 he claims that I made no motions tending to an improvement of conditions until February 25. My letter to him of February 4, introduced into the record to-day, shows that such a resolution offered by me on February 2 was voted down by the board.

He complains of my omission to attend board meetings more regularly. I think the records will show that I attended an average of from two to three meetings a week during the whole period that I was Comptroller of the Currency and ex-officio a member of the Federal Reserve Board; often more frequently.

In paragraph 3, on page 4, he says:

But even this issue was so beclouded that it would have been difficult for the board or for the Federal reserve bank of New York, even if they admitted the accuracy of all of your statements (which they positively do not), to determine very clearly what course of action you would have them pursue in the circumstances.

Well, I think that my recommendations were clear enough for a man of average intelligence. I am sorry the governor did not understand them.

He says further along:

In the case of the one particular member bank which is made the basis of most of your charges, the report of the examination evidencing the facts upon which you base those charges, was not delivered by you to the Federal reserve bank of New York until January 7, 1921, some months after the examination was begun and after you had written your letter of December 28, 1920, addressed to me.

I do not think it was quite fair for him to make it appear that I failed to bring the facts of that case before the board until January 7, 1921. Gov. Harding himself knows perfectly well that I invited—I may almost say I urged—him to attend a hearing with the executive officers of that very bank about the middle of November, 1920, where matters relating to their operation and conditions were being discussed. He was unable to attend for some reason or other, at least he did not attend, and I made it my business to inform him particularly in November of the progress of conditions with that institution so as to keep him well informed. I regret that he should omit that important fact.

He states that the information given him in regard to a particular bank "did not present any information calculated to put either the Federal Reserve Board or the Federal reserve bank of New York upon notice of the conditions which you now charge existed throughout the year 1920."

That statement of his is very conclusively and completely answered and disproved in the record. I also call attention to the fact that the detailed page of criticisms which were omitted from the record to-day, for obvious reasons, dealt conclusively with that aspect of the case.

On page 5, the second paragraph, he says:

The Federal Reserve Board has maintained, and the Federal reserve bank of New York has maintained, that it is not the duty of either the Federal Reserve Board or the Federal reserve bank of New York to control the internal management or policies of banks coming within the jurisdiction of the office of the Comptroller of the Currency by means of arbitrary restrictions of credit.

Now of course that is a pretty broad subject. My position is that it is the duty of the Federal reserve banks to exercise a wise discernment and discrimination in extending huge loans to banks which are misusing their funds or are engaged in heavy speculative operations, or which are otherwise subject to criticism. I do not believe it is the theory of the Federal reserve act that money should be handed out to any member bank automatically as long as they furnish eligible paper. I do not believe that it is the thought of Congress or

of the people that any bank shall get as much money as it pleases as long as it hands out so-called "eligible" paper.

The CHAIRMAN. Well, is it your judgment that the policy adopted and carried out by the Federal Reserve Board and bank of New York was not wise and applied with proper discretion?

Mr. WILLIAMS. I think that the policies of the Federal reserve bank of New York in this respect are not wise, as I understand them to be set forth by Gov. Harding in his letter, and also in the long report of Gov. Strong to the Federal Reserve Board which was read to-day. I understood from those reports which you all heard, that the reserve bank of New York does not consider that it is a part of its duty to keep itself informed in regard to the operations and conduct of the business of its large member banks with a view to regulating its advances and extensions of credit according to the member banks operations and methods and general conditions.

The CHAIRMAN. I think we ought to clearly understand that proposition. My understanding of the position taken in that letter was that the Federal reserve bank of New York did not think that it would be wise to undertake to regulate the management, the internal management of the banks by restrictions of credit, not that it did not think it was wise to keep itself informed as to the general operations of the bank or the general character of its borrowings.

Mr. WILLIAMS. It is my view, taking a purely hypothetical case, that if the Federal reserve bank has a large member bank whose funds are being employed principally in wild speculations and in excessive loans to particular interests, especially its own officers, the reserve bank should be more guarded in extending credit to such bank than it would to another bank doing a purely commercial commercial business and not engaged in huge speculations.

The CHAIRMAN. Do you think that there should be a stricter rule of credit applied to a bank which loaned money for speculative purposes than is required of one that is engaged solely in commercial transactions?

Mr. WILLIAMS. Absolutely, and it is my judgment that the theory of the Federal reserve act is the upholding and promotion of commercial business of the country rather than speculation.

Representative SUMNERS. Mr. Williams, what degree of inspection and investigation do you think the Federal reserve bank should exercise in order to ascertain the character of the activities of the member banks?

Mr. WILLIAMS. That is a matter which calls for the exercise of a sound discretion and wisdom and experience and ability on the part of the supervising officers of the Federal reserve banks, and the same kind of wisdom and discretion which is used and exercised by the management of the most successful member banks. When an individual member bank, whether it be a national bank or a State bank, finds some particular borrower or customer is running wild and is engaged in all sorts of reckless speculations and disregarding the fundamentals of prudence and discretion, why the member bank calls that man down and limits its extension of credit to him. And I think the same rule should be observed in the dealings between the Federal reserve bank and the member bank, to a certain degree.

The CHAIRMAN. Are you familiar with the methods adopted by the Federal reserve bank of New York to keep itself advised as to the operations of member banks?

Mr. WILLIAMS. Well, I can not say that I do know the extent to which they keep themselves advised as to the condition of member banks. I should judge that they did not keep themselves very well advised as to the condition of some banks, because I would regret to think that if they were advised as to how the money which they were handing out was used, they would continue to pass it out with such prodigality.

The CHAIRMAN. Are you familiar with the methods which they have adopted, or which they used in keeping themselves informed as to the operations of the banks borrowing from them?

Mr. WILLIAMS. I am familiar with the internal condition of some of the large banks to which they have made the largest loans.

The CHAIRMAN. I wish you would answer the question. It is a perfectly simple one. I am asking you if you were familiar with the methods adopted by the Federal reserve bank of New York to keep itself advised as to the condition and the practices of the banks borrowing money from it?

Mr. WILLIAMS. I am advised as to some of the methods and devices which are employed. One, I should say, is to have access to the reports and examinations which are furnished to those banks by the comptroller's office. That is one primary and fundamental method of being informed. Even though the comptroller's office should furnish to the reserve bank of New York only one detailed report of examination a year, that one report would give the bank a basis upon which to make intelligent inquiries when any excessive loans are asked for by that bank.

The CHAIRMAN. Are you under the impression that intelligent inquiries were not made of the borrowing banks?

Mr. WILLIAMS. I should judge from the way in which credit has been extended to some of the banks as to whose internal workings I am advised, that the reserve bank did not inform itself, or if it did inform itself, if it was advised, I think that it should not have granted the huge credits which were passed out.

The CHAIRMAN. You are basing that judgment entirely on the basis of the loans granted, on your knowledge of the conditions of the banks rather than your knowledge of the method adopted by the bank to keep itself informed.

Mr. WILLIAMS. Yes; I know partially the method, but I can not say that I know all the methods that they employ to keep themselves informed. I do not pretend to.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. It just occurred to me that in making the sort of criticisms that you are making it might be wise to familiarize yourself with the methods that are adopted by the Federal reserve bank.

Mr. WILLIAMS. Well, I do not think that refers to the question that I am discussing particularly. I say that under conditions which I have pointed out, if the bank had been informed, I should have expected them to have adopted a more conservative course.

The CHAIRMAN. Well, the whole question here is whether the Federal reserve bank of New York, or elsewhere, should be guided by a general policy, or by the character of the transactions of the bank.

Mr. WILLIAMS. Gov. Harding says, on page 5:

On January 6, 1921, at a personal conference in your office you showed a copy of your letter of December 28, 1920, addressed to me, to an officer of the Federal reserve bank of New York and in referring to the particular national bank under consideration, you stated to him that you intended to recommend to Congress an amendment making possible the rediscount of paper now held to be ineligible in order to permit of even further extensions of credit that might be necessary to protect innocent depositors and creditors of such banks as this particular one which you cited as an illustration of the necessity of the amendment.

It is entirely true that I recommended to Congress and recommended to the Federal Reserve Board that there should be an amendment to the Federal reserve act which would make it possible for the Federal reserve banks to extend credit to large banks or other banks in an emergency upon a class of paper which is not now eligible for rediscount with those banks. And I am still firmly of the same opinion.

The **CHAIRMAN.** May I ask you there, whether the policy which you suggested could be adopted by the Federal Reserve Board without legislation?

Mr. WILLIAMS. No; it could not, without a violation of the law. I am told that it has been passed around or suggested that the reserve banks in emergency would disregard the law and lend on whatever they pleased, or whatever they thought they would be justified in lending on, to a bank in trouble, but I think it very much better to be governed by the law and to lend in accordance with the provisions of the law.

It has been suggested that that position is inconsistent with my suggestion that there should be a discrimination in loans to banks. There is no inconsistency. Even if a bank has been mismanaged and has been allowed more money than it ought to have been given by the Federal Reserve Board, and should get into trouble, I should certainly be in favor of the reserve banks using every effort to prevent disaster by lending the bank more money, if necessary, if they can do so lawfully and properly, but I think that by discrimination and greater watchfulness these banks can be prevented from getting into that extended condition. And that is exactly what I have been urging, that they should be so managed, and that the Federal reserve banks should pay them such attention as will make it unlikely that they will get in that extended condition. It is well known that there are many perfectly solid banks that would be unable to resist a run or to meet a run if they were dependent upon the rediscount of the amount of the eligible paper they have. They have other paper that is good but not eligible, and my thought is, and my recommendation to Congress is based upon, the utilization in an emergency of other securities which would enable a bank to stand a run.

The **CHAIRMAN.** Who would that emergency be determined by?

Mr. WILLIAMS. Who would the emergency be determined by?

The **CHAIRMAN.** Who would that emergency be determined by, and what standard would be used in determining it?

Mr. WILLIAMS. I have made specific suggestions along those lines in my report to Congress. I think that the Federal Reserve Board might be given the right, the authority, in an emergency to make paper not now eligible, eligible; to accept securities which can not now be accepted as a basis for loans by a reserve bank to a member bank. In the emergency of 1913, as Comptroller of the Currency it became my duty to pass upon some three or four hundred millions of

miscellaneous securities of all sorts which were deposited with various currency associations as the security for the emergency currency which was issued at that time. We accepted not only Government bonds, but other securities, municipal bonds, first-class railroad bonds, and many other securities which the Federal reserve banks have no right to lend upon as the law now stands.

The CHAIRMAN. Could this emergency, in your view, be declared with respect to the affairs of the particular bank, or with respect to the condition of the country as a whole?

Mr. WILLIAMS. I think that the law should be amended. That is a matter of detail, but I think it should be so general that the board could authorize a Federal reserve bank to take advantage of it.

Gov. Harding further remarks in his letter:

The inference in your subsequent letters and finally your statement in your later letter of March 26, 1921, that the Federal reserve bank of New York should of course have corrected details of the management of this bank or any other bank which might be making excessive loans to its officers, or which might be charging excessive rates of interest, by refusing to extend further credit, were entirely inconsistent with your own expressed ideas and with the ideas and convictions of all of those most familiar with the scope and purposes of the Federal reserve act.

It is not at all inconsistent. It is entirely in accord. I would try to prevent reckless expansion before the bank became strained, and if the situation should become dangerous, if it were possible to do so I would try to save it by lending it more money on proper security.

On page 6 Gov. Harding says:

Furthermore, the Comptroller of the Currency is charged with the responsibility of the examination and supervision over national banks. That responsibility rests upon him and him alone.

Well, the comptroller has not the power to enforce methods and policies which would, in my judgment, deal successfully with serious situations which sometimes arise. I have made certain recommendations to Congress in that connection. But the reserve bank to which the member bank comes for loans has the power to say: "Unless you conduct your bank in a decent and lawful manner and on conservative lines we will not lend you money." The comptroller has no such authority as the board, and the board could exercise that authority, in my judgment, in a very salutary way.

In the third paragraph on page 6 Gov. Harding says:

It is interesting to note in this connection that although you deny the power of the Comptroller of the Currency under the law to prevent such loans as those under discussion, nevertheless, you did take steps, subsequent to the last examination of the bank in question, which it has been understood were most effective in eliminating from the assets of that bank most of the loans that were criticised and which have been responsible for a rather drastic change in the policies of the bank.

Well, that was to a certain extent by moral suasion. The Federal reserve bank itself has even greater power in certain contingencies.

Gov. Harding says, on page 7—and I am nearly through the letter now—in reference to my request for information in regard to the proportion of acceptances which had been sold by the Federal reserve bank of New York at the request of member banks:

I will, however, inform you, with reference to the one question which you now raise—that is, with reference to the proportion of acceptances transferred by the Federal reserve bank of New York to other Federal reserve banks for its own accommodation—that less than one-seventh of the transfers which you stated in one of your letters represented continued borrowings by the Federal reserve bank of New York were sold by it for its own accommodation.

The information which I had hoped to elicit was not only the proportion of acceptances which were sold to accommodate the New York bank, but also the amount of bills discounted as well. The bills discounted presumably were all for the accommodation of the Federal reserve bank of New York. But that information apparently has not been furnished.

The CHAIRMAN. I think that information was in the letter read by Gov. Strong.

Mr. WILLIAMS. I do not understand that it is furnished separately as to bills discounted and acceptances. If it is, I should be pleased to see it in the record.

On page 7, again Gov. Harding says:

It appears, therefore, that contrary to your expressed belief the Federal Reserve Board has positively not let your "serious complaints touching board policies and reserve, bank supervision and management stand essentially unchallenged." Every recommendation which you have made to the board was formally acted upon by it in authorized session.

The recommendations as to liberalizing credits and reducing interest rates were "acted" upon eventually, it is true, but negatively, they were turned down. I find no essential statement which I made as to its accuracy, which can be challenged.

In the next to the last paragraph, on page 7, Gov. Harding says:

Before concluding, the Federal Reserve Board desires to refer to a few other statements in your letter of March 26, 1921, which are not of very great moment, but which can not pass unnoticed. It is denied that any of the members of the Federal Reserve Board have ever stated with reference to Federal Reserve Board policies that it was "more important to be unanimous than right."

Now he makes a technical denial of that language. My statement was this, I did not say that a member of the board "stated" that it was "more important to be unanimous than right." My statement was:

I have never been able to indorse or accept the doctrine quoted seemingly with a large degree of approval during a debate on board policies several months ago by a certain eminent member of the board that it was more important to be unanimous than right.

That was my statement, and it is true.

I think, Mr. Chairman, that that pretty well covers every statement which it is worth while for me to notice in Gov. Harding's letter of April 4, 1921, and which, as I stated before, was, as I thought, pretty fully covered by my address at Washington about the middle of April, a copy of which was sent to every member of the Federal Reserve Board at the time.

Mr. Chairman, I would like to introduce into the record this editorial force from the Manufacturers Record of May 5, 1921, if there is no objection.

The CHAIRMAN. I wish to say that I think the policy of inserting material into the record, statements made by persons who do not appear before the commission and whom the members of the commission therefore have no opportunity to cross-examine with respect to the basis for the suggestions or the charges or the opinions which they express, is a very, very doubtful policy. I think it is of very doubtful propriety to insert this particular editorial. However, I have no objection to it, as it is directed to the United States Senate

and the House of Representatives, and I presume that the members of those bodies will know how to deal with it.

Mr. WILLIAMS. The editorial is as follows [reading]:

To Members of the United States Senate and House of Representatives:

You have seen the chaos created in business by the drastic deflation brought about through the determined action of the Federal Reserve Board during the last 18 months to 2 years. You have seen your constituents suffer losses which are staggering. You have seen a decline in the value of output of farm, factory, and mine products and of securities during the last 12 or 15 months to the extent of \$25,000,000,000 or more, or an amount in excess of the cost of the war to this country.

Moreover, the money expended in the war helped to create activity and give employment to many people, but the loss of \$25,000,000,000 in value of products and securities has been wiped out of existence.

You see over 500,000 railroad cars lying idle on the tracks. You see the whole railroad situation in despair because of the lack of business, and the reasons for this you must necessarily face and investigate to the limit of your ability, in the interest of the Nation's business life, for there are millions of men walking the streets in idleness because work can not be had, and the idle body and the empty stomach create a very bolshevistic feeling in a brain which is not engaged in productive work.

Even though the new administration may be able to change this situation and stimulate the business interests of the country by a loosening up of the drastic restrictions on credit, our future welfare demands a very careful study of the causes of the present troubles in order that the future may be safeguarded.

By reason of this fact we are taking the liberty of inviting your serious consideration to some of the statements recently made by Mr. John Skelton Williams, former Comptroller of the Currency, and member of the Federal Reserve Board, in regard to the operations of that board. The statements made by Mr. Williams prompt us to ask, Is there any Senator or Representative who will excuse or overlook the things upon which Mr. Williams has turned the light in his recent address before the People's Reconstruction League?

The points made by Mr. Williams in his speech prompt us, therefore, to ask every Member of the Senate and House of Representatives the following questions based entirely upon Mr. Williams's statements and which we take for granted are correct, as he states them on his official knowledge.

No. 1. Do you defend the exaction (by a reserve bank) of interest as high as 87½ per cent per annum from a small country bank, 85 per cent of whose loans were to farmers?

No. 2. Do you defend the exaction of about 200 per cent per annum interest which was charged last summer for about six months on a large loan to a manufacturer by a member bank to which the Federal reserve bank of his district was lending money at 6 per cent per annum or less?

No. 3. Do you defend the plan which an "important official" of the Federal reserve bank of New York says was under consideration of "putting on still more pressure to clean up the after-war mess in a hurry and get it over," even though it involved "many forced failures" and "a long time in picking up the pieces?"

No. 4. Do you defend the huge loans made to certain individual banks conspicuous for their speculative operations and the speculative operations of their officers while numerous banks and other merchants and farmers were being starved or deprived of credit greatly needed?

No. 5. Do you defend the absurd excuse offered by the Federal Reserve Board that the "average" rate was all right when favored banks were borrowing millions at 5 and 6 per cent, while other banks were being charged in some cases all the way from 7 per cent to 87 per cent for funds sorely needed?

No. 6. Do you defend the action of the board in rejecting the resolution offered by Mr. Williams, then comptroller and a member of the board, that in no case should a member bank be required to pay (to a reserve bank) in excess of 10 per cent per annum interest; the comptroller's resolution to limit the interest rate to 6 per cent having also been voted down?

No. 7. Do you approve of having the reserve banks, which are already earning over 100 per cent per annum, add to their profits by exacting 6 per cent or 7 per cent per annum interest on loans secured by Liberty bonds, which only pay 3½ per cent and 4½ per cent interest and which, in many cases, were subscribed to at par with the definite assurance that they would be carried at 4½ or 4¼ per cent per annum interest?

No. 8. Do you defend the methods by which from five to eight brokers on the New York Stock Exchange artificially fixed from day to day the rate of interest on hundreds of millions of dollars of call loans, thereby enticing to New York for speculative uses funds solely needed by business men and farmers in other sections of the country?

No. 9. Do you think the Federal Reserve Board justified in boasting of a high ratio of "reserve" indicating, under existing conditions, a useless impounding of the funds of the system, when business men and farmers are suffering and complaining as they still are going, of the lack of funds for essential needs, the unused lending power of the reserve banks at this time being \$1,500,000,000?

No. 10. Do you defend the board's apathy and inertia, its refusal, during the past six months, in the face of repeated and emphatic warnings to revise its deflation policy, so as to ease a shrinkage which, in the absence of measures of relief which it could have aided in providing, has become a disastrous collapse?

No. 11. Do you think the management of the eminently respectable gentlemen sitting, or "setting," on the Federal Reserve Board during the past six months prior to March—two college professors, two bankers, one lawyer, and a Poughkeepsie newspaper man, who, in addition to the Comptroller of the Currency (who differed with them radically) constituted its membership and controlled our financial levers—has been particularly successful in this period?

No. 12. Or do you think that more liberal policies, advocated by leading thinkers and successful men of all classes in our own and other countries, including among the latter former Chancellor of the Exchequer McKenna, now head of one of the world's largest banks; Lord Leverhulme, one of Britain's greatest manufacturers and business men; and the statesmanlike governor of the Bank of France, would, if they had been pursued by the board, have been more successful and might have saved us billions of dollars of losses and untold suffering?

No. 13. Do you believe that a system, however wise in many respects it may be, should give to any seven men the most autocratic power ever given to an equal number of men in the world's history, over the financial, and thus over the entire business operations of a great country, such as the United States?

No. 14. Do you not believe that, regardless of what has happened and the change that may take place under what will probably be a much wiser administration of the Federal Reserve Board than that of the last few years, there should be some change which would enlarge the membership of the board by an adequate representation of the industrial, commercial, and agricultural interests of the country?

No. 15. Do you not believe that an organization having such limitless power over the welfare of the Nation, despite all the protests that may be made to the contrary, should hold its meetings open to the public so that the people of the entire country might know the reasons advanced for any action taken, and the vote of the members thereon? If, for instance, it had been known to the public that the Comptroller of the Currency was constantly, vigorously protesting against the methods of deflation, it is not conceivable that the Federal Reserve Board would ever have been allowed to carry out the plans which have brought such poverty to millions of people.

No. 16. Do you believe that any financial organization, controlled by the Government or by private financial interests, should have the right to turn on or turn off the supply of credit at its will, and deflate or inflate the products of the country with an autocratic power such as never before existed in the world?

These are questions which the country at large is asking. It will demand a reply. Never again will this Nation permit its entire business interests to be sacrificed in the way they have been sacrificed, by the power held by a limited number of men who at their will can deflate or inflate, can build up or destroy. That is a power too great to be committed to any seven men on earth.

The Federal reserve system has vast potentialities for good. It is a wonderfully constructed machine. But it is a machine the operations of which, and the reasons therefor, the public has a right to understand, and to know of any movement made, and the reason therefor.

Mr. Chairman, in contrast with the policy which has been observed at some times in certain districts by Federal reserve banks, and especially in contrast with a suggestion which was made, as quoted in one of the newspapers some weeks ago, purporting to have come from "an important officer" of the Federal reserve bank of New York that a plan was considered of "putting on more pressure" and thus cleaning up the after-war mess in a hurry, I should like to read the following newspaper interview which it appears was given out at Victoria, British Columbia, by one of our ablest and most respected bankers upon his recent return from travels in the East [reading]:

The Associated Press quoted Mr. A. Barton Hepburn, the senior and ranking officer of one of the largest national banks in New York, as saying upon his arrival at Victoria: "Japan is backing up the banks in lending funds at a low rate of interest to struggling firms that would otherwise go under to the detriment of commercial life."

I think that is an exceedingly interesting view coming from one of our leading and most esteemed bankers, a former Comptroller of the Currency.

The CHAIRMAN. Do you happen to know, Mr. Williams, how the bank officials rate in Japan compared with the commercial rate during the recent crisis in Japan—whether it was higher or lower than the commercial rate?

Mr. WILLIAMS. I do not recall offhand what the bank rate in Japan was during the year 1920. That information could be gotten, though, for your committee.

The CHAIRMAN. Well, as a matter of fact was not the bank official rate higher than the commercial rate during that period?

Mr. WILLIAMS. I do not know. I have no figures in my mind at the moment, Mr. Chairman. I know that the rate in Japan was not up to 45 per cent, though.

The CHAIRMAN. Well the average rate in the United States was not up to 45 per cent either.

Mr. WILLIAMS. No; fortunately.

The CHAIRMAN. As a matter of information I would like to direct your attention to the fact that in October, 1919, the Japanese discount rate was raised from 6.5 to 7.3, and on November 5, 1919, it was raised from 7.3 to 8.03, which rate continued during the entire year 1920, and was in effect in June, 1921.

Mr. WILLIAMS. There was no progressive rate in Japan, though, was there?

The CHAIRMAN. Not that I know of.

Mr. STRONG. There was, Mr. Chairman.

Mr. WILLIAMS. Mr. Chairman, I have just read an extract from a statement attributed to a veteran banker of this country. With your permission, I should like to read an extract from a letter which I received a few weeks ago from a leading economist, and very successful business man and financier in England.

The CHAIRMAN. Who is the author of the letter?

Mr. WILLIAMS. Mr. Arthur Kitson.

The CHAIRMAN. What is the date of the letter?

Mr. WILLIAMS. June 23, 1921. He is the president of the British Banking Reform League. At the request of a gentleman I sent him a copy of my address before the People's Reconstruction League in Washington. In acknowledging it he says:

I agree with all that you have written. We have been experiencing the same troubles in this country that you have had in the United States, and from identically the same cause. Our treasury officials, under the influence of the big money lenders, undertook to deflate our currency, although Heaven knows that currency was scarce enough during the war, but there was advantage for those gentlemen whose interest it is to keep a constant market for their own credit.

I will read a further extract from his letter. Continuing, he said:

The public stopped buying, business collapsed, firms closed their doors, and we have at the present time the greatest roll of unemployed that we have ever had since the "hungry forties."

Further, he says:

On the other hand, Germany is the one country where prosperity abounds, and under her cheap currency system trade is booming, and she is able to undersell all other countries. It is a strange thing that the intelligent people of the world can not grasp this subject and see it as it is.

I should like, with your permission, to read extracts from an address made by the former chancellor of the exchequer, Hon. Reginald McKenna, of England, now president or chairman of probably the world's largest bank, the London Joint City & Midland Bank. These extracts from Mr. McKenna's statement are contained in an English newspaper, the Clarion, published under date of February 4, 1921.

The CHAIRMAN. Have you any means of knowing whether this is an authentic statement of what the gentleman's views are or not?

Mr. WILLIAMS. Well, it was sent to me by a very responsible man abroad. I have no doubt it is authentic.

The CHAIRMAN. Does it purport to be a verbatim copy of the speech?

Mr. WILLIAMS. Yes; I understand it purports to give, as far as it is quoted, verbatim statements from the former chancellor of the exchequer [reading]:

Let us look at the policy of monetary deflation to be obtained by a high bank rate and a restriction of credit. Let us suppose that it were practicable by this process to bring prices permanently down to the prewar level. What sort of charge would our national debt then mean to us? It ranks to-day at £9,700,000,000, mostly borrowed when money was worth very much less than before the war. With prices back to their former level, the true burden of the debt would be more than doubled, or, in other words, the creditor would receive a huge premium at the expense of the debtor.

I will not quote the whole article, but give you a few extracts. He says further:

I think I have said enough to show that an attempt at monetary deflation of this kind can only end in the strangulation of business and widespread unemployment.

The editor of the Clarion, commenting on this statement, says:

Thus, in Mr. McKenna's opinion, the Government policy now being carried out by the banks, the policy of reducing the supply of money for industry, will inevitably result in—

1. The robbery of the majority of the people for the benefit of a few rich.
2. An unbearable rate of taxation.
3. Widespread unemployment.

Continuing, he says:

Mr. McKenna on this question is in entire agreement with us. He says: "Monetary inflation, unlike speculative inflation, is not a temporary condition, capable of remedy by raising the bank rate and restricting credits. Prices in this case are forced up over a protracted period of time, wages and contracts of all kinds are adjusted to new price levels, and fresh capital is embarked on business on this basis. In circumstances such as these the first effect of an attempt to force down prices by monetary deflation must be to cause severe trade depression. * * * The consequences of a continuous fall in prices entailed by dear money and restriction of credit, and accentuated by heavy taxation, must be complete stagnation of business."

I should like permission to read two or three extracts from articles written by the president of the British Banking Reform League, whom I have heretofore quoted. These addresses or articles were prepared by him in the closing days of the war. They are very illuminating.

The CHAIRMAN. Who are these speeches by?

Mr. WILLIAMS. By Mr. Arthur Kitson, president of the British Banking Reform League.

On page 36 of *Money Problems*, published by Mr. Kitson in 1920, being addresses made by him some months previously, he says [reading]:

MONEY CONTRACTION AND SOCIAL MISERY.

The contraction which followed the Napoleonic wars when our statesmen destroyed the "cheap" money which had enabled Great Britain to carry on her industries during the long war period from 1797 to 1815, and substituted the costly and inadequate gold basis, brought about the great fall of prices and that era of business depression which gave rise to the corn law agitation resulting in the Chartist riots and the rise of the free trade movement. Neither free traders nor tariff reformers seem to have understood that that period of social misery was directly attributable to the Government's contraction of the money supplies. As previously stated these disasters ended as soon as the supply of money was increased sufficiently to meet the needs of commerce.

We find precisely the same results in the history of the United States. Their Civil War was successfully waged and their industries prospered by means of an abundant supply of paper money. But no sooner was peace declared and the contractionists had succeeded in reducing the currency supply than trade began to decline and an era of falling prices, business depression, unemployment, and social distress set in. For the past three years we have been experiencing merely a repetition of former results under currency expansion. Every nation is forced to rely upon its credit during great national crises. No nation has ever been able to wage a great or prolonged war or to weather a great political crisis on a precious-metal basis. Our trade and industries for the past three and one-half years have been and are being carried on successfully at the same time that we are waging the greatest war in the world's history.

This was written in 1918 [continuing reading]:

Nothing but an abundant supply of currency in the shape of legal-tender notes and bank credit could have enabled us to undertake such unprecedented burdens. For the first time in our industrial history unemployment has practically disappeared, whilst labor was never so well remunerated. Any attempt to destroy this paper currency after peace is declared will constitute an attack on the national welfare, and if accomplished will result in a repetition of the economic disasters which have always accompanied periods of currency contraction.

As further proof of the fact that the chief barrier to increased output of wealth is an insufficiency of currency, the address of Sir Edward Holden on the "Depreciation of securities in relation to gold," delivered in December, 1907, to the Liverpool Bankers' Association and previously referred to in former articles, may be cited. In that illuminating address Sir Edward showed conclusively that the maximum amount of trade which is possible depended upon the volume of bank loans allowed, and that the extent to which loans could be granted depended not upon the demands of trade, nor upon the amount of securities offered, but upon the amount of legal-tender reserves controlled by the banks.

I insert those views of very eminent English authorities, not as indorsing them necessarily in full but as offering material for serious thought.

The CHAIRMAN. Well, you are not suggesting in reading that statement, I suppose, that it was possible to maintain the industry of this country on the basis of the loans and discounts and the expansion of credit of 1919?

Mr. WILLIAMS. Mr. Chairman, I am glad you made that suggestion. It has been my belief and conviction that there has not been in this country the degree of currency inflation which some people have tried to make us believe existed. I dealt with that subject in my annual report for 1920, and I would like especially to introduce into this record my statement on that subject. I think that there has

been no inflation of our currency. There has been an expansion of our currency, but not an inflation.

The CHAIRMAN. I was not talking about inflation of currency; I was talking about inflation of credit, which is a very different thing.

Mr. WILLIAMS. And I have not been in sympathy with the severe measures which have been directed toward not only the deflation of credit but the deflation of currency. The memorandum which I read into the record this morning, I believe, shows that there has been a deflation of credits of over a thousand million dollars in the past 12 months, as expressed by the loans and rediscounts with the reserve banks.

Now I want to call attention to the fact that the Liberty bonds and the other war securities, the Victory notes and certificates of indebtedness which the banks of the country have been lending on, or have been holding for investment, have amounted in the past year or two to substantially as much as the total loans and rediscounts of all the 12 Federal reserve banks; in other words, that the great expansion of credit or of currency which is spoken of sometimes has not existed to the extent that it is believed by some people; that while we have issued and paid for and taken care of twenty-four or twenty-five billions of Government obligations, the banks of the country have only had to come to the Federal reserve banks to relieve them only to the extent of about 10 per cent of the amount of Government securities the people have paid for without asking additional relief on account of the huge expansion of business and the rise in prices.

The CHAIRMAN. Well, is that strictly true? If banks had only to go to the Federal reserve banks to relieve them of 10 per cent, that goes over a long period of time. You would have to consider the various periods in which these quotations were made.

Mr. WILLIAMS. I mean the maximum amount of loans and rediscounts by the Federal reserve bank, I believe, was around \$3,000,000,000. Now, the amount of war obligations which we have had out have ranged from twenty-two to twenty-seven or twenty-eight billion dollars in the last two or three years. I think that the amount of war obligations which we have out at this time amount to somewhere from twenty-three to twenty-four billion dollars. And the rediscounts in the 12 Federal reserve banks amount to only at the present time, if I remember the figures correctly, less than \$2,000,000,000.

The CHAIRMAN. Well, I want to get this clearly in my mind. All of these bonds, or practically all of them, pass through banks, either the national banks or the State banks, and as they pass through they establish the credits of those banks, which would make the basis of further transactions, either for war purposes or for other purposes, isn't that true?

Mr. WILLIAMS. No; I was including in my statement all the Liberty bonds and Victory notes which were in all national banks, whether they were held as collateral or whether they were owned. It includes the whole business. So that we may say that nine-tenths of the war securities, of which there are twenty-four billion, are not in those banks in any way, either for investment or as security for loans.

The CHAIRMAN. Well, as they went through the banks they did stand as a basis for credit, did they not?

Mr. WILLIAMS. No; how?

The CHAIRMAN. Well, the banks took the notes——

Mr. WILLIAMS. Yes; but I say to a certain extent——

The CHAIRMAN (continuing). Sold them to people and established the credit on the basis of it, which was used for the production and manufacture of war material.

Mr. WILLIAMS. Only a small proportion of them are held by the banks. If the holders of the Liberty bonds and Victory notes are borrowing on them anywhere to any heavy extent it must be outside of the banks.

The CHAIRMAN. Your figure of \$3,000,000,000 represented the amount rediscounted with the Federal reserve bank, not the amount which was held by the member banks, or upon which the member banks are loaning?

Mr. WILLIAMS. I should like to read a brief paragraph here which will, I think, specifically answer your question. This is in my annual report.

On page 15 of the Comptroller's Report, for 1920, there is a statement under the heading of "National bank condition November 15, 1920, compared with March 4, 1919, following the armistice" that begins as follows [reading]:

An analysis of the reports of condition of all national banks as of November 15, 1920, as compared with their condition on March 4, 1919, four months after the armistice, suggests that there has been far less inflation of credit and loans, at least as far as the national banks are concerned, than is popularly supposed, and some of the criticisms which have been made as to the alleged financial inflation, so far as they are concerned, is hardly justified. The generally conservative instincts and prudent management of most of our bankers have been a healthy and restraining influence to the orgy of extravagance and speculation which raged during the 18 months' period succeeding the armistice.

The loans and discounts of all national banks on March 4, 1919, plus the United States Government securities owned (but exclusive of United States bonds held to secure circulation), which may be regarded in the light of loans to the Government, amounted to \$12,694,050,000, as compared with \$13,749,926,000 on November 15, 1920. This was an increase in loans and discounts and United States Government securities held during the past 20 months of only \$1,055,876,000, or less than 9 per cent.

I wish you would note, please, this paragraph:

It should be taken into consideration that during this period of 20 months the Government sold and collected \$4,500,000,000 of Victory notes, the majority of which were sold and collected for through our national banks.

Another study which is of interest in this connection is the analysis of the money borrowed by the national banks through bills payable and rediscounts on March 4, 1919, as compared with November 15, 1920. It may also be allowable to consider in this connection the amount of money borrowed by the national banks for these same periods in the shape of United States Government deposits, which are in effect demand loans from the Government secured by collateral.

On March 4, 1919, bills payable and rediscounts of all national banks aggregated \$1,451,223,000, while Government deposits on the same date amounted to \$591,318,000, making a total of borrowed money, plus Government deposits (secured by collateral), of \$2,002,541,000. On November 15, 1920, the total amount of bills payable and rediscounts was reported at \$2,390,633,000 and United States Government deposits at \$147,239,000, making a total of loans and discounts, plus money from the Government as deposits, of \$2,537,872,000, representing a total increase in bills payable and rediscounts and United States Government deposits during this 20 months' period of \$495,331,000.

It was during these 20 months, as stated above, that the \$4,500,000,000 of Victory notes were subscribed and paid for, and the national banks were necessarily called upon to carry hundreds of millions of those bonds for their customers in addition to the Victory bonds which they subscribed to for their own account.

The strong position of the national banks is further apparent when we consider that the amount of United States Government bonds which they hold (exclusive of those held to secure circulation), plus the loans made by these banks, on the security of Government bonds, is practically as much as the aggregate of their bills payable and rediscounts, including money borrowed from the Federal reserve banks and from all other banks.

That shows that the total amount of bills payable and rediscounts of the banks is covered by the Government bonds owned, plus the loans which they have made on those Government bonds. So I say that there is no inflation there. [Continuing reading:]

We therefore find that if the national banks should sell their United States Government bonds to investors and collect the money which they are now advancing on United States Government bonds they could, as a whole, without drawing upon their reserves, pay back every dollar they owe to the Federal reserve banks, whose earnings would as a result of such collections be reduced approximately \$150 000,000 per annum unless they should find other means for employing their funds.

The CHAIRMAN. If you thought there was no inflation of credit, why did you approve the action of the Federal Reserve Board in applying the higher discount rates late in 1919 and early in 1920?

Mr. WILLIAMS. I did not approve of it. I thought they went too fast.

The CHAIRMAN. Well, you say in your letters that you were in favor of that policy.

Mr. WILLIAMS. No, I beg your pardon. If you will look at my letters you will find that that is not my language.

The CHAIRMAN. No, it is not your language, but it is the substance of what you said.

Mr. WILLIAMS. No, there is a good deal of difference, Congressman. I was in favor of restraining the wild orgy of speculation which was in force and of holding down matters to a reasonable basis. I was never in favor of a 7 per cent rate, or any higher general rate.

The CHAIRMAN. Well, the record shows.

Mr. WILLIAMS. But I was in favor of restraining such things as were conspicuous in many parts of the country in the latter part of 1919 and the early part of 1920, and there was need for restraining influence, and that influence should have been exercised as conditions changed, and there should have been a revision of policies. When the automobile was going up hill at top speed I was in favor of holding it down and slowing it up so it might not go over the top and come to a crash on the other side. The upward movement of the automobile was stopped, but it crashed down on the same side on which it was proceeding. It came right back and was smashed up on the near side of the hill. I was opposed to that. I thought and still think it could have been regulated and controlled and could have been brought in an orderly way to safety.

Now, I should like to continue reading from the report of the comptroller for 1920. The next paragraph is:

An analysis of the reports of the national banks in each of the 12 Federal reserve districts tells us that in nearly every district a large reduction took place in the holdings of Government securities between March 4, 1919, and November 15, 1920, despite the flotation of the \$4,500,000,000 of new Victory notes in this period; and the money released by the sale of Government securities held by the national banks was generally used to increase the sum total of their loans and discounts.

I should also like to read into the record from page 21 of my annual report the following [reading]:

No real inflation in our currency. Proportion of money in circulation to total bank resources smaller now than before the European war.

A study of the above figures shows that between July 1, 1914, and July 1, 1920, there has been an actual reduction in the amount of gold in circulation, outside of the Treasury and reserve banks, of \$954,230,000 (due to the issue of Federal reserve notes in lieu of gold), while there has been an increase, or rather a new issue, of Federal reserve note circulation of \$3,121,241,000, following the inauguration of the new reserve system.

The net increase since July 1, 1914, in money of all kinds in actual circulation, outside of money in the Treasury and Federal reserve banks, is shown to be only \$1,962,000,000 and is accounted for by the issue of Federal reserve notes which are themselves backed by close to 50 per cent in gold, accumulated by the reserve banks as they issued their notes, and this gold is now held by reserve banks and reserve agents and is exclusive of the reserve which the reserve banks are required by law to hold against deposits.

The money in circulation in the United States at the close of the Government's fiscal year represents a distinctly conservative amount, when we compare it with the total resources of the banks of the country. The advance in prices and the increase in the resources of our banks can not be properly ascribed to inflation in our currency. On July 1, 1914, the proportion of the money in circulation to the total resources of all banks, both national and State, was 13 per cent. On July 1, 1920, the money in circulation outside of the Treasury and reserve banks was only 10 per cent of the total resources of national and State banks. The percentage of money in circulation to total resources of all banks was, therefore, 30 per cent higher in 1914 than the percentage shown at the end of the last fiscal year.

The proportion of money in circulation to total deposits of all banks (national and State, including trust companies, savings banks, etc.) in July, 1914, was 16.4 per cent. In July, 1920, the proportion was slightly less than 13 per cent.

In the six years which have elapsed since January 1, 1915, following the outbreak of the European war, our total imports of gold have exceeded our exports, according to the official figures (December, 1920, estimated) by \$967,618,197.

The gold produced by the mines of this country for the same period (1920, estimated) has amounted to approximately \$500,000,000.

If we assume that one-half of this gold has been used in the arts and industries, the increase in gold imports and gold from our own mines available for coinage will have increased our available stock of gold money during this period by not far from \$1,250,000,000.

During the six years since January 1, 1915, there has been a large excess of export of silver over silver imports, but this is largely offset and compensated for by the production of our silver mines during the period.

In conclusion, it appears that since about the time of the outbreak of the European War in 1914, the net increase in the stock of gold in the United States, coined or available for coinage, has amounted to about \$1,250,000,000, which is equal to about two-thirds of the net increase which has taken place in this period in the money in circulation, including gold, silver, and paper money, the increase in which from July 1, 1914, to July 1, 1920, on the foregoing basis, was about \$1,962,000,000.

Representative SUMNERS. Well, Mr. Williams, without reference to your report there or anything you have written, I am concerned to know whether or not it would be possible or safe to inaugurate a policy, national and district, under which values in this country might be pulled up, at least in the direction and the position which they held at the time when the national debt was created and when the people who are now burdened with debt contracted this debt. Is there anything that could be safely done by Congress, by any administrative branch of the Government, which would tend in that direction?

Mr. WILLIAMS. I think that there has been a very distinct improvement made in the last few weeks as the result of changes in Federal Reserve Board policies, in the liberalizing of rates, and the greater freedom in the granting of credits. I think that relaxation there has been already productive of good results, and if there is a proper policy pursued in that respect I think that things will grow still better.

Representative SUMNERS. You would not suggest anything in addition to the continuation of the policy which you referred to as having recently been adopted by the Federal Reserve Board?

Mr. WILLIAMS. I think there are some amendments to the law which would help the situation. I think, for example, that in view of the fact that it takes the farmer about nine months to plant and harvest his crop in some parts of the country, get the harvest in, that it would be well for us to extend the time limit on agricultural paper from six months to nine months. I think it would also be helpful if we could provide a means by which the farmer may obtain money more readily on warehouse receipts for the crops which he himself raises. I would not make it too easy for profiteers or dealers to obtain money on stored goods which they are holding for speculation, but I would give the farmer the opportunity of borrowing money on his obligations secured by warehouse receipts for wheat or corn or cotton under proper restrictions.

Representative SUMNERS. Do you think that that credit could properly be extended through the machinery of the Federal reserve bank as it is now organized?

Mr. WILLIAMS. As it is now administered?

Representative SUMNERS. No; I did not say as it is now administered; as it is now organized?

Mr. WILLIAMS. I think it could be done with possibly certain revisions in the law. It could be done by the Federal reserve system.

Representative SUMNERS. It would not be necessary, in your judgment, to create a new agency?

Mr. WILLIAMS. No; it could be done by the Federal reserve system under a proper administration. I think that those two measures would be profoundly valuable to the farmer. Give him nine months on his farm paper—there may be some regulations and restrictions there—and also make the farmer's paper eligible when secured on warehouse receipts for his products.

Representative SUMNERS. Recently the governors of the five banks of the southern territory had a meeting here. I noticed a statement given out by the Atlanta bank which indicates that that bank proposes to go the limit in giving aid to the cotton market. I noticed also a statement issued by the governor of the Richmond bank in which he indicates, as I understand the statement, that paper secured by cotton in the possession of the person who has bought it—

Mr. WILLIAMS. Who has bought it?

Representative SUMNERS. Who has bought it.

Mr. WILLIAMS. Not who has raised it?

Representative SUMNERS. In the possession of the person who has bought it, would not be subject to rediscount in the Federal reserve bank system. I have not been able to find where that limitation is imposed by the law. If that limitation is imposed by the law, it would seem to me that it would have to be changed.

Mr. WILLIAMS. That could be liberalized. I am not familiar with that particular situation. You have members of the Federal Reserve Board here, I suppose, who could answer that particular question.

I also think, Mr. Chairman and gentlemen, that it would be highly desirable to have a law which would prevent a member bank from charging its customers more than so much in excess of the interest rate which it is paying to its Federal reserve bank.

Now, the suggestion may be made that if we have that restriction some of these member banks and big institutions that are having a fine old time with 25 and 50 per cent interest will get out of the system. My answer to that is: Let them get out. I think the system will be better off without banks that resort to policies and principles and methods of that sort than to have them in the system, but I don't think they would get out. I think the effect would be that they would reform. I think that there are very few large institutions which have felt the benefits of the Federal reserve system that will want to retire from it, especially in the larger cities. And I think that a regulation of that sort would be of tremendous benefit to the borrowing classes and to our merchants and farmers and everybody else. I have made that recommendation in my last report to Congress, and I wish to take the liberty of emphasizing it here.

Take a bank, we will say in Philadelphia, a member bank, and that bank applies to the Philadelphia bank for a rediscount. I will take Philadelphia because I am pleased to say that I think the banks in Philadelphia are among the best managed in the country, and there are fewer abuses there than in many other places; the banks in Philadelphia as a rule are run on a business basis. Suppose a bank in Philadelphia wants to borrow \$1,000,000 and goes to its reserve bank. We will say the legal rate of interest in Pennsylvania is 6 per cent. The reserve bank says, "Are you observing the interest rates of your State; have you made any loans over the rates permitted by law?" They say, "We have not." The reserve bank will say, if the application is all right in other respects, "Here is your money. But it must be understood that you will not violate the usury laws as long as you are borrowing money from us." The bank says, "We accept those terms." They take the million dollars and loan it out within the laws of the State of Pennsylvania. But suppose the bank says, "Yes; we are loaning money at 2 per cent a month." Now, two courses are open in a case of that sort: The reserve bank may either say to the member bank, "You must agree that you will not loan any more money in excess of 6 per cent as long as we are loaning money to you," or they may go further and say, "You must return to the borrower any interest which you have collected unlawfully within the past year or within the past six months and adhere to a maximum rate of 6 per cent hereafter."

It may be the banks are running along smoothly, and they may think they have no occasion to borrow, and the going is good, and that they can continue to collect $1\frac{1}{2}$ or 2 per cent a month from needy borrowers. I don't think they will do this, however, if they anticipate or expect that the time will come soon when they must borrow again from the Federal reserve bank and must then disgorge the amount unlawfully collected. They are likely to let the customer have money at 6 per cent, the legal rate. How does that impress you?

Representative TEN Eyck. It certainly looks as if we might consider it.

Mr. WILLIAMS. Those are suggestions I wanted to take the liberty of making to your commission, Mr. Chairman.

Representative TEN Eyck. Right along that line, do you think it is feasible to discriminate between live-stock and farm paper and agricultural paper, by giving farm paper a swifter velocity, and by

giving farm paper a longer time, to meet their turnover, we will say nine months or a year, in order that—

Mr. WILLIAMS (interposing). I should say that agricultural paper should probably be defined as paper issued or made by the farmer for the production and harvesting of his crops.

Representative TEN EYCK. No; I am calling that paper farm paper made by the farmer for the production and harvesting of his crops; paper borrowed on by the farmer. And agricultural paper would be paper borrowed on by the commission man and dealer, who does not need nine months' paper.

Mr. WILLIAMS. No; I am glad you see that point. My suggestion would be that the man who buys the harvested crop should not have the nine months' time or six months' time.

Representative TEN EYCK. But the farmer should have nine months to a year for his turnover?

Mr. WILLIAMS. Yes, sir.

Representative TEN EYCK. As I understand, the reason for 90-day paper, and perhaps 120-day paper, as now given to the merchant, it is the average time of his turnover, and has been found to be the average time that he makes turnovers?

Mr. WILLIAMS. Yes, sir.

Representative TEN EYCK. While with the farmer it requires nine months' or a year's time to make his turnover?

Mr. WILLIAMS. Yes, sir; and the cattle raisers ought to have more than six months, too.

Representative TEN EYCK. Yes; the cattle raiser is a producer, too.

Mr. WILLIAMS. Yes, sir.

Representative TEN EYCK. He is a producer, the same as the farmer is.

Mr. WILLIAMS. Yes, sir. I think that legislation along those lines would be most helpful to the country.

Mr. Chairman, it is getting late, and I thank you very much for the time that you have given me. I feel unwilling to detain you much longer now, but I want to say a few words further before I close, and I would also like to add that I hope I may have your permission to appear before your Committee again if any testimony which may be given after I close should seem to make that desirable.

Allow me to say in conclusion that I recognize frankly that it is difficult, if not impossible, to prove mathematically that the policies of the Federal Reserve Board have caused the troubles in our commerce, industry, and finance which we see around us. It is more difficult to prove that than it would be to demonstrate that taking 2 from 4 would leave 2. Of course, coincidence does not mean always cause and effect. I can only give my judgment and my convictions on the evidence which I have before me; and my conclusions are based on my study of the situation from all angles, and with what I believe to have been exceptional opportunities for intimate knowledge of the situation, and from my own business experience of more than 30 years.

It is my deliberate judgment, so based, that the unyielding policies, the unsympathetic methods adopted and continued by the Federal Reserve Board after the importance of revising those policies to meet changed conditions had become manifest, are responsible, in great measure at least, for the strain, suffering, and disaster accompanying

our recovery from the delirium, demoralization, and disorganization which always have followed great wars.

We have to recognize human psychology, or impulse, or tendency, or whatever we may choose to call it, as a practical and real thing in life, to be considered and counted on by business men. It has usually been the cause of our panics, and a panic certainly is a real thing, however fanciful or fantastic its provocations.

I say the board failed to study the psychology, or whatever we may call it, and the changes and differences developing with time and events and with differing conditions at different times and seasons and in the various parts of the country, and to adjust their rulings and actions accordingly. In other words, it failed in sympathy, in my judgment, and it failed in understanding and responsiveness to the varying situations which are necessary for good banking, and especially necessary in banking on the gigantic scale and with the tremendous responsibilities of the Federal Reserve system.

The essence of my criticism is that the board undertook to apply the same rules and regulations and policies—if, in fact, they were not more liberal sometimes—where money was desired for speculation or usury and where it was absolutely and urgently needed for the accommodation of necessary commerce and the sustenance of essential industries and useful investments.

I do not say, or charge, that any member of the board is subject to prosecution or punishment. I do say, and the plain facts plainly show, that exactly what the Federal reserve system was intended to prevent has happened. We have to judge of performance by results. Briefly and bluntly, we have come through, and are going through, a period of exceptional trial and stress, and needed in the Federal Reserve Board men of exceptional ability and qualities. The board simply failed, in my opinion, to measure up to its responsibilities.

That is the gist of my contention at the present moment. I am not claiming here to be better or stronger than the other members of the board. I see from their last letter to me that I failed to present my suggestions so that they could be comprehended by them or to support them with arguments appealing to the intelligence of my associates. I am not assuming to be an expert in political economy, or even in finance. All my reasoning was and is based on study and ordinary practical experience in banking and in business, and upon observation of facts as they come before me.

I am not trying to injure or punish anybody, to give offense or to hurt anybody's feelings. I am out of office and hope to stay out; never have been in politics, and never expect to be. I am trying to give to the public and the country and you gentlemen in Congress some of the results of my experiences, thought, and observations, thereby doing what I believe to be my duty as a very loyal citizen of the country and earnest well-wisher of my fellow citizens.

We can not undo what has been done, nor do now what has been left undone that should have been done. I hope and think we will not, in a long while, have another such strain and trial as that through which we are and have been passing. I hope, however, that I may help to bring about some changes in the administration of the reserve system and some amendments to the Federal reserve act which will tend to make impossible a repetition of at least some of the errors I think have been made. Because no human device or construction

can be made proof against inadequacy or negligence, I venture the hope that what I tell, as plainly as I can, of what has happened, and how it has happened, may have some influence in inducing Senators to scrutinize very closely the qualifications and qualities of those whose names come before them for membership on this vitally and tremendously important body, which is unquestionably one of the most important agencies of our Government, having in its hands, in so large a measure, the welfare of the nation.

I thank you, Mr. Chairman and gentlemen, very much, for your patience in listening to me.

The CHAIRMAN. We are very much obliged to you, Mr. Williams. Are there any further questions? (After a pause.) If there are no further questions, the commission will stand adjourned until tomorrow morning at 10 o'clock, when Gov. Harding, of the Federal Reserve Board, will present his views of the situation.

(Whereupon, at 6 o'clock and 40 minutes p. m., the commission adjourned to meet at 10 o'clock on Thursday, August 4, 1921.)

AGRICULTURAL INQUIRY.

THURSDAY, AUGUST 4, 1921.

CONGRESS OF THE UNITED STATES,
JOINT COMMISSION OF AGRICULTURAL INQUIRY,
Washington, D. C.

The joint commission met, pursuant to adjournment on yesterday, at 10 o'clock a. m., in room No. 70, Capitol Building, Hon. Sydney Anderson (chairman) presiding.

The CHAIRMAN. The commission will come to order.

The chairman would like to make a brief statement in regard to the program for the day before we begin taking the testimony of Gov. Harding. I anticipate that Mr. Harding's statement will probably take all day to-day, and perhaps longer. Mr. G. Harold Powell, of San Francisco, is here, and I desire to give him an opportunity to appear before the commission before he returns to California. In order that he may do so Mr. Harding has consented to suspend at 3 o'clock this afternoon, and then we will take on Mr. Powell for his statement, after which Mr. Harding's statement will be resumed.

Mr. Harding, the commission, I think, would like to have you develop, if you will, first, your idea of the functions and relation of the Federal reserve system to the commerce and finance of the country, and then proceed with a discussion of any matters which you think would be of interest and value to the commission.

Representative TEN Eyck. I would like to say in that connection, I would like you if possible to start from where the reserve act authorized the establishment of the system, and not discussing the act but the authority, and then proceed on through the various branches of the system, and how it reaches out to the individual borrower.

STATEMENT OF HON. W. P. G. HARDING, GOVERNOR FEDERAL RESERVE BOARD, WASHINGTON, D. C.

Gov. HARDING. Without attempting to enter into a discussion of the Federal reserve act, I think it proper that the members of the commission should have the board's viewpoint as to what the functions of the board itself are, and the functions of the Federal reserve banks, a brief discussion of the character of the Federal reserve banks, and of their powers and limitations. When I speak of the board's viewpoint, I shall refer to the viewpoint that has been maintained consistently by a majority of the members of the board. I do not know that what I am going to say will represent the views of all those who have been members of the board, but I shall be very careful not to say anything which I do not know represents the views of the majority of the board. So that in speaking of the board, I would like to have it understood that the term means in

all cases the majority of the board. I might say, furthermore, that in cases where there have been any differences of opinion as between members of the board, there has never been a uniform line drawn; sometimes those who might dissent on one proposition might agree with and be part of the majority on another proposition. So that a member who is in the majority at one time may find himself in the minority at another time.

The Federal reserve banks are 12 in number. From a legal standpoint I am advised that they are private corporations organized under a special act of Congress, namely, the Federal reserve act. They are quasi governmental institutions, in that they are under the supervision of the Federal Reserve Board, and that they have on their boards of directors three men who represent the Government, who are appointed by the Federal Reserve Board. Each bank has nine directors. Six directors are elected by the member banks which are the stockholders of the Federal reserve bank. Thus in the operation and management of the bank, if lines should be drawn as between governmental and nongovernmental directors, the governmental directors would be in the minority, two to one against them. I do not know, however, that this line has ever been drawn.

Senator HARRISON. You stated that six of them were elected by the member banks; you did not state about the other three.

Gov. HARDING. They are elected or appointed by the Federal Reserve Board. Each is elected for a term of three years. The class C directors, who are elected by the Federal Reserve Board, must not, under the law, be officers, stockholders, or directors of banks, and that means nonmember banks and trust companies, as well as member banks.

The class A directors, three in number, are representative of the member banks. They may be bank stockholders, bank directors, or bank officers; presidents of banks, if you please.

Class B directors must, at the time of their election, be actively engaged in their district in commerce, agriculture, or some other industrial pursuit.

For voting purposes, in electing directors, the member banks are divided by law into three groups. The act as amended does away with the original section of the act which provided for numerical equality in those groups and provides that each group "shall consist, as nearly as may be, of banks of similar capitalization." The effect, therefore, is that in each district the larger banks are in a group by themselves, and they vote for a class A director, and also for a class B director, one to be elected each year.

Then there are the middle-sized banks in the second group, and they in turn, elect each year when their vacancies come up—each term, however, is for three years, so that the election does not occur every year in each group—but the middle-sized banks, when their turn comes to elect a director, choose a class A director, and a class B director, who represents the commercial and agricultural and industrial interests.

And then the small banks which in all districts are the larger number, elect their class A director, and their class B director.

Senator LENROOT. Can you tell us the capitalization that divides the different groups?

Gov. HARDING. The capitalization varies in different districts, because a bank with a capital of \$100,000 might be a small bank in one district, and yet it might be a middle-sized bank in another district, and belong to a different group. The law now provides that each group shall consist, as nearly as may be, of banks of similar capitalization.

Senator LENROOT. I wanted to get the number of banks in the first group?

Gov. HARDING. I can get that for you, and give it to you accurately.

Senator LENROOT. Well, just approximately.

Gov. HARDING. I think in every district 30 to 50 banks.

Senator LENROOT. In the first group?

Gov. HARDING. Yes; I do not know of any district that has less than 30.

The powers of the Federal Reserve Board and the powers of the Federal reserve bank are clearly defined. Section 11 of the Federal reserve act describes in detail just what the Federal Reserve Board is authorized and empowered to do. I shall not undertake now to read that entire section, but I want to refer to the salient features of it, and if the commission wishes to have the whole section in the record, I shall be glad to have it inserted.

The CHAIRMAN. It may be inserted at this point. If you desire to make reference to it, the whole section may go in.

(Section 11 of the Federal reserve act referred to is as follows:)

SEC. 11. The Federal Reserve Board shall be authorized and empowered:

(a) To examine at its discretion the accounts, books, and affairs of each Federal reserve bank and of each member bank and to require such statements and reports as it may deem necessary. The said board shall publish once each week a statement showing the condition of each Federal reserve bank and a consolidated statement for all Federal reserve banks. Such statements shall show in detail the assets and liabilities of the Federal reserve banks, single and combined, and shall furnish full information regarding the character of the money held as reserve and the amount, nature, and maturities of the paper and other investments owned or held by Federal reserve banks.

(b) To permit, or, on the affirmative vote of at least five members of the reserve board, to require Federal reserve banks to rediscount the discounted paper of other Federal reserve banks at rates of interest to be fixed by the Federal Reserve Board.

(c) To suspend for a period not exceeding thirty days, and from time to time to renew such suspension for periods not exceeding fifteen days, any reserve requirements specified in this act: *Provided*, That it shall establish a graduated tax upon the amounts by which the reserve requirements of this act may be permitted to fall below the level hereinafter specified: *And provided further*, That when the gold reserve held against Federal reserve notes falls below 40 per centum the Federal Reserve Board shall establish a graduated tax of not more than 1 per centum per annum upon such deficiency until the reserves fall to 32½ per centum, and when said reserve falls below 32½ per centum a tax at the rate increasingly of not less than 1½ per centum per annum upon each 2½ per centum or fraction thereof that such reserve falls below 32½ per centum. The tax shall be paid by the reserve bank, but the reserve bank shall add an amount equal to said tax to the rates of interest and discount fixed by the Federal Reserve Board.

(d) To supervise and regulate through the bureau under the charge of the Comptroller of the Currency the issue and retirement of Federal reserve notes and to prescribe rules and regulations under which such notes may be delivered by the comptroller to the Federal reserve agents applying therefor.

(e) To add to the number of cities classified as reserve and central reserve cities under existing law in which national banking associations are subject to the reserve requirements set forth in section 20 of this act, or to reclassify existing reserve and central reserve cities or to terminate their designation as such.

(f) To suspend or remove any officer or director of any Federal reserve bank, the cause of such removal to be forthwith communicated in writing by the Federal Reserve Board to the removed officer or director and to said bank.

(g) To require the writing off of doubtful or worthless assets upon the books and balance sheets of Federal reserve banks.

(h) To suspend, for the violation of any of the provisions of this act, the operations of any Federal reserve bank, to take possession thereof, administer the same during the period of suspension, and, when deemed advisable, to liquidate or reorganize such bank.

(i) To require bonds of Federal reserve agents, to make regulations for the safeguarding of all collateral, bonds, Federal reserve notes, money or property of any kind deposited in the hands of such agents, and said board shall perform the duties, functions, or services specified in this act, and make all rules and regulations necessary to enable said board effectively to perform the same.

(j) To exercise general supervision over said Federal reserve banks.

(k) To grant by special permit to national banks applying therefor, when not in contravention of State or local law, the right to act as trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver committee of estates of lunatics, or in any other fiduciary capacity in which State banks, trust companies, or other corporations which come into competition with national banks are permitted to act under the laws of the State in which the national bank is located.

Whenever the laws of such State authorize or permit the exercise of any or all of the foregoing powers by State banks, trust companies, or other corporations which compete with national banks, the granting to and the exercise of such powers by national banks shall not be deemed to be in contravention of State or local law within the meaning of this act.

National banks exercising any or all of the powers enumerated in this subsection shall segregate all assets held in any fiduciary capacity from the general assets of the bank and shall keep a separate set of books and records showing in proper detail all transactions engaged in under authority of this subsection. Such books and records shall be open to inspection by the State authorities to the same extent as the books and records of corporations organized under State law which exercise fiduciary powers, but nothing in this act shall be construed as authorizing the State authorities to examine the books, records, and assets of the national bank which are not held in trust under authority of this subsection.

No national bank shall receive in its trust department deposits of current funds subject to check or the deposit of checks, drafts, bills of exchange, or other items for collection or exchange purposes. Funds deposited or held in trust by the bank awaiting investment shall be carried in a separate account and shall not be used by the bank in the conduct of its business unless it shall first set aside in the trust department United States bonds or other securities approved by the Federal Reserve Board.

In the event of the failure of such bank the owners of the funds held in trust for investment shall have a lien on the bonds or other securities so set apart in addition to their claim against the estate of the bank.

Whenever the laws of a State require corporations acting in a fiduciary capacity, to deposit securities with the State authorities for the protection of private or court trusts, national banks so acting shall be required to make similar deposits, and securities so deposited shall be held for the protection of private or court trusts, as provided by the State law.

National banks in such cases shall not be required to execute the bond usually required of individuals if State corporations under similar circumstances are exempt from this requirement.

National banks shall have power to execute such bond when so required by the laws of the State.

In any case in which the laws of a State require that a corporation acting as trustee, executor, administrator, or in any capacity specified in this section, shall take an oath or make an affidavit, the president, vice president, cashier, or trust officer of such national bank may take the necessary oath or execute the necessary affidavit.

It shall be unlawful for any national banking association to lend any officer, director, or employee any funds held in trust under the powers conferred by this section. Any officer, director, or employee making such loan, or to whom such loan is made, may be fined not more than \$5,000 or imprisoned not more than five years, or may be both fined and imprisoned, in the discretion of the court.

In passing upon applications for permission to exercise the powers enumerated in this subsection, the Federal Reserve Board may take into consideration the amount of capital and surplus of the applying bank, whether or not such capital and surplus is sufficient under the circumstances of the case, the needs of the community to be served, and other facts and circumstances that seem to it proper, and may grant or refuse the application accordingly: *Provided*, That no permit shall be issued to any national banking association having a capital and surplus less than the capital and surplus required by State law of State banks, trust companies, and corporations exercising such powers.

(1) To employ such attorneys, experts, assistants, clerks, or other employees as may be deemed necessary to conduct the business of the board. All salaries and fees shall be fixed in advance by said board and shall be paid in the same manner as the salaries of the members of the board. All such attorneys, experts, assistants, clerks, and other employees shall be appointed without regard to the provisions of the act of January 16, 1883 (volume 22, United States Statutes at Large, page 408), and amendments thereto, or any rule or regulation made in pursuance thereof: *Provided*, That nothing herein shall prevent the President from placing said employees in the classified service.

(m) Upon the affirmative vote of not less than five of its members, the Federal Reserve Board shall have power to permit Federal reserve banks to discount for any member bank notes, drafts, or bills of exchange bearing the signature or indorsement of any one borrower in excess of the amount permitted by section 9 and section 13 of this act, but in no case to exceed 20 per centum of the member bank's capital and surplus: *Provided, however*, That all such notes, drafts, or bills of exchange discounted for any member bank in excess of the amount permitted under such sections shall be secured by not less than a like face amount of bonds or notes of the United States issued since April 24, 1917, for which the borrower shall in good faith prior to January 1, 1921, have paid or agreed to pay not less than the full face amount thereof, or certificates of indebtedness of the United States: *Provided further*, That the provisions of this subsection (m) shall not be operative after October 31, 1921.

(See amendment of Feb. 27, 1921.)

Gov. HARDING. You will notice that paragraph (a) provides that the Federal Reserve Board is authorized and empowered—

(a) To examine at its discretion the accounts, books, and affairs of each Federal reserve bank and of each member bank and to require such statements and reports as it may deem necessary. The said board shall publish once each week a statement showing the condition of each Federal reserve bank and a consolidated statement for all Federal reserve banks. Such statements shall show in detail the assets and liabilities of the Federal reserve banks, single and combined, and shall furnish full information regarding the character of the money held as reserve and the amount, nature, and maturities of the paper and other investments owned or held by Federal reserve banks.

And then paragraph (b) provides:

To permit, or, on the affirmative vote of at least five members of the Reserve Board, to require Federal reserve banks to rediscount the discounted paper of other Federal reserve banks at rates of interest to be fixed by the Federal Reserve Board.

I may add here that this is the only direct and specific power given the Federal Reserve Board in the act in the matter of loans; that we may permit one Federal reserve bank to rediscount with another Federal reserve bank, or, by affirmative vote of five members of the board, we may require one Federal reserve bank or group of Federal reserve banks to rediscount the discounted paper of other Federal reserve banks at rates of interest to be fixed by the board.

Then paragraph (c) is the section which provides or authorizes the board—

To suspend for a period not exceeding 30 days, and from time to time to renew such suspension for periods not exceeding 15 days, any reserve requirements specified in this act.

Then the proviso that the board—

Shall establish a graduated tax upon the amounts by which the reserve requirements of this act may be permitted to fall below the level hereinafter specified.

The graduated tax is described in this section. This graduated tax increases as the reserve drops down; with the further requirement that as these reserves diminish the Federal reserve bank shall add an amount equal to said tax to the rates of interest and discount

fixed by the Federal Reserve Board. The other sections do not require special mention here, except paragraph (f):

To suspend or remove any officer or director of any Federal reserve bank, the cause of such removal to be forthwith communicated in writing by the Federal Reserve Board to the removed officer or director and to said bank.

Then paragraph (j), "To exercise general supervision over said Federal reserve banks."

I wish to point out that the word "control" does not appear in that paragraph. The words are "general supervision."

Now, the other powers of the Federal Reserve Board appear in various sections of the Federal reserve act.

Senator LENROOT. Will you discuss later—I will not ask you now—your construction of the words "general supervision?" Will that come up later and will that be taken up later by you?

Gov. HARDING. I think it is different from "control," and I will explain that just as soon as I get to the powers of the Federal reserve bank directors. For instance, the Comptroller of the Currency has supervision over the national banks of the country, and the State bank superintendents have general supervision, where the law so provides; of the State banks. But he does not have control; the control of a bank is vested in its officers and directors.

Now, in section 13 the Federal Reserve Board is given power to determine or define the character of paper eligible for discount within the meaning of this act. The board is given no legislative powers whatever. Congress has legislated and has defined in a broad way eligible paper, but has given the board power, within the meaning of the act, to define more specifically the character of the paper eligible for discount.

In section 14 open market operations are defined.

Representative SUMNERS. Governor, what section did you refer to just a moment ago—just at this moment?

Gov. HARDING. Section 13. Now, open market operations are not obligatory upon the Federal reserve banks, because the permissive "may" is used. Section 14 begins:

Any Federal reserve bank may, under rules and regulations prescribed by the Federal Reserve Board, purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances, etc.

Paragraph (b) of section 14—now, this is a very important paragraph. To keep the connection you should go back to the opening words of section 14. There are certain specified powers. So it would mean that any Federal reserve bank has power—

to establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business.

The part I will read now is the amendment which was enacted in the early part of 1920, the progressive rate amendment, "and which, subject to the approval, review, and determination of the Federal reserve board may be graduated or progressed on the basis of the amount of the advances and discount accommodations extended by the Federal Reserve bank to the borrowing bank."

Senator HARRISON. When was that amendment made, Mr. Harding?

Gov. **HARDING**. Approximately in March or April, 1920. I do not think it was earlier than March, or later than April. I can give you the exact date. It was April 13, 1920.

Senator **HARRISON**. Of course, that was passed by Congress on the recommendation of the Federal Reserve Board?

Gov. **HARDING**. Yes; I will explain that later.

Now, I will ask the commission to turn for a moment to section 4 of the Federal reserve act. I said a moment ago that in law Federal reserve banks are private corporations incorporated under a special act of Congress. If you read section 4 and preceding sections you will see that this statement is true. The fiscal agency functions exercised by the Federal reserve banks are also exercised by national banks which are incorporated under acts of Congress, known as the national bank act. So, in like manner, the Federal reserve banks are organized under the Federal reserve act as private corporations having as stockholders all the member banks. [Reading:]

Upon the filing of such certificate with the Comptroller of the Currency as aforesaid, the said Federal reserve bank shall become a body corporate, and as such, and in the name designated in such organization certificate, shall have power—

First. To adopt and use a corporate seal.

Second. To have succession for a period of 20 years from its organization unless it is sooner dissolved by an act of Congress, or unless its franchise becomes forfeited by some violation of law.

Third. To make contracts.

You will notice that all through the act where reference is made to the various powers of Federal reserve banks almost invariably the qualifying clause follows, "subject to the approval of the Federal Reserve Board." In section 4 that qualifying clause is missing, except in one instance. [Reading:]

Fourth. To sue and be sued, complain and defend, in any court of law or equity.

Fifth. To appoint by its board of directors such officers and employees as are not otherwise provided for in this act, to define their duties, require bonds of them and fix the penalty thereof, and to dismiss at pleasure such officers or employees.

Sixth. To prescribe by a board of directors, by-laws not inconsistent with law, regulating the manner in which its general business may be conducted, and the privileges granted to it by law may be exercised and enjoyed.

Seventh. To exercise by its board of directors, or duly authorized officers or agents, all powers specifically granted by the provisions of this act and such incidental powers as shall be necessary to carry on the business of banking within the limitations prescribed by this act.

The eighth, it is not necessary to discuss here. But about the middle of paragraph 8, I want to call attention to this clause:

Every Federal reserve bank shall be conducted under the supervision and control of a board of directors.

Now, in section 11 relating to the powers of the Federal Reserve Board, the word "control" is lacking. Section 11 provides that the Federal Reserve Board shall have "general supervision" over the Federal reserve banks. This section provides that "every Federal reserve bank shall be conducted under the supervision and control of a board of directors."

Representative **TEN EYCK**. That is, under its own board of directors?

Mr. **HARDING**. Its own board of directors, chosen as I have already indicated.

Now, this section defines the functions of the board of directors [reading]:

The board of directors shall perform the duties usually appertaining to the office of directors of banking associations and all such duties as are prescribed by law.

You all know that in the case of a national bank, or in the case of a State bank, neither the Comptroller of the Currency nor the superintendent of the State banks has the right, under his power of supervision, to say, you must make such and such a loan, or you shall not make such and such a loan, if the bank has legal power to make it, and if in its opinion it is well to make it. I am emphasizing this because of the idea that seems to be generally prevalent all through the country that the Federal Reserve Board, sitting here in Washington, is a body which exercises vast powers over local institutions. I am not trying to minimize the powers which Congress has granted the Federal Reserve Board. I want to say that those powers, like all delegated powers, ought to be exercised with discretion and moderation and with all due regard to the opinions and judgment of those who are more directly in control of the banks over which the Federal Reserve Board has general supervision.

I do not think it will be contended that Congress, when it enacted the Federal reserve act, sought to establish a central bank. Of course, under the provisions of section 11, which I quoted awhile ago, the Federal Reserve Board can mobilize credits; if one Federal reserve bank in one section of the country is in need of credits for seasonal operations, or special emergencies, and other banks more fortunately situated in other sections of the country do not care to extend those credits, the Federal Reserve Board can force, by a vote of five members of the board, those other banks to extend credits where they are needed by other banks for seasonal operations or on account of special emergencies.

THE CHAIRMAN. As a matter of practice, would that probably be done by the Federal Reserve Board, in the absence of a request from a bank?

GOV. HARDING. As a matter of practice, the Federal Reserve Board has never had to exercise that authority, because there is a spirit of cooperation among the 12 Federal reserve banks, and they extend those accommodations voluntarily.

THE CHAIRMAN. Has the Federal Reserve Board ever been asked by one bank to require another bank to arrange credits?

GOV. HARDING. The board is asked frequently by a bank to arrange discounts for it; is asked frequently now, and all during 1920, and parts of 1919. There is nothing in the law to prevent officers of one Federal reserve bank taking up directly with the officers of another Federal reserve bank the matter of rediscounts. But the board requested, a number of years ago, that the banks should make these arrangements through the board.

SENATOR HARRISON. That is because of the spirit of cooperation?

GOV. HARDING. No; but the board wants to know what the situation in each district is. We want to be able to allocate the reserves equitably. We do not want one community to be well supplied with credits and another community deprived of credits.

REPRESENTATIVE TEN EYCK. In other words, you have better judgment of the entire situation than a particular bank would have?

Gov. HARDING. Yes. We have a private-leased wire, and we are constantly receiving information and communications. I am going to read to you before I get through this morning, a statement showing the condition in the several districts night before last.

Senator HARRISON. But there is a spirit of cooperation between the officers of the different banks?

Gov. HARDING. Yes; The Federal Reserve Board has never had to force this matter of rediscounts.

Representative TEN EYCK. Will you tell me who is the judge of the paper that is rediscounted when the board through a vote of five of its members, orders one Federal reserve bank to discount paper for another?

Gov. HARDING. The directors or their authorized officers or agents who made the rediscounts in the first instance are the judges. The board does not see the notes; neither does the lending Federal reserve bank see them. It merely takes the paper upon the indorsement and upon the guaranty of the borrowing Federal reserve bank.

Representative TEN EYCK. Could they refuse to accept any paper that was presented to them that another Federal reserve bank had discounted?

Gov. HARDING. If the board ordered them, by a vote of five of its members, to take it, I think they would have to take it, under the law.

Representative FUNK. Mr. Harding, there seems to be a feeling in the West that during 1920 all of the resources of the country, taken as a whole, were not available for some of the western reserve banks; now, what was the situation—

Gov. HARDING (interposing). I will go into that very fully, if you will let me take this up in the regular order.

Representative FUNK. I just want to propound this question, and then if you will cover it later—

Gov. HARDING (interposing). I will cover it very fully later.

Representative FUNK. I was going to say there was a feeling that some of the western reserve banks were failing to meet the requests that were made upon them, but that if all the resources of the country were considered as a whole, then some accommodation from eastern banks, particularly the bank in New York, might have been extended to those western reserve banks and helped them out.

Gov. HARDING. Congressman, that feeling was not warranted, and I will explain a little later on why. The feeling comes from the inability or indisposition of the member bank to make the loan in the first instance. I am going into that quite fully.

Now, I was discussing the powers of the directors of the Federal reserve banks. This is a very important section [reading]:

Said board shall administer the affairs of said bank fairly and impartially and without discrimination in favor of or against any member bank or banks and shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements, and accommodations as may be safely—

Note that word "safely" in there—

as may be safely and reasonably made with due regard for the claims and demands of other member banks.

I will stress that a little more further on.

I want to discuss now the rate. In one of the early drafts of the Federal reserve bill, which was being considered by Congress in 1913.

and which became a law on December 23, 1913, language substantially as follows appeared:

The Federal Reserve Board each week shall fix the rate of discount to be charged by each Federal reserve bank, and shall advise each bank of such rate.

That was stricken out in one of the succeeding drafts, and the law as finally passed provided that each Federal reserve bank should establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which rate shall be fixed with a view of accommodating commerce and business, and so on.

I will state frankly that the Attorney General of the United States, in December, 1919, gave an opinion, at the request of the Secretary of the Treasury, that the Federal Reserve Board has the right, if it chooses to exercise it, to fix and determine, under its power of review, a rate previously established by a Federal reserve bank, even if the directors of the Federal reserve bank disapprove of having its rate changed. But there again is a power which should be exercised with great discretion and moderation. The Federal Reserve Board is not organized as a central bank; we have no credit files; it does not seem to be our business, by any provision anywhere in the act—and certainly we are not given the machinery—to keep up with individual credits. That seems clearly to be left to the Federal reserve banks.

The directors of a reserve bank, under this law, subject to the provisions of law, and the orders of the board, must "extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks."

This means that if the directors of any Federal reserve bank, through prejudice or for any other reason, wanted to refuse reasonable and proper discounts which might safely be made to a member bank—that is, if they were prejudiced against that bank and should refuse reasonable and proper discounts which might safely be made to that bank—then that bank could take an appeal to the Federal Reserve Board, and the Federal Reserve Board could order the Federal reserve bank to discount for that bank, if it had good and eligible paper to offer. But there is nothing in the law that the Federal Reserve Board has power to determine for any bank whether that paper is good. The question of credit is one of the most delicate and complicated matters connected with the banking business. Each Federal reserve bank and each member bank and nonmember bank pays special attention to the credit worth of their customers. The Federal Reserve Board is not qualified to pass on individual credits.

Now, as to the discount rate. Up to this time the Federal Reserve Board has never exercised its power to fix discount rates over the wishes of a Federal reserve bank. There have been instances—only occasional instances—where the directors of a Federal reserve bank have met and have decided on certain changes in discount rates, and the Federal Reserve Board, having a new case presented for its review and determination, has approved those changes in part and has fixed other rates in lieu of some suggested by the directors; there have been instances of that sort. But I do not recall an instance where the Federal Reserve Board has met in solemn session and said to a reserve bank in any city, by telegram or otherwise, "You have

had such and such a rate; hereafter your rate will be so and so." We have always conferred with the reserve banks.

But if money rates were such over the country as to warrant a change in rates one way or the other, and the reserve banks were changing their rates all around, and the board approved of those changes, and a certain reserve bank should obstinately refuse to change its rates, then the board, after conferring with its directors, if they were still obdurate, would exercise its power to make a change. But we have gotten along very harmoniously with the directors of all the Federal reserve banks and their officers, and we have frequent correspondence on the subject of rates, and we have a private wire that keeps us in constant touch with anything they want to report.

Representative SUMNERS. Governor, before you get away from your discussion of the powers of the board over the banks, I want to ask what construction you place on subsection (j) of section 11?

Gov. HARDING. I think I have already explained that [reading]:

To exercise general supervision over said Federal reserve banks.

That means the power of supervising the banks generally, in harmony with the specific powers already delegated to us in previous paragraphs of section 11. And it has relation to the operations of the Federal reserve banks, but our power over a Federal reserve bank is not as complete as the powers of its board of directors, who the law says shall perform the duties usually appertaining to the office of directors of banking associations, and the banks are placed under their supervision and control.

The situation is quite analogous, as I have already stated, to the supervision exercised by the Comptroller of the Currency over national banks and the supervision exercised by State bank superintendents over State banks.

Representative SUMNERS. Now, we understand, of course, that the matter of detailed administration in the several districts is under the control of the officers of the respective banks of those districts.

Gov. HARDING. Yes; the board of directors is authorized in section 4 here to fix by-laws for the conduct of its business; it determines what officers the bank shall have, and what powers it delegates to those officers. The board of directors is in control of the Federal reserve bank; the Federal Reserve Board does not have the same control.

Representative SUMNERS. I understand that very well. But what I am trying to find out is this: Does that subsection (j) mean, construed in connection with the rest of the provisions of the act, that while, as a matter of fact, the governing officers of the Federal banks have to do with the details of the operations of those banks and the general policy of those banks within their respective districts, yet they exercise whatever powers they do exercise under the general supervision of the Federal Reserve Board; so that, construing the whole of it, and undertaking to determine the relationship of the board to the several reserve banks, are we to conclude that under this subsection you have a general power of control?

Gov. HARDING. Congressman, I think the simplest way to determine that is to refer to any standard dictionary for a definition of the word "supervision" and for a definition of the word "control."

Now, it seems to me that we can distinguish between "supervision" and "control." Certainly, the supervision and direction which the

law says the board of directors shall perform—"the board of directors shall perform the duties usually appertaining to the office of directors of banking associations"—must mean a more intimate relation than can be exercised by any board exercising merely supervisory powers.

Representative SUMNERS. Yes; I understand that. But I am trying to get—

Gov. HARDING (interposing). I will say, Mr. Sumners, that later on I am going to bring in some specific matters into the discussion, that if your questions were asked then you would have an answer to them.

Representative SUMNERS. I thought you were discussing now the fundamental question of power.

Gov. HARDING. I am coming to the most fundamental thing of all.

Representative SUMNERS. Very well; just one more question I would like to ask and then I will not press the matter further: Do you think that any general supervision can be exercised where the power of control does not rest?

Gov. HARDING. Certain supervision can be exercised when you have power to examine; power to approve salaries; power to remove for cause.

Representative SUMNERS. I will not disturb you any more in your discussion now.

Gov. HARDING. But I think you must draw the line; in any efficient administration you can not have two controlling bodies. The Federal reserve banks which are sometimes called regional banks—that term is not used in the act—are entirely independent corporations; each one independent of the others.

Representative SUMNERS. I do not think there is any discussion about that; I was not directing my question to the matter of policy, because I recognize that that must be determined by the board absolutely. But I was directing my question to the law.

Gov. HARDING. I have tried to make myself clear.

Representative SUMNERS. I will not press it further.

Gov. HARDING. My position is that the Federal Reserve Board should not assert, for the sake merely of asserting power—it ought not to exercise control, merely for the sake of exercising control, even if under the law it could exercise control and power to manage.

Representative SUMNERS. Do you mean "ought not" in the sense of "can not."

Gov. HARDING. I think under the law the Federal Reserve Board could meet to-morrow morning, if it saw fit, and remove every officer and every director of every Federal reserve bank. The law only requires—

Representative SUMNERS (interposing). That is subsection (f) ?

Gov. HARDING. The law says:

To suspend or remove any officer or director of any Federal reserve bank, the cause of such removal to be forthwith communicated in writing by the Federal Reserve Board to the removed officer or director and to said bank.

Representative SUMNERS. Yes.

Gov. HARDING. Now, I think we could assert any cause, however trivial it may be, and be within our legal rights in making removals. But I should hate to withstand the force of public opinion when people began to demand the reasons for such removals.

Representative SUMNERS. I will not press that. I am not discussing policies.

Gov. HARDING. Congress has undoubtedly given considerable powers to the Federal Reserve Board, but I think those powers should be exercised with prudence and common sense. If the Federal Reserve Board exercised every power that Congress has given it, merely for the sake of exercising the power, public sentiment would not stand for it very long.

Representative SUMNERS. Governor, I do not see how there can be any difference of opinion between you and me on what you started out to discuss; you started out to discuss the law.

Gov. HARDING. What specific matter have you in mind? If you will name some specific instance, to get it crystallized, I will try to answer it. What are you trying to get at?

Representative SUMNERS. I am trying to get an answer to my question: I am trying to find out what you construe to be your powers under subsection (j) of section 11.

Gov. HARDING. I have tried to answer.

Representative SUMNERS. If your answer is satisfactory to you, it will be satisfactory to me.

Gov. HARDING. I have said that of the powers delegated by Congress to the Federal Reserve Board, in the exercise of those powers the rule of reason should apply. The Federal Reserve Board should pay due regard to the power which the Congress has delegated to the directors of the Federal reserve banks.

Representative SUMNERS. I do not question that.

Gov. HARDING. Now, while we are not a court—do not understand me as claiming that the Federal Reserve Board is a court—but do you think that the supreme court of a State, or the Supreme Court of the United States, would undertake, *prima facie*, to pass judgment on a case which is to come up before a lower court? They exercise their powers on appeal.

Representative SUMNERS. Yes.

Gov. HARDING. Now, the powers exercised by the Federal Reserve Board are somewhat analogous.

Senator LENROOT. I want to ask this question: Under your construction of the law, are the class C directors representative of the board in any sense?

Gov. HARDING. They are.

Senator LENROOT. Is it your construction of the law that it was the intent that the Federal Reserve Board should exercise a supervision—a direction of policy through their representatives?

Gov. HARDING. I think the law undertook to give the Federal Reserve Board the opportunity of exercising its supervisory powers as I think Congressman Sumners understands them, in a perfectly proper and ethical way by having the board represented directly on the board of directors of a Federal reserve bank.

Representative TEN EyCK. May I ask a question right here?

Gov. HARDING. Yes.

Representative TEN EyCK. Has the Federal Reserve Board the same power and jurisdiction over the acceptances or ordering the acceptance of certain papers as it has over the rate-making power that you have described here previously?

Gov. HARDING. I do not think so. I do not see how the Federal Reserve Board is expected by this act to exercise powers over matters which it can not intelligently pass upon.

Now, in section 4, I have already quoted the duty of the board of directors in extending discounts to member banks. I will read it again [reading]:

Said board shall administer the affairs of said bank fairly and impartially and without discrimination in favor of or against any member bank or banks and shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made, etc.

It shall, subject to the orders of the Federal Reserve Board, extend to each member bank discounts, etc., but it does not say that it shall, subject to the orders of the Federal Reserve Board, discount paper which the directors think is unsafe or undesirable. It says it shall "extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made." The word "safely" is in there, and "reasonably made," and another qualification, "with due regard for the claims and demands of other member banks."

In other words, the law does not want any Federal reserve bank authority, through prejudice, to deprive any member bank of accommodations which it is fairly entitled to, if it has paper which can be safely rediscounted, nor does it want any bank to be shown favoritism and given very large accommodations which might impair the lending power and obligations of all other member banks.

Representative TEN EYCK. I will give a specific instance: For instance, you might find a condition where one reserve bank has refused to discount paper for another reserve bank, and upon your investigation you find that the money is so located throughout the country that they should discount for that bank.

Gov. HARDING. The Federal Reserve Board has no jurisdiction whatever over what paper a member bank shall take from a customer, or anyone else.

Representative TEN EYCK. I meant a Federal reserve bank, excuse me. As you described it before, you said you had the power and would act if one Federal reserve bank refused to discount paper for another Federal reserve bank, and if after due investigation you found that the money was needed in that particular locality, and I was——

Gov. HARDING (interposing). It has never been necessary for the Federal Reserve Board to exercise its power to require one Federal reserve bank to discount paper for another Federal reserve bank.

Representative TEN EYCK. I appreciate that; you say there has been a spirit of cooperation.

Gov. HARDING. I will explain that a little later.

Representative TEN EYCK. Let me go a little further: Now, if the first Federal reserve bank had refused to discount paper for the second Federal reserve bank because they had a feeling, as you expressed it heretofore, and they might refuse to accept the paper that the second Federal reserve bank presented, as a continuation of the policy of keeping the money from that particular locality, could you step in and investigate that paper, and after due investigation could you say to the first Federal reserve bank, "You have got to accept that paper"?

Gov. HARDING. What would happen is this: The paper offered by any Federal reserve bank for rediscount to another Federal reserve

bank—I explained the reason why these matters come through the board, so that we can allocate the funds and distribute them without favor or burden as the case may be. Now, if one Federal reserve bank had a large volume of paper which it had discounted for another Federal reserve bank and had the indorsement of the borrowing Federal reserve bank on it, but knew nothing as to the credits involved in the various transactions, if it felt uneasy and felt that it was expanding itself for the benefit of those borrowing Federal reserve banks more than it ought to in justice to its members banks, or if it felt uneasy about the quality of the paper, now what would happen—this never has happened—but what would happen—

Representative TEN EYCK. That is what I want.

Gov. HARDING. One of the officers of the lending Federal reserve bank would come to Washington and say, "See here, now, we don't know anything about this particular paper; we sent for a list of it and we do not think much of it; we are carrying so much of this paper, and the borrowing reserve bank's capital is so much; and we are carrying in this way two or three or four times the amount of the capital of the borrowing bank. Now, we don't think you should make us go any further with this. If there is anything wrong, let us stop it." The law provides a method. The law does not presume that the Federal reserve bank is absolutely impregnable; it provides what shall be done in the case of insolvency. The whole system would not be insolvent because of the insolvency of any one bank. Those are matters which might arise but are very unlikely.

Senator LENROOT. I would like to ask this question: Section 4, which you have quoted, provides:

Said board shall administer the affairs of said bank fairly and impartially and * * * extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made, etc.

Is it under that section that you would exercise power over collateral, if you did exercise power over questions of collateral?

Gov. HARDING. The Federal Reserve Board does not determine the question of collateral.

Senator LENROOT. Has it never determined a question of collateral?

Gov. HARDING. The Federal Reserve Board does not determine questions of collateral. But under section 13, it has repeatedly admonished reserve banks that they must not define the eligibility of paper; if there is any doubt about the eligibility of paper, that question must be referred to the Federal Reserve Board for its determination. And the Federal Reserve Board has repeatedly admonished reserve banks that it is their duty to live up literally to section 4 of the Federal reserve act, and that they must consider all offerings from all banks of any eligible paper. If the paper is clearly not eligible, they can not take it, and must decline it. If the paper is eligible technically, but is of a doubtful security and the board of directors feel uncertain about it, and feel that they can not safely, or can not with proper regard to the requirements of the other banks in the district, take the loan, then it is their duty to decline to make it; and I do not believe that the Federal Reserve Board has any power to direct a Federal reserve bank to make a loan to any bank, if the Federal reserve bank's officers in their honest judgment feel that that loan is an unsafe loan to make. Of course, if a complaint is made to the Federal Reserve Board, the Federal Reserve Board would investi-

gate it and try to render a decision which would be just to the Federal reserve bank, and to the applying bank as well. But, certainly I do not think the Federal Reserve Board would try to dictate in the administration of matters which are clearly intended to be left to the discretion and judgment of the directors of a Federal reserve bank, and force drastic action in a matter of that kind.

Senator LENROOT. Well, if the Federal reserve bank did in fact demand excessive collateral, would that be a matter for review and determination by the Federal Reserve Board?

Gov. HARDING. If a complaint was made to the board, it would.

Senator LENROOT. You are going to meet the charge later on that it was done?

Gov. HARDING. I am.

Representative FUNK. Of course, when paper is rediscounted by one bank for another, the original bank guarantees the amount of the payment?

Gov. HARDING. It guarantees the amount to the loaning bank.

Representative FUNK. So that any complaint that was made to the Federal Reserve Board that they turned it down because they did not like the paper, would not be a very strong argument, when the original bank guarantees that paper.

Gov. HARDING. Unless the loaning bank should come to the Federal Reserve Board and question the goodness of the paper or the strength of the indorsement. But, as I have said before, that is a matter that has never come up; never. It is merely a theory. I do not think it is ever going to come up.

Now, I understood from the testimony that I heard here yesterday that this commission was not given a satisfactory definition of the "basic line." It is very important that this commission should have a clear understanding of the meaning of the term "basic line." It is fundamental. And in order that you may understand it I have written my definition, and want to put it into the record, so that you will understand it, and will supply each member of the commission with a copy.

The CHAIRMAN. Is this uniform throughout the districts?

Gov. HARDING. I am going to read it, and I hope we will dwell on it until each and every member of the commission understands it thoroughly.

The basic line referred to in various statements of Federal reserve banks is the theoretical amount that a Federal reserve bank could lend to each member bank based upon the member bank's contribution to the earning power of the Federal reserve bank and upon the Federal reserve bank's ability to place issues of Federal reserve notes while maintaining a minimum reserve of 40 per cent against notes and 35 per cent against reserve deposits. Stated another way, it represents the amount of accommodation that the Federal reserve bank without borrowing from other Federal reserve banks could extend to all its member banks equitably and ratably if all member banks were borrowing at the same time. Since progressive rates have been abrogated at all Federal reserve banks, the basic line no longer has any practical significance but is used for statistical and comparative purposes.

Now, I will state there that while the progressive rates were in effect, as they were in 1920 in four districts, and until recently in two districts—

Senator HARRISON (interposing). What districts were those?

Gov. HARDING. The districts that had the progressive rates were Atlanta, Kansas City, Dallas, and St. Louis.

Senator HARRISON. And the two that had them until recently?

Gov. HARDING. The two that abolished the progressive rates recently were St. Louis and Kansas City. In the Dallas district, the progressive rate was abolished in February, 1921, and in the Atlanta district it was abolished in November, 1920. In the St. Louis district it was abolished in June, and the Kansas City district had a limited progressive rate until two or three weeks ago.

Now, the basic line, when the progressive rate was in effect, meant a great deal, because it meant the amount of accommodation on which the borrowing member bank paid the minimum rate of interest, and the application of the basic line was not uniform in all districts. For instance, some banks wanted to make the basic line relate to the required reserve of the member banks, and others wanted it based on the actual reserves carried. One bank based it on the member bank's capital and surplus. And then, again, the Atlanta bank excluded from its progressive rate and added to its basic line an amount equal to the capital stock of the member bank for all loans for agricultural and live-stock purposes, so as to give the agricultural and live-stock interests the benefit of a lower rate of interest. All banks which had the progressive rate exempted from the operation of that rate certain paper secured by Liberty bonds, Treasury certificates and Victory notes.

Now, if we go on with this we will get a better understanding of it. All member banks are required to be stockholders in the Federal reserve bank. They must subscribe for capital stock in the Federal reserve bank to an amount equal to 6 per cent of their own capital and surplus and must pay in one-half of their subscriptions, or 3 per cent of their capital and surplus. Each member bank is required to carry its entire legal reserve with the Federal reserve bank. The amount of this reserve varies according to the classification of the towns or cities in which the member banks are located.

This refers to section 19. I will come to that in a moment.

The reserve against time deposits, however, is the same for all member banks—3 per cent. The reserve required against demand deposits held by member banks in the three central reserve cities—New York, Chicago, and St. Louis—is 13 per cent. In the reserve cities—there are 50 or 60 reserve cities—for instance, every city which has a Federal reserve bank or a branch bank, if it is not a central reserve city, has been classified as a reserve city. Then, in addition, there are a number of other cities that have been classified from time to time as reserve cities. I think there are 50 or 60 of them in all.

In the reserve cities, 10 per cent, and in all other cities, towns, and villages, 7 per cent. The following table illustrates the reserve requirements and the theoretical basic line of discount accommodations in the case of a member bank in a small town and of a member bank in a central reserve city.

Now, we will consider a member bank A, located in a small town, which has a capital of \$25,000 and a surplus of \$15,000, which is a total of \$40,000. The stockholding of that bank in the Federal reserve bank—3 per cent of its capital and surplus—is \$1,200. The

reserve required to be kept on deposit with the Federal reserve bank is 7 per cent of demand deposits and 3 per cent of time deposits. It is assumed that the demand deposits are \$50,000, and the time deposits are \$50,000. So, assuming this bank with a capital and surplus of \$40,000 has a total of deposits of \$100,000, one-half in demand and one-half in time deposits.

Representative TEN EYCK. Is that \$50,000 total?

Gov. HARDING. \$50,000 of time deposits and \$50,000 of demand deposits, making a total of \$100,000 in deposits.

The bank is required to keep on deposit with the Federal reserve bank as a reserve 7 per cent of its demand deposits, and 7 per cent of \$50,000 is \$3,500; and it is also required to keep on deposit with the Federal reserve bank as a reserve 3 per cent of its time deposits, and 3 per cent of \$50,000 is \$1,500, so its total reserve deposit required is \$5,000.

The normal basic line for credit accommodation for that bank at the Federal reserve bank is as follows: The amount of capital stock held is \$1,200—we are considering now what this bank contributes to the Federal reserve bank—the amount of capital stock held is \$1,200. Of course, the Federal reserve bank does not have to carry a reserve against its capital stock.

This country bank has \$5,000 at the Federal reserve bank which it is obliged to maintain as a reserve deposit with the Federal reserve bank against its demand deposits and time deposits, so we figure 65 per cent of the reserve deposit of \$5,000, which makes \$3,250, and add this to its stock in the reserve bank, \$1,200, making a total of \$4,450.

Next, we multiply by $2\frac{1}{2}$, which represents the expansion through Federal reserve note issues. You see, the Federal reserve bank can use discounted paper to secure Federal reserve notes, provided it carries a reserve in gold of 40 per cent. So we multiply the sum of the capital stock held by the Federal reserve bank, \$1,200 and 65 per cent of the reserve deposit, \$5,000, or \$3,250, or a total of \$4,450, by $2\frac{1}{2}$, and we get \$11,125, which would be that member bank's normal basic line. In other words, it is a theoretical line which shows what the Federal reserve bank could discount equitably and ratably for all member banks in its Federal reserve bank district based on the reserves carried by each with the Federal reserve bank.

Now, take the case of the large city bank, bank B, located in a central reserve city. These figures are intended to be typical. This bank has a capital of \$25,000,000 and a surplus of \$15,000,000, or a total of capital and surplus of \$40,000,000. Its stockholdings in the Federal reserve bank are 3 per cent of its capital and surplus, or \$1,200,000. The assumption is made in this case that the large city bank has demand deposits of \$250,000,000 and time deposits of \$50,000,000. The reserve required to be kept on deposit with the Federal reserve bank is 13 per cent of the demand deposits, \$250,000,000, or \$32,500,000, and 3 per cent of its time deposits, \$50,000,000, or \$1,500,000. Or a total required to be kept as a reserve deposit with the Federal reserve bank of \$34,000,000.

Now, the basic line for credit accommodations for this bank at the Federal reserve bank would therefore be the amount of capital stock held, \$1,200,000 plus 65 per cent of its reserve deposit of \$34,000,000, making \$23,300,000. multiplied by $2\frac{1}{2}$, which represents the expan-

sion through Federal reserve note issues, would be \$58,250,000, this bank's basic line.

You will notice that the large city bank has to maintain a reserve of 13 per cent of its demand deposits, while the country bank is required to maintain a reserve of 7 per cent of its demand deposits, consequently the contribution made by the reserve city bank to its Federal reserve bank is proportionately greater than the contribution of the country bank to its Federal reserve bank.

The CHAIRMAN. Of course, at the same time that 7 per cent and the 13 per cent is the limiting factor in the amount which the bank can borrow, consequently the bank that maintains a reserve of 13 per cent, as against the bank which maintains a reserve of 7 per cent, can borrow twice as much.

Gov. HARDING. I say, it is merely a theoretical line, but it is used for statistical purposes. But what I want to call your attention to is that if this bank, whose basic line is \$58,250,000, should borrow from the Federal reserve bank \$100,000,000, and the country bank, whose basic line is \$11,125, should borrow \$100,000, the proportion loaned by the Federal reserve bank to the country bank would be much greater than that loaned to the city bank, because, in the one case, the country bank would be borrowing nine times its basic line and the city bank would be borrowing twice its basic line.

Representative SUMNERS. The proportion in accordance with its capital stock would be greater, but would the proportion be greater in reference to the capital stock itself?

Gov. HARDING. It has nothing to do with the capital stock.

Representative SUMNERS. I do not see why; perhaps it is due to my ignorance. The big bank in the city, with \$25,000,000 of capital and \$15,000,000 of surplus, contributes a larger percentage of that capital and surplus to the stock of the Federal reserve system than does the country bank?

Gov. HARDING. Yes, sir.

Representative SUMNERS. When it shall have made that contribution, however, is it not entitled to a larger percentage of borrowing?

Gov. HARDING. You mean the city bank?

Representative SUMNERS. Yes; the city bank.

Gov. HARDING. It gets it in this way: You multiply by 2½, the same as you do in the case of the country bank, and the basic line figures \$58,250,000; and the country bank's basic line is figured at \$11,125. The point I want to make is that you have to consider the system, and consider it as a whole. Suppose that every member bank in every reserve district should be borrowing from its Federal reserve bank its entire quota, then there would not be any surplus for rediscounting anywhere, unless we reduced the reserve requirements. While provision is made for that, there is a limit to it.

Representative TEN EYCK. What is the practice, if a bank is above the basic line, and another has not kept up to the basic line, even though the basic line is not in operation, and both made application for money in stringent times—what would be the practice of the Federal reserve bank as regards which one they would loan to first?

Gov. HARDING. I do not think any Federal reserve bank has ever made any discrimination in that way. It is not a question which it would favor first, because no Federal reserve bank has a waiting list; every Federal reserve bank is ready for business every business day

in the year; every Federal reserve bank rediscounts paper every day, and probably most Federal reserve banks decline to take some offerings every day.

Representative TEN EYCK. In other words, they would not consider this then in loaning?

Gov. HARDING. It is a sort of a rule to go by; a gauge. In other words, you can look over this list and tell at a glance the situation; it is a convenient way for the board to keep in touch with the banks. A Federal reserve bank will report that it is loaning to bank A such an amount; to bank B so much; and to bank C so much. If the "basic line" is reported in each case, the Reserve Board can get a better line on the relative borrowings.

Representative TEN EYCK. It has no relation as regards the discounting of paper at this time?

Gov. HARDING. It has no effect at all at the present time.

The CHAIRMAN. It would have an effect under the progressive rate, however?

Gov. HARDING. It would have under the progressive rate.

Representative FUNK. Is there any way by which the member bank can get increased accommodation with the Federal reserve bank other than the way you have outlined here; that is, by selling its own paper? May it actually sell paper which it has taken in?

Gov. HARDING. I assume that nearly all banks in the United States have paper which is not eligible for discount at Federal reserve banks, under the law. The majority of banks in the United States are not members of the Federal reserve system. Most banks which are members of the Federal reserve system, approximately 10,000 in number, maintain accounts with other banks that they were in the habit of keeping before the Federal reserve system was organized. And a great many country banks, and banks in good-sized cities, will discount not only with the Federal reserve bank of their district, but with their correspondent in the financial center where they have been in the habit of carrying an account. For instance, a number of Wisconsin banks in the central and southern part of the State have accounts with Milwaukee banks or with Chicago banks, and you will find that they still get discount accommodations from the Milwaukee and Chicago banks. And in the northern part of the State they may deal with the Twin Cities, and they get accommodations there. The banks in North Dakota, South Dakota, and Montana get their accommodations in part from the Federal reserve bank and in part from the member banks that they have been in the habit of dealing with.

Representative TEN EYCK. It is not necessary then for a national bank to be a member bank in order to discount their paper with the reserve bank?

Gov. HARDING. Section 13 requires that to be eligible, in addition to the other requirements for eligibility, all paper must bear the indorsement of a member bank.

Representative FUNK. My question was as to whether a member bank could secure other accommodations than you have outlined here from a Federal reserve bank.

Gov. HARDING. Accommodation on their basic lines?

Representative FUNK. Yes.

Gov. HARDING. Surely; they do it all the time.

Representative FUNK. Will you explain that, please? Here is a bank that is pressed by its customers for money. You have outlined how under the Federal reserve banking act they can go up to the basic line. Is there any other way by which they can get accommodations from a reserve bank; and if so, how, in general terms?

Gov. HARDING. I have tried to make it clear, Congressman, that the basic line is merely a theoretical line.

Representative FUNK. I understand that.

Gov. HARDING. I can cite you numerous instances in all districts where banks have discounted with the Federal reserve bank up to five, ten, and fifteen times their basic line. The basic line does not limit them at all. I believe you are from Illinois. Here is a statement from the Federal reserve bank of Chicago—

Representative FUNK. I am not complaining of the basic line or whatever application you make of it, but is there another scheme or method whereby banks can secure aid through this Federal reserve act?

Gov. HARDING. Why, the member banks can secure aid from the Federal reserve bank as long as they offer eligible paper which is acceptable to the Federal reserve bank. If the Federal reserve bank thinks the paper is safe and the accommodations can reasonably be made, why, it takes it. The basic line does not cut any figure whatsoever.

Now, I want to cite you an instance here of a bank in Illinois—numerous instances. Here is a bank in Illinois with a capital of \$50,000, surplus \$25,500. Its theoretical basic line is \$38,850. The reserve it actually carried with the Federal reserve bank is \$24,492. On June 30, 1921, that particular bank was borrowing from the Federal reserve bank of Chicago \$142,666.

Representative FUNK. What was it early in 1920?

Gov. HARDING. That same bank on June 30, 1920, was borrowing \$77,855, and on June 30, 1921, was borrowing \$142,666.

Representative FUNK. Well, I suppose the time it needed assistance was 1920.

Gov. HARDING. Well, it got it right along.

Representative FUNK. Half of what it got in 1921.

Gov. HARDING. I am giving you the comparative figures for June 30, 1920, and June 30, 1921. They borrow now nearly twice as much as in 1920.

Representative FUNK. Certainly. In other words, they were borrowing half as much in 1920, when they needed it, as they are borrowing now.

Gov. HARDING. When did they need it most—before the 30th of June or after the 30th of June?

Representative FUNK. I do not know what that particular bank needed.

Gov. HARDING. That increase in that particular loan has taken place since the 30th of June, 1920. I will read you some other instances. There is no use denying that very large accommodations were granted in the fall of 1920. In the first place, at one time, in the latter part of October, 1920, we had eight Federal reserve banks borrowing from three Federal reserve banks a total amount of \$267,-

000,000. Now, when you expand that by two and one-half times, that represents over \$667,000,000 of credit that was furnished by three Federal reserve banks to help out the situation in October and November, 1920, in other Federal reserve districts.

I worked through all that period of 1920, and was here constantly, sitting at my desk, getting telegrams from one Federal reserve bank asking for discounts, watching all the figures, and I know that credits were extended as the demands came in. There was never a case where application was made by a Federal reserve bank for credit with another that it was turned down or declined. It was pretty close figuring, but we maintained the reserves as required by law.

Senator HARRISON. And during that time the progressive rate was being applied in only four districts, was it, Governor?

Gov. HARDING. Yes. I will take up the progressive rate directly.

Here is a chart which shows in a graphic way—I will pass it around so you can see it. This solid white line here [indicating] represents the earning assets of the Federal reserve banks. That includes bills rediscounted by member banks and the acceptances bought by Federal reserve banks and the relatively small amount of Government securities that they own. You will see here that the great expansion in Federal reserve credit began to take place about the 19th of September, 1919, and that it went up very rapidly until the 2d of January, 1920, and then, with these fluctuations, it went up until the 5th of November, 1920.

This broken white line here [indicating] represents the Federal reserve note issues. You see they went up steadily until the 24th of December, 1920. Since then they have been going down, and at the date this chart was made—the latter part of May—they were back to where they were in September, 1919. This shows the thing graphically. I will try to give you exact figures, although in the statement I made before the House committee I was talking from the original of this chart and gave the approximate figures shown on the scale.

Senator HARRISON. In speaking of the basic line and these percentages that apply, you made a remark a moment ago which is quite true, that these country banks keep large deposits in cities in the reserve centers, and consequently these large banks use the deposits from the Federal reserve banks, do they not? Their percentages would be increased that much, because of the little banks keeping larger deposits in the cities?

Gov. HARDING. I do not catch that exactly. You mean that the city bank which has a large amount of country accounts—

Senator HARRISON. Yes; they would be enabled, therefore, to have a larger credit, because the country banks are keeping a large deposit in the city banks, but the city banks do not keep a large deposit in the country banks.

Gov. HARDING. Yes; but they have merely to carry a certain portion of that credit, 13 per cent or 10 per cent, according to the classification of the city. That does not enable the Federal reserve bank to extend as much credit as would be the case if all banks were member banks and dealt directly with the Federal reserve bank.

Suppose that Senator Smith was a banker and you were a banker and you kept an account with him; that you did not belong to the Federal reserve system, but Senator Smith did. You keep \$100,000

balance with Senator Smith. Senator Smith, if he is located in a reserve city, would carry with the Federal reserve bank—assuming that your deposit was all on demand, only \$10,000 of it. The reserve bank would not get the benefit of your \$100,000. It would get only the 10 per cent reserve against your deposit with Senator Smith's bank, and that would be all the Federal reserve bank would have to base its loans on, as far as your deposit is concerned?

Representative SUMNERS. I want to ask you a question with regard to progressive rates.

Gov. HARDING. Can we not take up the progressive rate matter a little later on?

The CHAIRMAN. I suggest that perhaps it would be wiser to let Gov. Harding develop the system first.

Representative SUMNERS. I do not want to insist at all. I understood the governor was discussing progressive rates a moment ago.

Gov. HARDING. No; I had not come to them yet. I was merely referring to them.

Representative SUMNERS. I thought you submitted a table here with reference to progressive rates.

Gov. HARDING. That was about the basic line.

Here is an address I made at Cleveland, Ohio, on the 16th of September, 1920, at a time when demands were very heavy on the Federal reserve system, and I think if this commission would like to get an insight into what the views of the Federal Reserve Board were at that time and what the board's policies were, it might be better to go back and refer to things which took place at the time rather than have a made-to-order statement at the present time. [Reading:]

The Federal reserve banks, as the custodians of the ultimate banking reserves of the country, as the mainstay of the acceptance market, as the agencies of last resort in the matter of rediscounts, and as the media through which so large and important a part of the currency is issued, must always be kept in an absolutely sound and strong position. Their strength must be measured by the liquidity and intrinsic value of invested assets, which include rediscounts for member banks, as well as by the proportion of gold and lawful money to their liabilities. A gold reserve is essential to a sound financial system. This percentage of reserve ought normally to be considerably higher than the minimum required by law, in order to provide ample margin for meeting unusually large seasonal requirements and unexpected emergencies, but even though the reserve should fall temporarily below legal requirements—

I said this advisedly, because at that time it looked very much as though the reserves would fall below legal requirements, and we did not want any shock to come upon the country if that action was taken. When we had a large issue of Federal reserve notes outstanding, obligations of the United States Government, and those notes are redeemable in gold or lawful money at any Federal reserve bank, and in gold at the Treasury of the United States, and when we had considerably more notes outstanding than we had gold on hand, it was very necessary not to alarm anybody about the value of the currency. Otherwise we might have been deluged with Federal reserve notes for redemption by people wanting gold.

Bear in mind that the war obligations of the Government are payable in gold, and it is necessary that our currency system—that is, in the opinion of the board—should be kept on a gold basis. If the public should coincide with some of the views I have heard expressed lately, that it would benefit business in this country if we

got on the basis of the German paper mark, which is worth now only about 7 per cent of its normal gold value—in other words, if we wish to get on the basis of irredeemable paper currency in this country, that is the business of Congress and not of the Federal Reserve Board. The Federal Reserve Board's duty is to administer the law as Congress has given it to us, and the law requires the Federal reserve banks to be in a position to redeem in gold or lawful money all Federal reserve notes presented to them for redemption.

Now, this was a very serious thing we had to consider all last fall. You will remember the panicky talk that was going on last fall. And I said this deliberately. I showed it to colleagues on the Federal Reserve Board, and they approved of this statement. They wanted to do what they could to prepare the public mind in case the reserves should go below the legal minimum, so that there would not be any scare or panic or shock. I said:

But even though the reserves should fall temporarily below legal requirements, there would be no occasion for uneasiness provided the assets of the banks are of the self-liquidating character which would admit of the restoration of the reserve within a reasonable time. It would be folly to inflict serious injury upon agriculture, commerce, and industry merely for the sake of maintaining an arbitrary minimum reserve, but it would be still more consummate folly to treat a low reserve position, brought about by an emergency, as a normal base from which future emergencies are to be met.

In other words, when you have an emergency, take care of it, but do not educate the public and the banks to the idea that once the Federal reserve system has reached an abnormally low reserve that that reserve is big enough and stay on that basis, so that when another emergency comes along we start from that low point. [Reading:]

The average reserve now required of all national banks is about 8 per cent of their net deposits. As this reserve must be carried with the Federal reserve bank, it will amount to 8 per cent in terms of gold and lawful money, only when the reserve of the Federal reserve bank is 100 per cent of its liabilities, and it is reduced *pari passu* as the reserve of the Federal reserve bank declines.

For instance, suppose a bank in Milwaukee had a \$1,000,000 reserve balance with the Federal reserve bank of Chicago, and that \$1,000,000 represented 10 per cent of its deposit liabilities. Now, in terms of gold and lawful money, that Milwaukee bank would have 10 per cent reserve only if the Federal reserve bank of Chicago had 100 per cent reserve against its deposits and note issue liabilities. If the Chicago bank has a 50 per cent reserve, then your Milwaukee bank has only a 5 per cent gold reserve. If the Chicago bank has 25 per cent reserve, then the Milwaukee bank has only a 2½ per cent gold reserve. [Reading:]

There are some who believe that the minimum reserve required by law may be lightly infringed upon, for they say, "What is a reserve for if it is not to use?" Some who hold these views are fond of referring to the case of a hospital where all the beds are occupied, except a few which are held in reserve. The ambulance brings in a badly injured man, who is denied admission upon the ground that all the beds are full. The ambulance surgeon points to two or three unoccupied beds and is met with the response, "Those are reserved beds and can not be used." Certainly, any hospital under sane management would use those beds in case of real emergency, but would not permit their use by strangers of sound and healthy appearance who might have been unable to obtain hotel accommodations, nor would a hospital with its capacity taxed to the limit encourage convalescent patients to remain a day longer than necessary.

The law fixes the minimum reserve to be carried by Federal reserve banks against their note issues at 40 per cent and against their member banks' deposits at 35 per cent. It permits temporary suspension by the Federal Reserve Board of these minimum reserves under certain graduated penalties, but in order to illustrate the danger

of regarding the legal minimum as the normal base from which to operate, I would like you to consider what would be the outcome if we had to meet another emergency, such as war, with Federal reserve bank reserves at their present level. When a state of war was declared on April 6, 1917, the combined reserves against deposits and note issues of all Federal reserve banks averaged 84.7 per cent.

I do not think there has been brought out in the hearing before this commission up to this time the influence that Government borrowings have had upon the entire financial situation. It has had a most tremendous effect. Government borrowings were very heavy, especially in the financial centers. The many people throughout the country generally had, before the war, never seen a Government bond. They subscribed for patriotic purposes, but as soon as the war was over, or perhaps before, many commenced selling them. In many cases they sold them and bought all sorts of things, including stock in speculative undertakings. One of the causes for the depreciation in the bond market was the pressure to sell by people who, instead of holding their bonds by saving and paying, concluded they would take the loss and put them on the market in order that they might buy something else that they thought would bring them a quicker profit or a better return.

All this Government borrowing during the war and since has had a tremendous effect. I may elaborate upon this later, but I think the governor of the Federal reserve bank of New York, who will follow me, will have more to say on this point than I have, because he comes in closer contact with those matters and is better qualified to talk from actual experience than I am. [Reading:]

When a state of war was declared on April 6, 1917, the combined reserves against deposits and note issues of all Federal reserve banks averaged 84.7 per cent. Due to this condition, the United States was able to meet all financial obligations incurred without any impairment of its own ability or of that of the banks to redeem currency in gold, thus preserving the parity of all forms of money in circulation. This was an achievement impossible of accomplishment during the Civil War, when current prices were quoted in terms of irredeemable paper money, which was not brought back to a parity with gold until 14 years after the close of the war.

Early in January, 1919, shortly after the armistice, the combined reserves of the Federal reserve banks was 51.3 per cent, showing a diminution of 33.4 per cent from the date of our country's entry into the war. The gold embargo was removed in June, 1919, when large amounts of gold held for foreign accounts were released. Even after this the reserves stood at 51 per cent on September 26, after which date they showed a steady and continuous decline to 44.8 per cent at the close of the year.

During the last six months of the year 1919, tendencies toward unrestrained extravagance and abuse of credit were manifest all over the country.

I do not think anybody will deny that. I want to quote and put in the record right here some excerpts from the report of the Comptroller of the Currency for the year 1920, dated December 6, 1920, and signed by John Skelton Williams, comptroller. I have read what I said in September, 1920, and I am going to read from the comptroller's report, which is dated December 6, 1920, and let this commission see just how far we were in accord or how far we disagreed. My statement here was made on September 16, 1920, and his report bears date December 6, 1920.

Representative SUMNERS. Was that the date of publication or the date of compilation? Do you know about that, Governor?

Gov. HARDING. This report went to Congress, my recollection is, on February 7, 1921. These reports always bear a date prior to that on which they are made public. It had to go to press, and it bears the date of December 6, 1920.

I do not mean to say, of course, that the comptroller got any ideas from me, but I do want to point out that there was not a very great difference of opinion on certain conditions as expressed in his report dated December 6 and in my address of September 16, 1920. I said [reading]:

During the last six months of the year 1919 tendencies toward unrestrained extravagance and abuse of credit were manifest all over the country. It became evident that the rediscount facilities of the Federal reserve banks were being used too freely and that unless corrective measures were applied the situation would become exceedingly dangerous. The rediscount rates of the Federal reserve banks were much below the market rates for money, thus affording member banks an opportunity for profit in their rediscount transactions and making it exceedingly difficult to keep in check borrowing demands made upon them. The Federal Reserve Board and the Federal reserve banks, while recognizing the necessity of holding these dangerous tendencies in check by means of a reasonable and effective control of credit in order that its flow might be once more regulated and related to the economic welfare of the country and the needs of its producing industries, were reluctant to take any precipitate action. It was realized that productive industries are profoundly affected by credit conditions, that modern business is done on credit, and that the mood and temper of the business community are deeply affected by the state of credit and may be easily disturbed by ill-considered or hasty action. The test of the functioning of a credit system must be principally in what it does to promote the production and distribution of goods. It is well understood that too rapid or too drastic deflation would defeat the very purpose of a well-regulated credit system by its unsettling effect upon productive industry. On the other hand, overproduction at high cost on expanded credit would be a grave menace. The Federal reserve authorities recognized the importance of avoiding extremes, and their energies were therefore directed more particularly to the prevention of further expansion for nonessential purposes and to the gradual and orderly liquidation of nonessential loans.

I think that in a letter which was read yesterday the witness expressed substantial agreement with these ideas as late as December 28, 1920. [Reading:]

The predominant idea was not necessarily to reduce the loan accounts of the banks of the country but to bring about such a readjustment in them as would ultimately lead to a restoration of a proper balance between the volume of credit and the volume of concrete things which credit helps to produce and which are the normal basis of credit.

Now, the comptroller in his report dated December 6, 1920, beginning on page 3, says [reading]:

The urgent and unguarded buying of American products by the Allies in the early days of the war had driven the prices of our products to unprecedented figures; and it became difficult subsequently, when a more orderly system of buying was instituted both for our own Government and for the Allies, to return to anywhere near normal prices. It has been estimated that the profits and increments accruing to the people of this country during the last year of the war amounted approximately to \$50,000,000,000, and that the surplus income over and above the living expenses of the people, despite the extravagant rate at which they were living, approximated \$15,000,000,000 for that year.

After the armistice the demands for war materials of course ceased, but the cries from the impoverished countries of Europe for foods continued, and the demands for materials for reconstruction and rehabilitation developed rapidly.

The profits which South America, China, and Japan had also realized in supplying the products of those respective countries to the Allies had brought about a condition of high prosperity and activity in all of those countries, and their peoples had acquired a taste for luxuries and for the products of other countries which we were called upon to supply in huge quantities.

The demands made upon the United States for steel and iron products, machinery, agricultural implements, fabrics, foods, automobiles, and specialties of all kinds gave to our business men visions of unchecked and limitless prosperity, and our exports of merchandise for the year 1919, following the war, exceeded by nearly \$1,000,000,000 our total exports for the war year 1918. Imports into this country of

merchandise from every quarter of the globe also broke all records, and amounted for the year 1919 to \$3,904,000,000—nearly \$1,000,000,000 more than the maximum amount of imports ever before brought in.

TURN OF THE TIDE.

The turning of the tide in the world delirium and inflation came in the spring of 1920, with the financial and industrial collapse which took place in the Empire of Japan. The Japanese had profited hugely from the supplies which they had furnished to the Allies and from the operation of their merchant marine, the profits of which during the war were enormous. This great business had brought about the creation and flotation of numerous new financial, manufacturing, and trading corporations throughout Japan, and in the flotation of these companies a spirit of reckless speculation had been developed which pervaded every section of the population of that country—farmers, merchants, professional men, bankers, and public officials.

The efforts which were made primarily in this country to bring about an orderly deflation and the curbing of reckless speculation began to make themselves felt not only here but in all the countries with which we had been dealing. The apparently insatiable demand which America had developed for such luxuries as silks had tremendously stimulated the silk industry of Japan. The prices of raw silk had advanced in the space of a year or two approximately 400 per cent, maximum prices having been reached in January and February of 1920.

A rather sudden curtailment or suspension of the American demand for silks had an immediate effect upon the Japanese market. The collapse in the prices of raw and manufactured silks was followed by the prostration of the Japanese market for cotton goods which in recent years has become one of the great industries of that country. The closing down of numerous other industries followed in the wake of the financial panic, which had resulted in the suspension of some of the largest banks and business houses in the Empire, and an acute depression in business set in and still continues.

As the crisis which followed the turning of the tide in Japan is typical of conditions in many other countries of the world with which we have been trading and with which we are still doing business, it may be illuminating to reproduce here the following extract from an article by a leading and well-informed Japanese banker and business man, the president of the Tokyo Bankers' Association, printed in the latest issue of a prominent and ably edited Japanese (Tokyo) magazine.

I do not care whether this goes in the record or not—that is for the commission to say—but I think that is a very illuminating article, and the witness did not refer to that yesterday. I think probably the members of the commission would be interested in it, because it relates to agricultural conditions and labor. I do not see anything in it criticising the Federal reserve system or the Federal Reserve Board, however. There is no mention of that.

The CHAIRMAN. Without objection, it will be inserted in the record. There is no objection.

(The article referred to is here printed in full, as follows:)

The outbreak of (World War) hostilities saw the economic world of Japan, which had been inured to peace, paralyzed by the suddenness of the conflict. All business came to a standstill. This general depression was immediately followed by a state approximating panic. Industry was hard hit and the money market was completely tied up. There was no knowing where the downward tendency would stop. It was fortunate, however, that the closing of exchanges and suspension of specie payment were not experienced here as in European countries. In other respects the economic condition of Japan was quite as depressed as that of Europe.

When Japan entered the war with the object of reducing the German fort in the Far East, it was difficult to form any idea of the extent to which her intervention would affect her internal affairs. The minds of the people became uneasy. Business and industry sank into the depths of depression. With the progress of the conflict, however, Japan became gradually adjusted to war conditions. The people became engrossed in the manufacture of munitions for their army and for supplying the demands of the allied countries. Factories which had hitherto turned out only merchandise eagerly took up the production of munitions of war.

By encouraging production and by extending shipping facilities, Japan was able not only to keep her own needs supplied but she was able to meet the requirements made of her by her allies. Shipping companies were feverishly engaged in trans-

porting munitions to the ports of allied countries. Industries which were once on the verge of extinction were now busy and working overtime. The government, in cooperation with the people, never hesitated to take measures that were thought necessary for the successful prosecution of the conflict, even though these involved sacrifices on the part of the industries. While supplying Russia with war funds, Japan, on the other hand, raised domestic loans for the benefit of England and France.

Not only was Japan called on to assist the other powers in these ways and by keeping the Pacific and Indian Ocean routes safe for transport of troops and supplies, thus preserving the peace of the Far East, but she was offered what was at the same time an opportunity and a duty to supply those oriental markets which were suffering by reason of the temporary stoppage of European and American trade. In order to relieve the situation Japan sent her products in rapidly increasing quantities to these markets. Factories were kept busier than ever turning out commodities for export overseas, and always there was a call for more goods and for more factories to make more goods.

The various phases through which the Japanese economic world has passed since 1914 fall into three periods—first, a period of stagnancy, then transition, and finally a period of prosperity. And now we are in the midst of another time of transition.

With the conclusion of a treaty of peace at Versailles, Japan found herself faced with the necessity of returning to prewar conditions. Exports, which during the war exceeded imports by considerable amounts, * * * began to dwindle, and soon the normal prewar condition of an excess of imports followed. Japan's trade balance had been consistently unfavorable during the two decades preceding the war, the average import excess between 1893 and 1915 being about 46,000,000 yen (a yen is equal to about 51 cents in United States currency). This condition was, of course, reversed during the war years, a favorable balance first appearing in 1915. This excess of exports increased in 1916 and again in 1917, amounting to nearly 600,000,000 yen in the latter year. Then came a drop in 1918, and the excess of exports gave way to excess of imports in 1919, following the prewar order of an excess of imports during the first half year which the excess of exports of the latter half was unable to overcome. It may be noted that the reason for the unfavorable balance of the earlier months of the year is the heavy importation of American and Indian cottons, while the change during later months is brought about by shipment of raw silk to the American market.

It is pleasing to note, however, that late official forecasts point to a rice crop this year which will be the largest in our history. The estimate is above 63,000,000 koku (a koku is approximately 5 bushels), which is 4 per cent greater than last year's crop, which was the largest up until that time, and 12 per cent above the average for the last several years. This condition is attributable to the favorable weather thus far and the depressed state of the silk market at the planting time. Farmers this year are giving more attention to rice and less to cocoons, and it is estimated that there will be a reduction of 15.6 per cent for the total cocoon crop of the three seasons as compared with the total of last year. This is the greatest decrease experienced in recent years.

Japan is still an agricultural country in spite of her remarkable recent industrial advancement. About 55 per cent of the families of the nation are of the farmer class, and rice is by far the most important crop of the country. As in other agricultural lands, good crops may be taken as an indication of good times, for what benefits the farmers as a class benefits the nation as a whole.

Along with various other problems brought upon us by the war, the labor question came to occupy an important place, this question being made still more pressing by complications with other social problems. Unemployment has been greatly increased by the general industrial depression and the consequent suspension and curtailing of factory operations. The position to-day is that unless some harmonization and unification of aim and effort is effected between capital and labor, the further sound development of industry can not be expected.

Especially at the time of transition from war to peace conditions, when a great change occurred in the relations of demand and supply, Japan was compelled to readjust her industries and to change the nature of her financial machinery. It has already been noted how the reckless spirit of speculation, brought about by the sudden change of Japan's economic position, contributed to her confusion. Japan to-day is faced with the necessity of adopting such a policy as will enable her to change from expansion to retrenchment. She is once again treading the path of change and transition.

At present two opposite opinions are expressed regarding Japan's economic future—one pessimistic, the other optimistic. The careful student will take both these views into consideration and will weigh the facts and conditions on which they are based.

It is my opinion that the worst of the present business depression is now past. Some accentuation of financial stringency is expected to be felt at the time of the general New Year's settlements, but it must not be forgotten that business is naturally dull at the beginning of the year. And above all, it must be remembered that behind our scattered cases of misfortune and failure the country as a whole is financially sound and strong.

Great wealth has been accumulated during prosperous years, and that wealth has not been wiped out of existence. That business that has been firmly established and conducted on sound principles will survive and all will be the better off when speculative and mushroom enterprises leave the field clear for sturdier growth. It is my hope and belief that by next spring, or next summer at the least, our general economic world will have recovered its normal stability and activity.

Gov. HARDING. I shall continue reading from the comptroller's report [reading]:

The story of Japan's industrial and financial experience is largely similar to the experience of South American and European countries—some of them our allies and others neutral. Some of these countries are now going through a business cataclysm similar to that through which Japan has so recently passed.

Before I read the next paragraph of this report of the Comptroller of the Currency, dated December 6, 1920, I want to read an extract from an address made at Augusta, Ga., by John Skelton Williams, former Comptroller of the Currency, before the chamber of commerce and the Georgia Press Association on July 14, 1921. He says [reading]:

I believe I have something to say that should be said. Having no political purpose, no ax to grind, as you people say, I suppose I can talk rather more freely than those who are more or less entangled with parties or factions or individuals. My employment throughout the last seven years as Comptroller of the Currency of the United States has given me exceptional opportunities to know the inside and the outside of our commercial and banking operations and conditions, the moving spirits and influences, and has imposed on me the duty of making a special study of them, divested as I am of the interests and alliances that sway the judgments of men.

In my opinion, we have been subjected to unnecessary hardships and losses by failure to use properly the means provided for avoiding or ameliorating these hardships. But there have been delays, dismays, and disasters from methods and policies which I believe to have been unnecessary, erroneous, and inexcusable.

I further declare the opinion that the partial failure is not the fault of the Federal reserve system itself but it is the fault of the administration of that system by individuals who have not measured up as they should have done to the great responsibilities imposed upon them. I know this opinion to be founded on facts. I formed that opinion through close knowledge of the situation and development acquired by me officially and accurately while I was comptroller.

Now, gentlemen of the commission, you heard the statements yesterday, and you can judge of them for yourselves. Now, I want to read from the more calmly considered official report of the comptroller dated December 6, 1920, following right along on page 6 where I left off [reading]:

In our own country we have been thus far fortunate enough—thanks largely to the splendid efficiency and stabilizing influence of the Federal reserve system—to avoid the financial crisis and complete disorganization which have made havoc elsewhere. We have passed with comparative safety through exceedingly troubled and nerve-racking times; but difficult and dangerous problems remain to be solved, the solution of which will demand clear heads and steady nerves.

Gentlemen of the commission, I am curious to know what happened after the 6th of December, up to the 28th of December and 2d of March, and recently. Beginning with early in January, when I commenced making speeches in New York, saying we had passed the danger point and reached a more normal state of mind; made speeches in North Carolina, pointing out that the farmers'

credits had to be carried, that additional credits should be granted, urging a liberal policy upon the member banks and the exercise of forbearance and patience, I am curious to know what happened to make such a great change in the opinions of a man who wrote this as an official and the man who wrote this other as an individual seeking to arouse the passions and prejudices of an audience.

That is not all. I want to read some more of this in the record. He refers here, on page 6, to "Vain efforts to maintain excessive profits"; page 7, "Deflation becomes world-wide." He says [reading]:

The deflation which, as we have seen, took place so precipitately in Japan has made headway in every country, civilized and uncivilized, from the Arctic Ocean to the tropical jungles; and most of the products of human labor and human enterprise in nearly every country on the globe are now obtainable for a fraction of the prices which prevailed a year ago. The raw silks of Japan are quoted at one-fourth to one-fifth of last January's prices. The raw cotton from our own Southern States is selling at one-third the price of last summer. Rubber from the Valley of the Amazon or the Congo forests, vegetable oil from the Far East, wool from Australia, hides from the Argentine, coffee from Brazil, sugar from Java and Cuba, all may now be purchased at prices from one-fourth to one-half of those paid since the armistice.

The shrinkage in prices during the last year in the products of our own country, and in the products of other countries, purchased at high prices by our merchants and business men, if applied to our crops, and the products of our mines, forests, and factories, would represent an apparent loss sufficient to stagger the boldest imagination.

At the top of page 8 of his report the comptroller says [reading]:

A serious shrinkage of values was foreseen and predicted more than a year ago by those who studied conditions and considered the history of past wars. It has come faster and more violently than heretofore—

Note that he does not say because of any action of the Federal Reserve Board; he says [reading]:

It has come faster and more violently than heretofore, presumably because more rapid communication and transportation expedite the succession of inevitable effect on cause. Thus far results have not only come more quickly than after our former severe wars, but have been less calamitous. There is every reason to believe that the same facts that hasten disaster will hasten recovery; and that the people of different countries and classes, being more intimately in touch with each other than ever before, will more promptly understand each other's rights and requirements and realize that it is to the interest of all to work together for fair readjustments.

The precipitate decline which has already been witnessed in so many leading commodities encourages the belief that in most cases we are near the bottom, the fall, in some instances, having been already excessive and abnormal and really not justified by actual conditions. Despite the tremendous decline in the prices of the raw materials for the articles upon which the cost of living is based—food, clothing, and the cost of shelter or housing—the private citizen is not yet receiving the full benefit of the drop; but he is required to pay a tax in the shape of middlemen's profits, which in many cases is inexcusable and unwarranted. We need not imagine that we have reached a firm and stable foundation until excessive profits are further deflated; until the private citizen is able to acquire, at the expenditure of \$1 of his hard-earned money, something approximating the quantity and quality which that dollar commanded in prewar times.

One of the chief blessings growing out of the war has been the movement toward equalization and the decided raising of the wages of the working people to a fairer and more equitable basis. This is for the permanent betterment of the country. Yet wages have not been altogether equalized; in some cases the advance has been insufficient, in others it has been excessive.

Many industries will find it impossible to continue the present high wages when competition with foreign countries again begins in earnest, as it will, and when commerce with all parts of the world will have been again speeded up, as it will be presently, through the agency of our enormously developed merchant marine.

Gentlemen, I am not reading this in any flippant spirit at all; I am reading this into the record because some of the statements made have a very direct bearing upon certain policies which the Federal Reserve Board adopted. I am coming to that later. And some of these things have a bearing upon the problem which you are primarily considering. The comptroller goes on [reading]:

We can not meet this foreign competition if our miners, mechanics, and laborers loaf three days in the week and demand wages for the other three days equal to those they formerly received for six days' labor. If this country is to prosper and grow and keep pace with the reawakened world—to say nothing of leading that world—it will be necessary for our people to work full time and intensely, and to proceed with all the skill and intelligence of which they are capable.

The nations with which we must compete have huge populations, with modern and scientifically equipped mills, factories, and workshops, and are determined to get on their feet again and achieve prosperity; and they know that they can succeed only by energy, thrift and sacrifice.

We need not depart from the 8-hour day, nor relinquish any of the legitimate benefits which the laboring man has won and is now enjoying in the shape of improved environment and working conditions, in order to keep this country on the highest plane of prosperity and on a basis which will enable it to compete with any other country. The important thing is that waste shall be eliminated as quickly as possible; that all prices shall be brought down to a sound and healthy level; that excessive and exorbitant profits shall be dropped, and that we go ahead at full speed to produce.

Remedies for ills; a pathway to prosperity—

I read that, because this is the official report of the Comptroller of the Currency of December 6 last [reading]:

Reiteration of certain indisputable basic facts and deductions may be useful in helping to drive into the minds of the business community and our people generally the fundamental and only remedies for existing hindrances and assurances for renewed stability and prosperity.

The prices of many basic commodities and leading raw materials have already returned to a prewar basis, while some articles are now below the prices of 1914. It now remains for the middleman to adjust his profits to the new prices before the ultimate consumer will receive the benefit of the reduced cost of living.

The laboring man will soon be in a position where he must determine whether he prefers a shut-down and idleness to a lower wage scale, which must take into consideration the lower living charges. Unless manufacturers can turn out their products at prices at which the public will buy, and can afford to buy, the mills and factories can not afford to run; but obviously it is better for manufacturers to operate and produce goods at cost, or at a very narrow margin of profit, rather than close down entirely. The attention of this office was directed some time since to the case of a large steel manufacturer employing many thousands of men who threatened to close his factories and throw his employees out of work unless certain large consumers of steel and iron products would place their orders at prices which would yield him a profit three times as great as the normal or average profit. Such an attitude, of course, is wholly indefensible and is deserving of the severest public condemnation.

Even with the help of tariffs intended to prevent foreign finished products from being imported, if we try to maintain a wage scale which does not square with the revised costs of living, we will be unable to sell our products abroad in competition with those of other countries whose manufacturing powers are well developed and whose wages are much below our own. It is clearly far better for workingmen, as the cost of living declines, to agree to a readjustment of wages on a basis which will permit factories to run and the wheels of industry to revolve, rather than to hold out for wages which it will be impossible for employers to pay when obliged, as they will be, to meet keen competition at home and abroad.

It is hoped and believed that our working people and manufacturers will both appreciate these simple and economic realities and that arrangements will be perfected with the owners of mills and factories which shall secure to the laborer his full share of the profits and that he will be allowed to participate with capital in whatever earnings may be realized over and above a fair return on the capital invested. Only on this principle can we expect to restore business, bring about renewed industrial activity, and establish a permanent and country-wide prosperity and contentment.

Inflation with reduced production bring hard times: In the report of the Comptroller of the Currency a year ago attention was directed to the grave dangers incident to the then prevalent reckless expansion in prices, accompanied by a reduced production of commodities and articles representing real wealth, and warning was given as to the inevitable consequences. In discussing the general business and financial situation at that time, I said—

I shall not read that, but he goes on to say:

“Our bankers, however, have not been able to restrain, except in a very limited way, the individual extravagance and indulgence, luxury, and display which constitute the most serious peril to us and which have reached proportions which, in our present conditions, amount to crime with the majority of our citizenship guilty. Nor have the banking forces or any other exponents of our real business sense been able to limit the crazy rapacity developed in some of our leading industries among men who should know better, but who apparently have become wildly intoxicated by special opportunities for exorbitant profits.”

That is in the report of 1919, which he reprints in 1920. Now, I want to quote just one more passage here from this statement on page 11. This is the report for 1920 again:

“The deflation, which at that time was obviously inevitable, has come, and the country is now in many respects on a sounder basis, economically, than it has been for years.”

That is on December 6, 1920, and you remember what he wrote me on December 28 about horses selling at \$3 apiece in Kansas and being fed to the hogs—I believe he did not say in Kansas, but out West somewhere. Corn is very cheap in the West, and I do not believe the people are buying horses to feed to hogs; I think they are feeding them on corn. [Reading:]

“When conditions abroad become more settled or stabilized, and when at home much needed adjustments are effected in the costs to consumers of steel and iron products, which are still quoted about twice their prewar prices, and when coal, for which the Government itself has paid in recent months as much as four times the prewar price, and certain other commodities which are now being kept up artificially or as a result of monopolistic control far above the prewar figures get back to normal level, our country, resting on a solid foundation, will be prepared to enter upon a new and, let us hope, long-enduring era of prosperity and healthy progress.

So far I have not found a single criticism of the Federal Reserve Board. He speaks of the “splendid efficiency” of the system. Efficiency is not a matter of law or legislation; it is a matter of operation. A system could not be splendidly efficient unless the operation of the system was efficient.

Representative MILLS. What is your comment upon what you have been reading there? Do you agree with it or not?

Gov. HARDING. Well, parts of it I agree with and parts I do not agree with. I do not mean necessarily that I agree with it, but what I want to say to you is that the Comptroller of the Currency says that he realized that prices were unduly inflated and advanced and that a reaction was coming, and the point I am leading to is this, that in the year 1920, when the Federal Reserve Board first authorized the increase in discount rates, the reaction did not come—here is where I essentially disagree with him. You would get the impression from his statement that a clique met somewhere and decreed that there should be deflation. Nobody issued any decree or order for deflation at any time, but these various economic forces, which the comptroller describes in his report here, were working—silent, unseen, powerful, irresistible forces, forces even greater than the Congress of the United States, and certainly much greater than any board created by an act of Congress.

There was a strike going on. The Federal reserve banks reported these tremendously increased borrowings of the member banks. The member banks themselves said, "We have loaned more than we want to loan, but we do not seem to be able to stop it some way. We are afraid of all this." Well, now, if a supervisory board of a banking system in this country has reason to believe that the loans of member banks, many of which have been rediscounted at the Federal reserve banks and form the basis of the currency that has been issued, may become unsatisfactory, and yet permits low discount rates to continue, and encourages further and further borrowings, how far would this inflation business go on? Would there not eventually have been an explosion? What benefit would the business interests of this country, or the farming interests, or any other interests of this country have gotten if these conditions had gone on for a few months longer in the year 1920 and then the explosion come and we had found our banking system in this country in the same condition that the banking system of Cuba is in, for instance? There would have been no benefit to anybody in that.

I shall go into this thing later, and I am going to show, from statements read as we go along, just what the board's position was all the way through. I am not trying to manufacture sentiment now. I am not trying to palliate anything at all. I am reading from actual reports of meetings and conferences and statements issued, etc.

There is another thing I want to get in the record from this report, if you please.

Representative SUMNERS. You turned aside from your report a moment ago to answer some questions propounded by Mr. Ten Eyck, and I wondered if you would mind stating at this time at what date you put into operation the increase of the rediscount rates.

Gov. HARDING. Why, the rediscount rates have been changed and modified occasionally ever since the system was established.

Representative SUMNERS. I understood you in your reply to Mr. Ten Eyck to refer to some year in which you put in the increase.

Gov. HARDING. An increased rediscount rate ought not to be given the significance that has been give to it. It should not be considered as a political question. It is not a political question at all; it is purely a banking question.

Representative SUMNERS. That is the reason I thought you would not mind answering when you put it into effect.

Gov. HARDING. The rediscount rates have been changing ever since the system was inaugurated.

Representative SUMNERS. My question was, however, directed to the statement you made to Mr. Ten Eyck a moment ago.

Gov. HARDING. Well, changes were made early in December, 1919. A more marked change was made—

Representative SUMNERS. What do you mean by a change? Do you mean an increase or a decrease?

Gov. HARDING. I mean they were increased slightly in December, 1919, and they were increased generally to a 6 per cent level on or about the 23d of January, 1920. Progressive rates were put in, as brought out in the statement yesterday, on various dates in April, May and June, 1920, and the maximum rates were put in along early in June, 1920, of about 7 per cent. All the changes in discount rates which have been made this year have been on a downward scale.

Now, I want to continue with this report. There are some important things here that I want to get in. On page 16 of the comptroller's annual report he states:

The figures below give for each Federal reserve district the aggregate of loans and discounts, plus United States Government securities, held by all national banks November 15, 1920, and the increase as compared with March 4, 1919.

This is "loans and discounts, plus United States Government securities." Now, United States securities are held more largely in the New York district than anywhere else—the greater proportion of them. I do not know why the comptroller put "plus United States Government securities" into this table or why he made his comparison between March 4, 1919, and November 15, 1920, why he went over practically a two-year period instead of a one-year period. But anyway here is what he has in here. He gives the total and the increase. I will give the round figures; the table will speak for itself.

(The table referred to is here printed in full, as follows:)

Loans and discounts, plus United States securities, Nov. 15. 1920.

	Total.	Increase since Mar. 4, 1919.	Per cent.
Boston Federal reserve district.....	\$978,478,000	\$138,857,000	1 17
New York Federal reserve district.....	3,491,136,000	24,362,000	(*)
Philadelphia Federal reserve district.....	1,044,083,000	21,507,000	2
Cleveland Federal reserve district.....	1,288,236,000	121,523,000	10
Richmond Federal reserve district.....	832,460,000	95,716,000	12
Atlanta Federal reserve district.....	507,440,000	31,413,000	7
Chicago Federal reserve district.....	1,784,210,000	127,239,000	8
St. Louis Federal reserve district.....	548,391,000	58,485,000	12
Minneapolis Federal reserve district.....	683,932,000	52,390,000	8
Kansas City Federal reserve district.....	920,479,000	84,112,000	10
Dallas Federal reserve district.....	631,026,000	137,577,000	27
San Francisco Federal reserve district.....	1,034,514,100	161,309,000	18
Total.....	13,744,385,000	1,054,490,000	.....

¹ Shown in comptroller's report as 1 per cent.

² Less than 1 per cent.

NOTE.—Figures do not include United States bonds held to secure circulation.

Gov. HARDING. The actual increase in New York was smaller than in any other district except Philadelphia. The largest actual increase was in San Francisco, and the next largest actual increase was in Boston. The percentage of increase was 27 per cent in Dallas as against 2 per cent in Philadelphia, and less than 1 per cent in New York.

Those are the figures, giving for each Federal reserve district the aggregate of loans and discounts, plus United States securities, held by all banks in those districts November 15, 1920, and the increase as compared with March 4, 1919. That shows there was an expansion of credit in the agricultural districts, an expansion much greater before November 15, 1920, than there was in large city districts.

I am going to read into the record in due course some figures showing that the liquidation which has taken place during the past year of over a billion dollars has been in the reduced holdings by the Federal reserve banks of bankers' acceptances, which have gone down from a total of two or three hundred million dollars—I am not trying to give actual figures here, however—down to about \$19,000,000, in

a recent statement made by the combined Federal reserve banks, and also in paper secured by Government obligations, Liberty bonds, and Treasury certificates of indebtedness. The decrease in all other paper, including commercial paper and agricultural live-stock paper—

The CHAIRMAN. Gov. Harding, I suggest that it is now half past 12. Unless you desire to go on at this time the commission will take a recess.

Gov. HARDING. I will just finish that sentence—was \$138,000,000, and that decrease is accounted for by payments to the Federal reserve banks by banks in New York City, Chicago, and Boston.

Just one other thing—

Representative TEN EYCK. May I ask you a question right there?

Gov. HARDING. May I get one other statement right in here. On page 52 of the comptroller's annual report for 1920 occurs this language:

Largely through the aid and excellent functioning of the Federal reserve system, the business and banking interests of the country have passed successfully through the perils of inflation and the strain and losses of deflation without panic and without the demoralization which has been produced in the past at various times from far less serious and racking causes. Those banking and other interests which at the outset so vigorously opposed the Federal reserve system are now among its warmest advocates.

Representative TEN EYCK. Just this one question: Gov. Harding, you said that the discounts of farm and live-stock paper had increased. Does not that cover the increased discounts of the country banks and also the discounts of dealers in farm products and live stock? I believe that we should differentiate between the loans to the farmers on their products owned by them in warehouses—

Gov. HARDING. I have some very clearly defined ideas on that which I would like to present in a later part of my testimony here.

Representative TEN EYCK. Yes—and the man who deals in live stock and farm products.

Gov. HARDING. I want to go into that very exhaustively.

Representative TEN EYCK. Don't you think that is right?

Gov. HARDING. I want to show why it is impossible, I think, under present conditions for the farmer generally—I am speaking of the small farmer—to get credit that he really ought to have, and I want to explain why that has come about and why it is impossible for the Federal reserve system to cure it. And I want to suggest a remedy.

Representative TEN EYCK. That is what I want—a remedy.

Gov. HARDING. But it is going to take time for me to go through all this. You see, there have been so many things introduced into the record that I am taking the time of the commission more than I otherwise would. But later on I will make a definite recommendation. I will go into this matter and state my experience in dealing with things of this sort, and you can determine for yourselves then whether or not I know what I am talking about, and whether my opinions are worth considering or not.

(Thereupon, at 12.35 o'clock p. m., the commission took a recess until 2 o'clock p. m.)

AFTER RECESS.

The joint commission reconvened at 2 o'clock p. m., pursuant to recess, Hon. Sydney Anderson (chairman), presiding.

The CHAIRMAN. The commission will come to order. Governor Harding, you may proceed.

STATEMENT OF GOV. W. P. G. HARDING—Continued.

Gov. HARDING. Mr. Chairman, as bearing upon the distribution of credits throughout the country, I would like to introduce into the record a table which appears at the top of page 17 of the annual report for 1920 of the Comptroller of the Currency. He says [reading]:

In the following statement there are given the figures of November 15, 1920, as to the total bills payable and rediscounts and Government deposits held by all the national banks in each district and the increase or reduction as compared with March 4, 1919.

There, again, I do not understand why he included United States deposits with the bills payable and rediscounts. But I give you the information for whatever it is worth, as showing the credit distribution. I suppose that was his idea, as to what the total credit distribution was by districts. This, of course, as I understand it, relates exclusively to national banks, does not include State banks which are members of the Federal reserve system or those which are not.

In this table he gives the following figures:

Boston Federal reserve district: Total, \$117,406,000; decrease, \$73,842,000, or 38.61 per cent decrease.

New York Federal reserve district: Total, \$813,648,000; increase, \$95,982,000, or 13.37 per cent increase.

Philadelphia Federal reserve district: Total, \$144,313,000; decrease, \$69,108,000, or 32.38 per cent decrease.

The CHAIRMAN. May I interrupt you there to ask where you are reading from?

Gov. HARDING. The report of the Comptroller of the Currency for 1920, the table at the top of page 17, which is headed "Total bills payable and rediscounts, including United States deposits, November 15, 1920."

Cleveland Federal reserve district: Total, \$87,072,000; decrease, \$32,254,000, or 27.03 per cent decrease.

Richmond Federal reserve district: Total, \$142,755,000; increase, \$5,425,000, or 3.95 per cent increase.

Atlanta Federal reserve district: Total, \$135,018,000; increase, \$55,320,000, or 69.41 per cent increase.

Chicago Federal reserve district: Total, \$399,688,000; increase, \$241,797,000, or 153.14 per cent increase.

St. Louis Federal reserve district: Total, \$108,300,000; increase, \$52,394,000, or 93.72 per cent increase.

Minneapolis Federal reserve district: Total, \$127,884,000; increase, \$99,332,000, or 347.90 per cent increase.

Kansas City Federal reserve district: Total, \$181,702,000; increase, \$78,419,000, or 75.93 per cent increase.

Dallas Federal reserve district: Total, \$118,912,000; increase, \$18,806,000, or 18.79 per cent increase.

San Francisco Federal reserve district: Total, \$159,385,000; increase, \$23,537,000, or 17.33 per cent increase.

The total bills payable and rediscounts, including United States deposits, as of November 15, 1920, in national banks of all districts appears from this report to be \$2,536,083,000.

It does not say how much of that was with the Federal reserve banks or how much with other banks, and it does not give the figures separately. I would suggest that if the commission would like to get a little clearer light on the situation, that when the witness who was on the stand yesterday comes back again that you ask him if he can give you the separate figures—how much the United States deposits amounted to, and how much the total bills payable and rediscounts amounted to. It does not seem to be shown in this report here.

Now, I think an inquiry was made this morning as to dates when changes in rediscount rates were made.

Representative SUMNERS. I asked that question; yes. Have you that information?

Gov. HARDING. I have that information here. This table that I have here begins with the changes from January 1, 1920, to July 25, 1921. I will state from memory that some slight increases were made the latter part of November or the early part of December, 1919, but that the substantial changes were made after the 1st of January, 1920.

Representative SUMNERS. Governor, does your data there show what the discount rate was at the beginning of the period to which you refer?

Gov. HARDING. It shows what the changes were from one date to the other.

Representative SUMNERS. You are going to incorporate it in the record?

Gov. HARDING. Yes. Exhibit A. This is "Rate changes and votes thereon from January 1, 1920, to July 25, 1921."

Philadelphia. Effective January 2, 1920.

Paper secured by certificates of indebtedness raised to 4½ per cent from 4¼ per cent.

Mr. Williams not present. Action unanimous.

January 2, 1920. Minneapolis.

Paper secured by certificates of indebtedness raised to 4½ per cent for 1 to 60 days and to 5 per cent for 61 and 90 days; both raised from 4¼ per cent.

The CHAIRMAN. Was that in correspondence with the increased rates borne by the certificates?

Gov. HARDING. Yes, sir; it was.

Mr. Williams not present. Action unanimous.

I may state also that all of these changes were made on the initiative of the directors of the Federal reserve banks concerned, the board approving or modifying the action.

Representative SUMNERS. What reason was suggested why they should be changed at that time, Governor, if you know?

Gov. HARDING. Why, the Treasury had raised its rates on certificates of indebtedness, and all we wanted to do was to facilitate the placing of the certificates without giving the member banks a profit in the transaction.

Representative SUMNERS. And that change was made with reference to the interest rate of certificate rather than to any general credit condition in the country at that time?

Gov. HARDING. Well, I don't think I could answer that properly in view of the action that was taken the next day.

Effective January 3, 1920. Kansas City.

Commercial paper rate raised from 5 per cent to $5\frac{1}{2}$ per cent.

Agricultural paper maturing after 90 days raised from $5\frac{1}{2}$ per cent to 6 per cent.

Paper secured by Liberty bonds and Victory notes raised from 5 per cent to $5\frac{1}{2}$ per cent.

Paper secured by certificates of indebtedness, from $4\frac{1}{2}$ per cent to $4\frac{1}{2}$ per cent.

Mr. Williams present. Action unanimous.

Representative SUMNERS. Why was the difference made with reference to agricultural paper?

Gov. HARDING. That was made upon the suggestion of the directors of the Federal reserve banks. I may state that later on in the year those differences were ironed out, so that at the present time there is no distinction at all between agricultural paper maturing after 90 days and paper maturing in 15 days.

Effective January 3, 1920. Boston. Paper secured by certificates of indebtedness raised from $4\frac{1}{2}$ per cent and $4\frac{1}{2}$ per cent, according to the rate borne by the certificate, to $4\frac{1}{2}$ per cent.

Mr. Williams present. Action unanimous.

Representative SUMNERS. Now, at that particular time did Boston raise its rate with reference to the general collateral that was rediscounted?

Gov. HARDING. No, sir; all the changes that are made are immediate, and the other rates were not affected.

Effective January 5, 1920. Richmond.

Paper secured by certificates of indebtedness raised from $4\frac{1}{2}$ per cent to $4\frac{1}{2}$ per cent.

Mr. Williams not present. Action unanimous.

Effective January 6, 1920. Atlanta.

Paper secured by certificates of indebtedness raised from $4\frac{1}{2}$ per cent to $4\frac{1}{2}$ per cent.

Mr. Williams present. Action unanimous.

Effective January 10, 1920. Chicago.

Paper secured by certificates of indebtedness raised from $4\frac{1}{2}$ per cent to $4\frac{1}{2}$ per cent.

Mr. Williams present. Action unanimous.

Effective January 12, 1920. Cleveland.

Rate on certificates of indebtedness raised from $4\frac{1}{2}$ per cent to $4\frac{1}{2}$ per cent.

Rate on commercial paper raised from $4\frac{1}{2}$ per cent to 5 per cent.

Rate on agricultural paper over 90 days raised from $5\frac{1}{2}$ per cent to $5\frac{1}{2}$ per cent.

Paper secured by Liberty bonds and Victory notes raised from $4\frac{1}{2}$ per cent to $5\frac{1}{2}$ per cent.

Mr. Williams not present. Action unanimous.

Representative SUMNERS. Why should there be the difference between the rate on commercial paper and agricultural paper?

Gov. HARDING. That was because of the time of maturity. Any agricultural paper maturing in less than 90 days was accorded the same rate as commercial paper. Now, the theory is that a Federal reserve bank keeping its assets liquid, and turning over frequently that paper having a short maturity is given a lower rate than paper having a longer maturity, but as the agricultural emergency increased the board and the Federal reserve banks decided that they would ignore that scientific or theoretical distinction and place the long-term agricultural paper on the same basis as the short-term commercial paper.

Representative TEN EyCK. How long did this difference exist before you changed it?

Gov. HARDING. Well, I will read this record and you will see when they were leveled up. But there was no distinction ever made at any time as between commercial paper and agricultural paper of the same maturity. You see, the banks can not take commercial

paper maturing any longer than 90 days. They can take agricultural paper maturing up to six months, so the only distinction that was ever made in the rate on agricultural paper applied only to that part of the agricultural paper which matured beyond 90 days.

Representative TEN EyCK. Did they make a distinction, however, as regards the acceptance of the two? Is it not a fact that most member banks prefer to take more liquid assets than agricultural paper? Is that not really a fact now?

Gov. HARDING. No; I don't know that it is a fact at all. It may be with the city banks, but with the country banks, a large part of their business is taking six months' agricultural paper. Sometimes it runs longer than six months.

Representative TEN EyCK. When you say country banks, does that not include a lot of city banks, too? Is it not a fact that the definition of country banks includes city banks as well as what you might call rural banks?

Gov. HARDING. If you were speaking of central reserve city banks and reserve city banks, then every bank which is not located in a central reserve or a reserve city is a country bank.

Representative TEN EyCK. That is what I understood it to mean.

Gov. HARDING. I remember some years ago the city of Buffalo—in fact up to 1914—was not a reserve city, although it had over 400,000 population, and it was always classed in the comptroller's report as "country;" that is a bank located in Buffalo was a country bank, under that classification. But what I am talking about now are banks located in small towns of 2,000 or 2,500 people; something like that.

The CHAIRMAN. I take it if a bank had both commercial paper and agricultural paper that it would probably discount the commercial paper, because it would be in larger amounts, in round amounts, and could be handled with less difficulty.

Gov. HARDING. Partly for that reason, and partly because of the lower rate. For instance, if a Federal reserve bank differentiated in its rates according to the maturity of the paper it took, if the rate, we would say, was 4½ per cent on paper maturing up to 30 days, and 5 per cent on paper maturing from 30 to 60 days, and 6 per cent on paper maturing from 60 to 90 days, and 6½ per cent on paper maturing beyond 90 days, why it would naturally follow that if a country bank would desire accommodation for a short time it would look up its short-time paper and discount the paper that bore the cheaper rate.

Representative TEN EyCK. Yes; but if, on the other hand, the same rate was accorded to both classes of paper, and one was a liquid paper and the other was a long-time paper, they undoubtedly would discount the long-time paper quicker than they would the paper of liquid assets that they could go into the market and sell immediately, is not that a fact? As a real banker?

Gov. HARDING. Yes; I have an idea that the banks generally, feeling that they could get their paper discounted with the Federal reserve bank with greater readiness than they could by the correspondent member banks, would probably give the Federal reserve bank some of their long-time paper, particularly if rates were the same, and discount their well-rated commercial paper with the city correspondent. But the point I wanted to stress is that these distinctions

in rates were based on the time of maturity and not on the classification of paper.

Representative TEN Eyck. Yes; I understand.

Gov. HARDING. Yes.

Effective January 12, 1920. San Francisco.

Rate on paper secured by certificates of indebtedness raised from $4\frac{1}{2}$ per cent to $4\frac{3}{4}$ per cent.

Mr. Williams present. Action unanimous.

I will explain that date. One record there shows that he was not present and the other shows that he was present. The Comptroller of the Currency is a very busy man. Sometimes he could not attend a meeting, and sometimes he would come in after the board met and was present for a little while and then he would go out, and for the last two or three years we have always made it a practice of putting on the minutes those who were present, and then if the Comptroller of the Currency came in after the proceedings had gotten under way, the minutes would note that "At this point the Comptroller of the Currency entered the meeting," and if he left before the meeting was concluded, there would be noted in the minutes, "At this point the Comptroller of the Currency withdrew from the meeting," so we could tell from those two entries in the minutes what action he participated in. The records will show that.

Effective January 23, 1920. Boston, New York, Philadelphia.

All three raised rates on commercial paper from $4\frac{3}{4}$ per cent to 6 per cent.

Rate on agricultural paper over 90 days from 5 per cent to 6 per cent.

Now, you may notice the differential was done away with there. Up to that time the rate was $4\frac{3}{4}$ per cent on commercial paper under 90 days, and agricultural paper was classed commercial paper with maturity under 90 days, and the rate on agricultural paper over 90 days had been 5 per cent, a differential of one-quarter of 1 per cent, against agricultural paper; but in this readjustment, where the rates were both raised to 6 per cent, the agricultural paper was not raised as much as the shorter time agricultural and commercial paper. I am talking about agricultural and livestock paper over 90 days. So it was the same.

Rate on paper secured by Liberty bonds and Victory notes from $4\frac{3}{4}$ per cent to $5\frac{1}{2}$ per cent.

Mr. Williams, Mr. Hamlin, and Mr. Moehlenpah voted "No," except that the vote to raise the agricultural paper of over 90 days from 5 per cent to 6 per cent was unanimous.

Effective January 23, 1920. Richmond.

Rate on commercial paper raised from $4\frac{3}{4}$ per cent to 6 per cent.

Rate on agricultural paper over 90 days raised from 5 per cent to 6 per cent.

Note there again the uniformity in the rate. Now, I will state here that in regard to that rate on commercial paper, that means the paper maturing in less than 90 days. It is an inclusive term it includes agricultural paper provided it matures in less than 90 days.

Rate on paper secured by Liberty bonds and Victory notes raised from $4\frac{3}{4}$ per cent to $5\frac{1}{2}$ per cent.

(These rates are the same as those approved for New York from Jan. 23.)

Mr. Williams not present.

Effective January 23, 1920. Kansas City.

Rate on commercial paper raised from $5\frac{1}{2}$ per cent to 6 per cent.

(All rates to correspond to those authorized for New York Jan. 23.)

Mr. Williams not present.

Representative SUMNERS. Was the last item New York?

Gov. HARDING. No; this was Kansas City. That all their rates were raised so as to correspond with the rates authorized for New York, Boston, and Philadelphia.

Representative SUMNERS. Yes.

Gov. HARDING. You see, we were getting uniform rates.

Effective January 24, 1920. Chicago, St. Louis.

Rate on commercial paper raised from $4\frac{1}{2}$ per cent to 6 per cent.

I think I will say with greater accuracy that the rate on paper up to 90 days raised from $4\frac{1}{2}$ per cent to 6 per cent.

Rate on agricultural paper over 90 days from $5\frac{1}{2}$ per cent to 6 per cent.

Note that evening-up process again.

Rate on paper secured by Liberty bonds and Victory notes raised from $4\frac{1}{2}$ per cent to $5\frac{1}{2}$ per cent.

St. Louis also raised rate on paper secured by certificates of indebtedness from $4\frac{1}{2}$ per cent to $4\frac{3}{4}$ per cent. (By this change the same rates throughout were authorized for Chicago and St. Louis as were authorized on January 23 for New York.)

Mr. Williams was present. Action unanimous.

Effective January 26, 1920. Atlanta, Minneapolis.

Rate on commercial paper raised from $4\frac{1}{2}$ per cent to 6 per cent.

Rate on agricultural paper over 90 days raised from $5\frac{1}{2}$ per cent to 6 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from $4\frac{1}{2}$ per cent to $5\frac{1}{2}$ per cent.

Mr. Williams present. Action unanimous.

Effective January 28, 1920. Cleveland.

Rate on commercial paper raised from 5 per cent to 6 per cent.

Rate on agricultural paper over 90 days raised from $5\frac{1}{2}$ per cent to 6 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from 5 per cent to $5\frac{1}{2}$ per cent.

Mr. Williams not present. Action unanimous.

Effective February 2, 1920. Dallas.

Rate of commercial paper raised from 5 per cent to 6 per cent.

Rate on agricultural paper over 90 days raised from $5\frac{1}{2}$ per cent to 6 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from 5 per cent to $5\frac{1}{2}$ per cent.

Rate on paper secured by certificates of indebtedness raised from $4\frac{1}{2}$ per cent to $4\frac{3}{4}$ per cent.

Mr. Williams present. Action unanimous.

Effective February 2, 1920. San Francisco.

Rate on commercial paper raised from $4\frac{1}{2}$ per cent to 6 per cent.

Rate on agricultural paper over 90 days raised from $5\frac{1}{2}$ per cent to 6 per cent.

You will notice there that there was a much lower rate on the paper under 90 days, $4\frac{1}{2}$ per cent, which was raised to 6 per cent, than there was on the agricultural paper over 90 days, which was raised only from $5\frac{1}{2}$ per cent to 6 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from $4\frac{1}{2}$ per cent to $5\frac{1}{2}$ per cent.

Mr. Williams not present. Action unanimous.

Effective February 26, 1920, to March 10, 1921.

All banks, except Minneapolis, raised rates on certificates of indebtedness to 5 per cent and, thereafter, the rate went up with the rate borne by the certificates and reached 6 per cent at all banks on July 1, 1921, and on July 21, 1921, these rates went down to $5\frac{1}{2}$ per cent again at Boston, New York, Philadelphia, and San Francisco.

Effective May 3, 1920. San Francisco.

Rate on paper secured by Liberty bonds and Victory notes raised from $5\frac{1}{2}$ per cent to $5\frac{3}{4}$ per cent.

Mr. Williams not present. Action unanimous.

Effective May 13, 1920. Cleveland.

Rate on paper secured by Liberty bonds and Victory notes raised from $5\frac{1}{2}$ per cent to $5\frac{3}{4}$ per cent.

Mr. Williams present. Action unanimous.

Effective June 1, 1920. New York.

Rate on commercial paper raised from 6 per cent to 7 per cent.

Under 90 days.

Rate on agricultural paper over 90 days raised from 6 per cent to 7 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Mr. Williams and Mr. Moehlenpah voted "no." The chairman (the Secretary of the Treasury, who was chairman ex officio), the governor, and Mr. Miller voted "aye."

Effective June 1, 1920. Chicago.

Rate on commercial paper raised from 6 per cent to 7 per cent.

Rate on agricultural paper over 90 days raised from 6 per cent to 7 per cent.

Action taken May 28, Mr. Williams not voting.

Effective June 1, 1920. Minneapolis.

Rate on commercial paper raised from 6 per cent to 7 per cent.

Rate on agricultural paper over 90 days raised from 6 per cent to 7 per cent.

Action taken by board May 29, Mr. Williams present. Action unanimous.

Representative SUMNERS. What bank, Governor, is that you are reading with reference to now?

Gov. HARDING. Minneapolis. In other words, the members who voted against raising the New York City rate from 6 to 7 per cent voted to raise the Minneapolis rate from 6 to 7 per cent a few days afterwards.

Effective June 1, 1920. Richmond.

Rate on loans secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Mr. Williams present. Action unanimous.

Effective June 4, 1920. Boston.

Rate on commercial paper raised from 6 per cent to 7 per cent.

Rate on agricultural paper over 90 days raised from 6 per cent to 7 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Mr. Williams present and voting "no."

The governor stated that he was authorized by the chairman to say that the proposed changes in discount rates were agreeable to him, and that he would vote "aye" were he present.

Effective June 7, 1920. San Francisco.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Action by the board taken June 2. Mr. Williams present. Action unanimous.

Effective September 28, 1920. Kansas City.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Mr. Williams present. Action unanimous.

Effective November 1, 1920. Atlanta.

Rate on commercial paper raised from 6 per cent to 7 per cent.

Rate on agricultural paper over 90 days raised from 6 per cent to 7 per cent.

This action was taken by board October 28 and involved the abolition of the progressive discount rate.

Mr. Williams was not present.

Now, a record was introduced yesterday of a vote taken on August 31, at which time I stated to the Federal Reserve Board that the governor of the Federal reserve bank of Atlanta had requested me to sound the board out as to how it would feel about approving action, if taken—it had not been taken—but how it would feel about approving action if taken by the directors of the Federal reserve bank of Atlanta to abolish their progressive rate. At that time the maximum flat rate for a normal basic line was 6 per cent. I asked Gov. Wellborn, and reported to the board what Mr. Wellborn said as to his reasons for desiring to abolish the progressive rate. He said that he

found that the large city banks, the banks with large capital and deposits, notably in New Orleans, Atlanta, Savannah, and Nashville, were in favor of the progressive rate because they had large deposits and large balances, and their basic line was very large, as I tried to explain this morning in this memorandum I gave, and that they figured that the operation of the progressive rate would give them money cheaper than if they went to a flat 7 per cent rate.

He said, on the other hand, the country banks which had smaller capital, smaller deposits, and necessarily smaller reserves, and therefore a smaller basic line, were in favor of the 7 per cent flat rate for the same reason, that it would give them their money cheaper.

I explained that to the board. At that time there was a disposition on the part of some of the banks in the large cities to use very large amounts of money which involved moving grain and other agricultural products which came from other Federal reserve districts to the ports.

The board instructed me to say to the Federal reserve bank of Atlanta that we were prepared to approve the abolition of the progressive rate whenever the directors of the Federal reserve bank recommended it, provided they would recommend a substitution of a 7 per cent flat rate for a 6 per cent progressive rate, but they were not prepared to make that recommendation until the latter part of October, and when they did, the board agreed to it, and the substitution was made about the 1st of November.

Representative SUMNERS. Governor, if it would not interrupt you, right at that point I want to see if I am clear as to the effect of the progressive rate. In the illustration which you gave this morning with regard to the basic rate, I wanted to get that information this morning, but seemed to be unfortunate in framing my question.

Gov. HARDING. Congressman, if you could just let me finish this story and then take it up we would have it all consecutive in the record.

Representative SUMNERS. Yes.

Gov. HARDING. It does not make any difference to me, however. I want to enlighten you.

Representative SUMNERS. Very well. I will bring that up later.

Gov. HARDING (reading):

Effective February 10, 1921. Cleveland.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Mr. Williams present. Action unanimous.

Other rates were 6 per cent, and they were giving a differential in favor of Liberty-bond holders, and found that that did not seem to be fair in certain instances, and they wanted to make the rate uniform.

Effective February 15, 1921. Dallas.

Rate on commercial paper raised from 6 per cent to 7 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Rate on agricultural paper over 90 days raised from 6 per cent to 7 per cent.

(This action was taken by the board February 15, 1921, and abolished at the same time the progressive rate.)

Action unanimous. Mr. Williams present.

Effective April 15, 1921. Boston.

This was after Mr. Williams left the board, and we have, of course, no further reports to make as to his action.

Rate on commercial paper reduced from 7 per cent to 6 per cent.

Rate on agricultural paper over 90 days reduced from 7 per cent to 6 per cent.

That was a voluntary recommendation on the part of the Federal reserve bank. Its reserve position justified it. The lower tendency of discount rates generally in the Boston district also justified it.

Effective May 5, 1921. New York.

Rate on commercial paper reduced from 7 per cent to 6½ per cent.

Rate on agricultural paper over 90 days reduced from 7 per cent to 6½ per cent.

The Bank of England had recently reduced its rate from 7 to 6½ per cent before that action was taken in New York.

Effective May 6, 1921. Atlanta.

Rate on commercial paper reduced from 7 per cent to 6 per cent.

Rate on agricultural paper over 90 days reduced from 7 per cent to 6 per cent.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

To all borrowers on the same basis.

Effective May 7, 1921. Chicago.

Rate on commercial paper reduced from 7 per cent to 6½ per cent.

Rate on agricultural paper over 90 days reduced from 7 per cent to 6½ per cent.

Effective May 10, 1921. Minneapolis.

Rate on commercial paper reduced from 7 per cent to 6½ per cent.

Rate on agricultural paper over 90 days reduced from 7 per cent to 6½ per cent.

Effective May 16, 1921. Dallas.

Rate on commercial paper reduced from 7 per cent to 6½ per cent.

Rate on agricultural paper over 90 days reduced from 7 per cent to 6½ per cent.

Effective May 21, 1921. St. Louis.

Rate on paper secured by Liberty bonds and Victory notes raised from 5½ per cent to 6 per cent.

Effective June 16, 1921. New York.

Rate on commercial paper reduced from 6½ per cent to 6 per cent.

Rate on agricultural paper over 90 days reduced from 6½ per cent to 6 per cent.

And the Bank of England followed suit a few days after that and reduced its rate to 6 per cent. There was no necessary connection, of course, between one bank and the other, but London and New York are both great financial centers, and without any prearrangement one action followed the other.

The CHAIRMAN. May I ask if that followed any decline in the rate of money?

Gov. HARDING. There was a declining tendency; yes. It is very hard to determine, by the way, just what is the market rate. New York has the only real call-money market, and in a great many financial centers there are no call-money rates. The interest rates of the different States seem to fix the limitations on money in a great many States. I think the best criterion to judge by now as to the market rate for money is the rate at which securities can be sold, income return, and even that is complicated with the question of income taxes, and so on.

Ordinarily the commercial paper rate, that is on paper sold by bill brokers, has been accepted as a criterion of the commercial paper rate on the market. But that is hardly fair now, because the bank which has idle funds to invest has an opportunity of investing its funds in paper which carries a smaller credit risk than the one-name commercial paper that is offered through note brokers. For instance, a bank can buy Treasury certificates of 6 months' or 12 months'

maturity when they are offered, or shorter maturity, if they buy on the market, and there is a good, strong demand for member bank acceptances, which are the obligations of a trader, an exporter, or an importer, or a merchant, accepted by a member bank. But the acceptance rate in New York now is less than the official bank rate, slightly less. And that is an ideal situation which we have been trying to work to, but never have succeeded in getting to, and under the conditions existing in this country it may be several years before we can get to it—that is, to keep the discount rate of the Federal reserve bank a little above the market or going rate, so that while providing funds for accommodation there is no incentive for a member bank to discount merely for the sake of making a profit because of the difference in rate which he charges his customer and the rate at which the Federal reserve bank will rediscount for him.

Effective June 25, 1921. Dallas.

Rate on commercial paper reduced from $6\frac{1}{2}$ per cent to 6 per cent.

Rate on agricultural paper over 90 days reduced from $6\frac{1}{2}$ per cent to 6 per cent.

And, again, I want to stress that that "commercial paper" means all paper of a commercial and agricultural type maturing under 90 days.

Effective July 21, 1921. Boston, New York, Philadelphia, San Francisco.

Rate on commercial paper reduced from 6 per cent to $5\frac{1}{2}$ per cent.

Effective July 21, 1921. Boston, New York, Philadelphia, San Francisco.

Rate on paper secured by Liberty bonds and Victory notes reduced from 6 per cent to $5\frac{1}{2}$ per cent.

Effective July 21, 1921. Boston, New York, Philadelphia, San Francisco.

Rate on agricultural paper over 90 days, reduced from 6 per cent to $5\frac{1}{2}$ per cent.

Effective July 30, 1921. Chicago.

Rate reduced from $6\frac{1}{2}$ per cent to a flat 6 per cent rate.

The CHAIRMAN. Was the increase in the discount rate on loans secured by Government paper adopted by all of the Federal reserve banks at about the same time?

Gov. HARDING. Well, over a period of 10 days or 2 weeks, I presume.

The CHAIRMAN. I tried to follow it, but I did not get in my mind whether that particular increase took place in all member banks about the same time, or took place in different banks at different times.

Gov. HARDING. You see the directors of the Federal reserve banks do not have uniform days for meeting. For instance, they meet on Tuesday in one bank and Wednesday in another, and every other week in another bank, and so on. But it took place at practically the same time.

Now, I want to quote from Table 48.

Representative TEN EyCK. Gov. Harding, may I ask a question right here.

Gov. HARDING. Yes, sir.

Representative TEN EyCK. As a sort of an appendix to your statement this morning, will you tell me what is the practice or procedure of the reserve banks in bringing to your attention suggested raises or lowerings of discount rates?

Gov. HARDING. Why, sometimes they will communicate with me informally and ask me to sound out the board and find out what

the board's view is about such and such a change in their rate schedule; how the board would feel about it.

Representative TEN EyCK. And give you their reasons for doing it?

Gov. HARDING. And give me their reasons for doing it. That is not the usual way. I think more frequently—well, I don't know about that either. I guess it is about six to one and half a dozen of the other.

Representative TEN EyCK. Well, what is the other way?

Gov. HARDING. The other is that they will go ahead and act and send a telegram to the board saying: "Our directors to-day voted, effective such and such a date, subject to the approval of the board, to fix the following rate."

Representative TEN EyCK. Now, if the board refused to accept their suggestions, then what is the outcome?

Gov. HARDING. Why, then the same old rate continues in effect.

Representative TEN EyCK. I merely asked this to get your explanation of the working of the system, Governor.

Gov. HARDING. Yes. You see, it is very clear from paragraph D of section 14 of the Federal reserve act that the board has the power of review and determination, but the initiative seems to be vested in the Federal reserve bank. Now, it is a very different proposition from a Federal reserve bank initiating a rate and proposing to the board that such and such be the rate, and the board holding back and saying, "No," and the board going ahead without consulting with the Federal reserve banks and sending them a telegram advising them that "Your rate from to-morrow is so and so."

The CHAIRMAN. Gov. Harding, if you are willing to suspend at this time I would like to have Mr. Powell, who is here from California, proceed.

(Thereupon Gov. Harding suspended his statement to permit Mr. G. Harold Powell to make a statement to the commission.)

(At the conclusion of Mr. Powell's statement Gov. Harding continued his statement, as follows:)

Gov. HARDING. Mr. Chairman, I would like to place in the record Table No. 48, which appears on page 188 of the Annual Report of the Federal Reserve Board for the year 1920, the date of that report being February 16, 1921.

This table shows the average rate charged on bills discounted by months during the year 1920 at each Federal reserve bank.

That table has also been extended by our statistical division so as to show the average rate charged on bills discounted from January, 1921, to June 30, 1921.

For the year 1920, the highest rate which appears at any of the Federal reserve banks at any month is 7.41 per cent for the month of November at the Federal reserve bank of Kansas City. The lowest rate which appears in the table at any Federal reserve bank for a certain month is 4.78 per cent, at the Federal reserve bank at Dallas, during the month of January, 1920. I read this so as to show you the effect of the progressive rate. The average on bills discounted by months at Kansas City was as follows: January, 5.52; February, 5.79; March, 5.80; April, 6.55; May, 6.81; June, 6.72; July, 6.62; August, 6.45; September, 6.78; October, 7.13; November,

7.41; December, 7.15, and the average for the year 1920, 6.65. The average rate for all banks for the year 1919-20 is as follows: Boston, 6.03; New York, 5.97; Philadelphia, 5.44; Cleveland, 5.66; Richmond, 5.78; Atlanta, 5.97; Chicago, 6.32; St. Louis, 5.98; Minneapolis, 6.40; Kansas City, 6.65; Dallas, 5.78; San Francisco, 5.82.

That Atlanta bank, Mr. Chairman, is the bank where that exceptional case in Alabama came up, and I will comment on that in a few minutes. The average rate charged at all banks in that district was 5.97. The general average for all the banks in the system for the year 1920 is 6.02.

(The Table No. 48, so referred to, is printed in full, as follows:)

No. 48.—Average rate charged on bills discounted, by months, during 1920.

[Per cent.]

Federal reserve bank.	January.	February.	March.	April.	May.	June.	July.
Boston.....	4.89	5.54	5.68	5.60	5.60	6.24	6.31
New York.....	4.86	5.42	5.53	5.48	5.56	6.19	6.25
Philadelphia.....	4.83	5.46	5.44	5.46	5.43	5.51	5.54
Cleveland.....	4.92	5.46	5.58	5.71	5.64	5.75	5.84
Richmond.....	4.96	5.50	5.63	5.59	5.58	5.95	5.96
Atlanta.....	4.92	5.55	5.67	5.68	5.72	5.82	5.94
Chicago.....	4.86	5.63	5.79	5.77	5.85	6.64	6.65
St. Louis.....	4.88	5.62	5.67	5.78	5.78	5.94	6.04
Minneapolis.....	5.05	5.70	5.77	5.81	5.89	6.78	6.77
Kansas City.....	5.52	5.79	5.80	6.55	6.81	6.72	6.62
Dallas.....	4.78	5.32	5.59	5.66	5.73	5.95	5.87
San Francisco.....	4.81	5.55	5.70	5.70	5.84	5.93	5.95
All banks:							
1920.....	4.90	5.52	5.64	5.67	5.74	6.20	6.21
1919.....	4.18	4.14	4.15	4.18	4.16	4.19	4.14
1918.....	4.02	4.02	4.06	4.23	4.35	4.42	4.37

Federal reserve bank.	August.	September.	October.	November.	December.	Year 1920.	Year 1919.	Year 1918.
Boston.....	6.47	6.50	6.44	6.52	6.60	6.03	4.25	4.17
New York.....	6.25	6.47	6.47	6.41	6.51	5.97	4.14	4.06
Philadelphia.....	5.57	5.58	5.59	5.61	5.67	5.44	4.13	4.09
Cleveland.....	5.81	5.82	5.88	5.87	5.87	5.66	4.24	4.21
Richmond.....	5.96	5.98	5.98	5.98	5.99	5.78	4.32	4.38
Atlanta.....	6.04	6.04	6.22	6.65	6.46	5.97	4.25	4.06
Chicago.....	6.65	6.76	6.72	6.71	6.75	6.32	4.35	4.24
St. Louis.....	5.84	6.06	6.10	6.60	7.08	5.98	4.26	4.27
Minneapolis.....	6.80	6.81	6.81	6.78	6.77	6.40	4.54	4.72
Kansas City.....	6.45	6.78	7.13	7.41	7.15	6.65	4.74	4.80
Dallas.....	5.76	5.88	5.91	5.98	5.96	5.78	4.46	4.55
San Francisco.....	5.96	5.97	5.98	5.98	5.98	5.82	4.50	4.54
All banks:								
1920.....	6.19	6.39	6.40	6.45	6.49	6.02	.....	.....
1919.....	4.12	4.18	4.19	4.53	4.67	.....	4.26	.....
1918.....	4.25	4.24	4.21	4.20	4.18	.....	.....	4.26

Gov. HARDING. Now, giving figures for the system, I have had the statistical department make out a table for this year from January to June 30, and I have the figures in detail, as follows, by months: For January, 6.36; for February, 6.41; for March, 6.43; for April, 6.32; for May, 6.20; for June, 6.14.

(The table last referred to is printed in full, as follows:)

Average rate charged on bills discounted from January to June, 1921, 365-day basis.

Federal reserve bank.	January.	February.	March.	April.	May.	June.
	<i>Per cent.</i>	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Boston.....	6.42	6.46	6.57	6.21	6.00	6.00
New York.....	6.53	6.55	6.52	6.45	6.26	6.08
Philadelphia.....	5.61	5.67	5.67	5.55	5.62	5.67
Cleveland.....	5.90	5.96	6.00	6.00	6.00	6.00
Richmond.....	5.99	6.00	6.00	6.00	6.00	6.00
Atlanta.....	6.40	6.29	6.39	6.36	6.12	6.00
Chicago.....	6.67	6.70	6.72	6.70	6.41	6.28
St. Louis.....	5.98	6.16	5.90	6.03	6.24	6.17
Minneapolis.....	6.79	6.73	6.78	6.81	6.54	6.45
Kansas City.....	6.70	6.47	6.50	6.44	6.49	6.41
Dallas.....	6.00	6.27	6.68	6.73	6.62	6.33
San Francisco.....	6.00	6.00	6.00	6.00	6.00	6.00
System.....	6.36	6.41	6.43	6.32	6.20	6.14

Average rate charged on bankers' and trade acceptances purchased from January to June, 1921, 365-day basis.

Federal reserve bank.	January.	February.	March.	April.	May.	June.
	<i>Per cent.</i>	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Boston.....	5.98	5.94	5.88	5.84	5.74	5.84
New York.....	5.97	5.96	5.96	5.91	5.86	5.87
Philadelphia.....	6.00	5.99	5.99	5.84	5.87	5.90
Cleveland.....	6.02	6.02	6.01	5.94	5.95	5.99
Richmond.....	6.08	6.08	6.08	6.08	6.08	6.08
Atlanta.....	7.10	7.10	7.10	7.10	6.07	6.07
Chicago.....	6.06	6.08	6.08	5.93	5.91	5.85
St. Louis.....	6.29	6.04	6.09	6.06	5.83	6.07
Minneapolis.....	6.08	.....	5.96	.....	.....	.....
Kansas City.....	7.10	.....	.....	7.10	7.10	7.10
Dallas.....	.....	.....	7.10	6.08	6.59	6.08
San Francisco.....	6.08	6.03	6.04	6.02	5.96	5.88
System.....	6.05	6.01	6.01	5.94	5.88	5.81

Gov. HARDING. A telegram from the governor of the Federal reserve bank at Atlanta says the average rate charged the member bank in Alabama that paid something over 80 per cent on a part of its loan on the progressive rate system was 8.7 per cent per annum.

The CHAIRMAN. That was the average rate for the entire district?

Gov. HARDING. No; that is the average rate for that member bank that paid the high rate on its loan.

Representative SUMNERS. Was that the average rate that bank paid at the time it was paying this particularly high rate?

Gov. HARDING. I suppose that is the average rate. I will read his letter, which gives the details. I wrote for information regarding that matter.

And I want to say in connection with this matter that I had no more idea that the application of the progressive rate would bring about that result than any other member of the board did. My attention was not called to it. I do not know why the bank itself did not call my attention to it. But I never learned of it until after the progressive rate had been abolished, which was on November 1, 1920. I suggested to the directors of the Federal reserve bank of Atlanta, when I met with them in Nashville in May last, that they refund to all member banks penalties for deficient reserves and all

excess interest above a maximum rate of 12 per cent, which would make a reasonable rate, from 6 per cent up to 12 per cent, you see. And they did so, and the amount was not large.

A similar refund has also been authorized in the Kansas City district.

Representative SUMNERS. Governor, do you know what effect that high rate, during the time it was in operation, had upon the interest charges of the banks to their regular customers?

Gov. HARDING. I think the rates were regulated by the usury laws of the various States. I think the witness stated yesterday that the banks in Alabama did not charge over 8 per cent; that the reports showed that.

Now, this particular bank, I may say, is one of two national banks in its town. The other bank there had a capital and surplus of \$175,000, with a basic line of \$59,990. This bank has a capital and surplus of \$37,500—\$35,000 last year, and \$37,500 this year—and a basic line of \$14,710. The aggregate loans to this bank on the 1st of June, 1920, amounted to \$114,333.

Its larger neighbor, with a capital and surplus over four times as great, was borrowing at that time \$87,427, as against a basic line of approximately \$60,000.

On June 30, 1921, the particular bank which was charged this high rate of interest had aggregate loans discounted with the Atlanta Federal reserve bank, of \$174,053.

Representative MILLS. What was its basic line?

Gov. HARDING. \$10,112; in other words, it was borrowing 17 times its basic line.

The CHAIRMAN. What were its reserves at that time?

Gov. HARDING. I am going to explain that. I want to read into the record this letter from the governor of the Atlanta bank, which will get the matter before you. May I erase the name of the bank?

The CHAIRMAN. I think there is no objection to that.

Gov. HARDING (reading):

JULY 23, 1921.

DEAR GOV. HARDING: In accordance with request contained in your telegram of the 21st instant, I take pleasure in inclosing herewith list of all Alabama member banks showing capital and surplus, basic line and amount of borrowings with us at the close of business June 30, 1920, and June 30, 1921. I am also inclosing full details in connection with our charges to the ——— National Bank, ———, Ala., representing progressive discount rates; also statement showing rebate of these charges aggregating \$2,281.56.

It is strange that I have never heard a complaint from that bank, and that bank is located in the town which is the home of a Member of the House of Representatives. I never heard from him in connection with it until the whole matter was settled up, and then he expressed gratification that the bank had been refunded the excess rate. [Continuing reading:]

There is also inclosed statement showing the average reserve balance of this bank and required reserve, which you will note, at a glance, shows a deficit in each period.

In comparing these statements referred to above, it can readily be seen that the progressive rates run exceedingly high due to the fact that this bank did not at any time during this period carry its required reserve balance; therefore, reducing its basic line, or discount line, whereby the progressive rate increased rapidly.

Now, if you will take that table I gave you this morning and look at the basic line, based upon the reserve balance, and if you will follow that table, you will see what I mean. If a bank has no reserve balance, it has got to get at the basic rate an amount based only on its stock in the reserve bank; this bank had \$37,500 capital stock and surplus, and figuring 3 per cent of that, you will find that it had \$1,125 of stockholding in the Federal reserve bank of Atlanta. Arriving at it by the same methods as indicated on the table I introduced this morning, we find it had about \$2,500 basic line. In other words, under the operation of the progressive rate, if the bank's basic line was \$2,500, it would pay 6 per cent interest on \$2,500; then as the rate of progression increased we get this result: You will see that on the next \$625 which the bank borrowed it would pay at the rate of 6½ per cent; and on the next \$625 it would pay at the rate of 7 per cent; and on the next \$625 it would pay at the rate of 7½ per cent; and on the next \$625 it would pay at the rate of 8 per cent; and on the next \$625 it would pay at the rate of 8½ per cent. Now, this gets us to about 8½ per cent on total borrowings of \$5,625, whereas if the bank had maintained the reserve balance that the law required it to maintain, it would have had \$10,000 at 6 per cent. It would have had \$2,500 more at 6½ per cent, and \$2,500 at 7 per cent, and so on; in other words, it would have had \$20,000 on an average charge of 6½ per cent on the whole \$20,000.

Now, here is a statement, however, of the case. [Continuing reading:]

Taking the matter as a whole, however, from the statement submitted below, it can be seen that while the progressive rates seem exorbitant the average rates paid to us for money borrowed during this period, when applied against the average borrowings, will not show anything in comparison to the seemingly high progressive rates shown. For instance, the average borrowings of the ——— National Bank for the period from June 15, 1920, to October 15, 1920, was \$149,830. The normal discount rate at 6 per cent on this amount would be \$2,996.80.

The witness yesterday took a two weeks' period to illustrate his figures. The Federal reserve bank gives us the whole period when the borrowings were large, from June 15, 1920, to October 15, 1920, and the commission can judge which is the right method.

Representative MILLS. What did that average for this period?

Gov. HARDING. For this period \$149,830, and the bank's basic line was \$10,000, the amount which the Federal reserve bank of Atlanta could loan this bank if all its member banks were borrowing the amount of their basic line.

Representative MILLS. What was the average interest rate?

Gov. HARDING. I am coming to that. [Continuing reading:]

The normal discount rate at 6 per cent on this amount would be \$2,996.80. Add to this amount progressive discount rates charged, \$3,680.15, and this less progressive discount rates rebated, \$2,281.56, would leave net amount of interest paid \$4,395.19 which would result in a rate charged for the average borrowings of 0.0880032 per cent per annum.

It should be noted that the progressive rates did not apply to agricultural paper in amount up to the capital and surplus of a member bank. We made a special exemption in such cases, with the approval of the Federal Reserve Board.

For your information, beg to advise that the rebated progressive discount rate referred to above, aggregating \$2,281.56, were refunded under date of June 28, 1921

And those progressive rates were refunded in every case, and my recollection is that the amount was about \$20,000 for the whole district.

Representative SUMNERS. Governor, I want to ask you with reference to the operation of this scale of rates. Recurring to the illustration given by yourself this morning with reference to the country bank and the city bank, the country bank having a total capital and surplus of \$40,000 and the city bank having a total capital and surplus of \$40,000,000. The calculations which I have made—in regard to the accuracy of which I am not in position to vouch for absolutely, figuring being out of my line—it seems that on the basis of capital, the country bank having a capital and surplus of \$40,000, it would be permitted on its basic line to borrow \$11,000, in round figures, or \$11 to every \$40 of capital.

Gov. HARDING. This basic line was figured on the contribution made by each member bank to the Federal reserve bank to do business with.

Representative SUMNERS. Whereas the city bank, with \$40,000,000, would be privileged to borrow \$58,000,000, and the country bank, with \$40,000, could borrow \$11,000; the city bank, with \$40,000,000 capital and surplus, could borrow \$58,000,000. I have eliminated the question of reserves, each one maintaining a legal reserve.

Gov. HARDING. Have you taken into consideration the amount of deposits carried by each bank? The whole proposition is this, Congressman: Put it on the individual case—there is no way of distributing credit by the Federal reserve banks per stirpes. You can not distribute Federal reserve funds on the basis of personal property owned in each State, or on any other basis excepting the amount the member banks can borrow. All transactions come through the member banks. If the member banks are not in localities where they can get large deposits, they can not carry the deposits with the Federal reserve bank that will justify them in giving large credits.

Representative SUMNERS. I understand that.

Gov. HARDING. You take one individual who is worth \$1,000,000, and another individual who is worth \$5,000; they are both excellent men, and the man who is worth \$5,000 may be a better man, and have just as good an appearance, and all that, as the millionaire, but on the question of the amount of money each can borrow, the millionaire naturally can borrow more money than the \$5,000 man.

Representative SUMNERS. Yes; but evidently I did not make myself clear. Let me make my statement again: Figuring on the basis of capital and surplus only, if the country bank with \$40,000 surplus and capital would be privileged to borrow \$11,000 after the progressive rate went into effect, whereas the city bank, with \$40,000,000, would be privileged to borrow \$58,000,000 after the progressive rate—

Gov. HARDING. That is, if you figured on capital alone.

Representative SUMNERS. That is what I am talking about.

Gov. HARDING. Why figure on capital alone?

Representative SUMNERS. I do not see any reason to get disturbed about the question.

Gov. HARDING. Why should you eliminate the gist or kernel of the whole question?

Representative SUMNERS. Is my statement true, or not?

The CHAIRMAN. I think your illustration of the little bank is decidedly unfortunate. You have taken a hypothetical case that would not happen once in many thousands of times. You have

assumed time deposits of \$50,000 and demand deposits of \$50,000, which is very, very small, in my part of the country, at least, for the capitalization.

Gov. HARDING. I was leading back to it. I was taking a case where a bank had deposits more nearly in proportion to its capital and surplus. I know some banks that have that proportion.

The CHAIRMAN. They are quite scarce, if I know anything about it. The average deposits in a country bank is about eight times the capital and surplus, and here you have about two and a half times, and it is unfortunate for the illustration you are trying to make.

Gov. HARDING. You think those figures are correct, if that is the capitalization and surplus, and give the deposit line?

Representative MILLS. Let me ask you a question, Gov. Harding: It would not necessarily follow that every bank with a capital and surplus of \$40,000 would have a basic line of approximately \$11,125, would it?

Gov. HARDING. Not at all. Let us take another case—an extreme case—

Representative MILLS (interposing). Wait a minute. That would not necessarily follow?

Gov. HARDING. Not at all.

Representative MILLS. Nor would it follow that a bank with, let us say, \$40,000,000 capital and surplus would have a basic line of \$58,000,000?

Gov. HARDING. Not at all. Let us work it around the other way—

Representative SUMNERS (interposing). I assumed this morning when you submitted this data that it was in some degree typical; at least sufficient for me to ask a question.

Gov. HARDING. It is a possible case.

Representative SUMNERS. It is a case which you submitted this morning.

Gov. HARDING. I know of a case where this illustration would fit.

Representative SUMNERS. If you submitted an illustration that does not illustrate, I am not responsible.

Gov. HARDING. You are using—

Representative SUMNERS (interposing). It is an illustration which you went to the trouble of typewriting, and I thought it was typical.

Representative MILLS. Let me ask a question.

Gov. HARDING. This illustrates what I attempted to illustrate. But you have overlooked the deposits.

Representative MILLS. That is the question. It is the deposits that must be figured in with the capital and surplus?

Gov. HARDING. Exactly. And another point you have overlooked. I assume that you all admit that ordinarily there is some relation between deposits and loans. In other words, if a bank with \$40,000 has only \$100,000 deposits, it would not have probably over \$125,000 or \$150,000 of loans. Well, now, if the same country bank, with \$40,000 capital, had \$600,000 deposits, it would probably have \$750,000 of loans. Now, if a bank has small deposits and small loans and its basic line is small, it does not have any occasion to rediscount so much. The thing equalizes itself.

Representative MILLS. Let me ask you about this further: Will you, to make the record entirely clear—will you t'ke, Governor,

the same bank with \$40,000 of capital and surplus, and deposits of \$500,000, and give us the basic line?

Gov. HARDING. Certainly. How much of those deposits time and how much on demand?

Representative MILLS. Make \$50,000 time.

Gov. HARDING. I do not think that would be a fair proportion, because the average in all country banks is usually about 50 per cent time deposits.

Representative MILLS. Then make it the average.

Gov. HARDING. Suppose we make it 20 per cent time deposits, a bank doing an active commercial business; we will say \$400,000 demand deposits and \$100,000 time deposits. It would be \$53,375.

Now, the rest of this Alabama bank matter is this—

Representative SUMNERS (interposing). I want to ask you one more question, Governor, before you go on.

Gov. HARDING. Yes.

Representative SUMNERS. In the illustration this morning of those two banks given by you, if considered solely on the basis of capital stock and surplus, it would seem that the country bank for every \$1.02 of stock and surplus could borrow \$11, whereas the city bank for every \$1.02 of stock and surplus could borrow \$58?

Gov. HARDING. No; if the city bank did not carry any reserve at all with the Federal reserve bank and the country bank did not carry any reserve, they would be figured on the same basis. The difference is in the classification of the towns in which the banks are located.

Representative SUMNERS. I want to be entirely fair about this; I do not want any advantage and do not want anything except to discover the truth. If each carried its legal reserve, then it would seem to me that the country bank, for every \$1.02 of its capital and surplus would be able to borrow \$11.

Gov. HARDING. Mr. Congressman, you are figuring on a case that never happened. You see; if the basic line has been figured on the basis of capital and surplus alone, then the city bank might have had an advantage. In order to cure that inequality, we take the other proposition, and it is a more scientific proposition anyway, because it takes into consideration every bank ratably, and it is absolutely fair. This is the first time that I have ever heard that question raised, that there was any inequality in the matter between a country bank and a city bank on the matter of the progressive rate. And since it has been abolished, there is no use for it, except for comparative and statistical purposes.

Now, as to this Alabama bank—

Representative FUNK (interposing). Mr. Chairman, can not that matter be submitted in the form of information for printing in the record? It is now 4.30, and we have listened all day to a reading of tables, and I must confess that I have not heard anything that has come near to the crux of this situation. The Federal Reserve Board has been criticized, and it has been said that it has discriminated against agriculture. I have not heard one word from this witness on that subject. Instead of that we have been compelled to listen to table after table that could be submitted in the form of exhibits. What I would like to know, and what the people of this country would like to know, is whether the Federal Reserve Board did have or did not have a policy of discrimination against agriculture.

Representative MILLS. Now, Mr. Chairman, it seems to me that it should be noted, in fairness, that for two days we allowed charge after charge to be presented here, which were wholly irrelevant to the questions we are discussing, and yet they were allowed to be made. And if the gentleman will remember, I objected, and pointed out the irrelevancy, and yet, by his vote, Mr. Williams was allowed to introduce into the record three speeches, and I then pointed out that we would have to allow other men to come in and submit answers to those charges, whether they had to do with agriculture or not. And the gentleman voted to have these irrelevant matters come in, which I submit had nothing to do with the question. But in fairness to this witness, after you have permitted and allowed charges to be made he should be permitted to answer them in detail.

Gov. HARDING. I will try to be as brief as I can. I do not enjoy it any more than you do.

Representative FUNK. I do not intend to be criticized by any member of this commission when I give expression to my views. You consumed most of yesterday in cross-examining the witness. The record will show that nine-tenths of the record was your questions, and when I make one suggestion I am criticized.

Representative MILLS. I am not criticizing.

Representative FUNK. If you will handle your affairs, Mr. Mills, I will handle mine.

The CHAIRMAN. The Chair thinks that the commission itself has voted to have submitted the matters which Mr. Williams's testimony covers, and that this witness then has a right, in answering, to refer to the matters which were charged in his statements and speeches.

Representative FUNK. I do not object, Mr. Chairman, if he makes some comment on it. But to read a dry table which can be put into the record in the form of exhibits——

The CHAIRMAN (interposing). We listened yesterday to 8 or 10 dry letters which contained more or less detail.

Representative FUNK. It was through no vote of mine that the letters went in. My vote went only to the three speeches, which were not read or commented upon.

The CHAIRMAN. You may proceed.

Gov. HARDING. Does the commission wish to hear from me any further?

The CHAIRMAN. You may proceed.

Gov. HARDING. I am informed that the Federal reserve bank of Dallas had a basic line which was based on the capital and surplus of the member banks.

Representative SUMNERS. That is what I was trying to get.

Gov. HARDING. I had overlooked that point, that the Dallas basic line was on that basis. That is the way they wanted it. I know that the scientific theory of the basic line is as I stated it this morning. But for the purposes of applying the progressive rate, the directors of the Federal reserve bank at Dallas, for reasons which seemed to them sufficient, recommended that the basic line be upon the capital and surplus of each bank, and it was so applied. Now, I will look through the board's files, if you wish, and find the reasons for wanting it applied in that way.

Representative TEN EyOK. Was that in only one locality?

Gov. HARDING. That was in the Federal reserve bank of Dallas.

The CHAIRMAN. What proportion of the capital and surplus is represented by the basic line?

Gov. HARDING. I think they took the entire capital and surplus of the member bank as the basic line. I presume they acted on this theory: You recollect under the old national banking laws the borrowings of a bank were limited to 100 per cent of its capital stock. The Federal reserve bank of Dallas said, we will take the capital and surplus as a basis and loan the amount of this capital and surplus, and that is the basic line they adopted. And the secretary of the board states that the reason they wanted it was that it was more advantageous to the country banks.

Representative SUMNERS. The graduated rediscount rate would not go into effect so soon that way and would be equal and uniform as between the country and the city bank.

Gov. HARDING. One word more about the progressive rate, and I am through with it. In the annual report of the Federal Reserve Board for the year 1919, it was stated that—

Any attempt to control credit by the application of a definite rule is subject to serious administrative difficulties. If the paper offered is eligible and good, it would be better for a reserve bank to grant accommodation at a price rather than to refuse it entirely, but the act, subdivision (d), section 14, provides that a Federal reserve bank shall have power to establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business. There is no authority, however, for establishing graduated rates based upon the total borrowings of a member bank, and consequently when it becomes necessary to advance the discount rate in order to curb the demands of those banks rediscounting with the Federal reserve banks in very large amounts, the same rate would have to apply to the moderate requirements of other member banks who may rediscount with the Federal reserve banks infrequently and never excessively. Thus the application of rate advances as a corrective or deterrent to certain banks tends to raise the level of current rates to all.

The board, therefore, recommends to Congress that an additional power be granted it, by adding to subdivision (d), section 14, a proviso that each Federal reserve bank may, with the approval of the Federal Reserve Board, determine by uniform rule, applicable to all its member banks alike, the normal maximum rediscount line of each member bank and that it may submit for the review and determination of the Federal Reserve Board graduated rates on an ascending scale to apply equally and ratably to all its member banks rediscounting amounts in excess of the normal line so determined. In this way, in the opinion of the board, it would be possible to reduce excessive borrowings of member banks, and to induce them to hold their own large borrowers in check without raising the basic rate. The Federal reserve banks would thus be provided with an effective method of dealing with credit expansion more nearly at the source than is now practicable and without unnecessary hardship to banks and borrowers who are conducting their affairs within the bounds of moderation.

A bill was prepared, based on that recommendation and was transmitted to the committees and Congress enacted the legislation.

Now, the application of the basic line was a new proposition. I think if the board had it to do over again, or if we should permit the progressive rate to be applied again, we would fix the maximum limit and have the differential not one-half of 1 per cent at a time, but 1 per cent at a time, for instance, with a normal rate of 6 per cent and an intermediate rate of 7 and a maximum of 8 per cent. But I hope the conditions are such as not to make it necessary to have a progressive rate apply any more.

The CHAIRMAN. I have no doubt that the progressive rate is theoretically sound; but it seems to me that there should be some flexi-

bility, and not purely an arbitrary rule for determining credit; that there must be some discretion somewhere for determining the credit. There is always hardship attending the application of an arbitrary rule. It can not be made sufficiently flexible to meet the conditions that will arise.

Gov. HARDING. Since the close of the year 1920 there has been a marked reduction in the loans and note issues of the Federal reserve banks combined, although this reduction has been by no means uniform at all the banks. As a matter of fact, the liquidation in the New York district has been about equal to that in all other districts combined. The rediscounts and advances of the Federal reserve bank of New York at the close of business on June 30, 1921, were lower than they had been since July 10, 1918. I have here copies of the weekly statement of condition of all Federal reserve banks for July 9, 1920, and July 6, 1921, and desire to call your attention to the fact that on the earlier date the Federal reserve bank of New York had total bills discounted and bought amounting to \$1,001,864,000, while on July 6, 1921, total bills held at the Federal reserve bank of New York were \$461,585,000, a reduction of \$540,279,000. If comparison should be made a week earlier in each case, it would be seen that a reduction took place of \$588,880,000. Bills held at the Federal reserve bank of New York increased from June 29, 1921, to July 6, 1921, from \$423,169,000 to \$461,585,000, a net increase for the week of \$38,416,000. The detail is as follows: July 9, 1920, secured by United States bonds and certificates, \$544,229,000; commercial paper, etc., \$303,454,000; bills bought in open market, \$154,181,000; total \$1,001,864,000. On July 6, 1921, secured by United States bonds and certificates, \$212,999,000; commercial paper, etc., \$236,970,000; bills bought in open market, \$11,616,000; total, \$461,585,000.

Some of those who have complained of the curtailment of credit live in the Richmond and Atlanta districts and it may be interesting, therefore, to ascertain just what the Federal reserve banks in those districts are doing. The inclosed statements show that on July 6, 1921, the Federal reserve bank of Richmond had total bills on hand amounting to \$105,974,000, against \$110,052,000 on July 9, 1920, but there was a reduction between these dates of \$15,830,000 in the amount of notes secured by Government obligations, which probably represents sales of bonds and certificates, while loans on commercial and agricultural paper increased from \$58,344,000 on July 9, 1920, to \$74,280,000 on July 6, 1921.

The Federal reserve bank of Atlanta shows between July 9, 1920, and July 6, 1921, an apparent reduction in total bill holdings of about \$17,000,000, but you will notice that commercial and agricultural paper increased from \$61,611,000 on July 9, 1920, to \$65,754,000 on July 6, 1921. When the difference in the value of cotton is considered it is evident that the real amount of accommodation given is considerably greater now than was the case a year ago. It should be noted, however, that the decrease in the total loans of the Federal reserve bank of Atlanta is not as great as it appears, for the bank on July 6, 1921, reports United States bonds and notes owned amounting to \$10,142,000 against \$117,000 on July 9, 1920. This increase represents bonds and notes purchased under resale agreement from certain member banks which had previously been using the bonds as

collateral for loans with the Federal reserve bank of Atlanta, so the actual reduction in the amount of the bank's total loans is only about \$7,000,000, instead of \$17,000,000.

Some figures relating to the Federal reserve bank of San Francisco may be of interest to you. The total bill holdings of the Federal reserve bank of San Francisco on July 6, 1921, amounted to \$161,203,000, as against \$199,003,000 on July 9, 1920. This reduction, however, is made up as follows: A decrease of \$4,446,000 in the amount of paper secured by Government obligations and a decrease of \$44,687,000 in the amount of bills and acceptances bought in the open market. Commercial and agricultural paper under rediscount for member banks amounted on July 6, 1921, to \$114,623,000 against \$103,290,000 on July 9, 1920, an increase in commercial, agricultural, and live-stock loans of \$11,333,000.

Let us now consider the figures for the system as a whole. On July 9, 1920, the total bills on hand at all Federal reserve banks amounted to \$2,934,184,000. On July 6, 1921, this total amounted to \$1,832,499,000, a decrease of \$1,101,685,000. The detail of this decrease is as follows: On paper secured by Government obligations, \$621,973,000, which can be accounted for in part by Government redemptions of bonds and Treasury certificates and private purchases for investment account, and in bills bought in the open market, \$341,455,000. While the volume of the acceptance business has declined during the past 12 months, this decrease is accounted for principally by the greater demand for first-class acceptances on the part of member and nonmember banks and trust companies. The volume may be smaller because of the smaller volume of trade. The total of agricultural, commercial and live-stock paper on hand, rediscounted for member banks, on July 6, 1921, was \$1,126,986,000, as against a total of \$1,265,243,000 on July 9, 1920, a decrease of only \$138,257,000, which is more than accounted for by the decrease in the holdings of paper of this kind by the Federal reserve banks of Boston, New York, and Chicago.

The Federal Reserve Board has made no suggestion whatever that any Federal reserve bank should undertake to force farmers to sell their cotton before the new crop comes in and telegraphic inquiry made of the Federal reserve banks in the cotton-producing districts shows that no such restrictions have been made by the Federal reserve banks.

I have here a copy of recent correspondence between the Federal reserve bank of Atlanta and one of its member banks, from which you will see that the governor of the Federal reserve bank calls the attention of his correspondent bank, which writes that it has notified its customers who are borrowing on cotton to sell it and pay their notes by July 1, to the fact that this is a matter which the Federal reserve bank has nothing to do with and that it has made no such demands. I also inclose copy of a letter written by the governor of the Federal reserve bank of Atlanta to the commissioner of agriculture of the State of Georgia, dated September 17, 1920, in which he states what the bank's policy will be regarding loans on cotton.

The comptroller's abstract, No. 130, made up from reports rendered as of April 28, 1921, shows that the total rediscounts with the Federal reserve bank of Richmond by national banks in South

Carolina on that date were \$12,506,000, while total loans and discounts of the South Carolina national banks on the same date, exclusive of the amounts rediscounted, amounted to \$75,208,000. Adding these two items together, we find that the South Carolina national banks had total loans and discounts on April 28, 1921, of \$87,714,000 and of this amount they had rediscounted with the Federal reserve bank \$12,506,000. They had also borrowed \$6,759,000 from the Federal reserve bank on their own collateral notes. The total accommodation granted to national banks in South Carolina as of April 28, 1921, was therefore \$19,265,000, or 22 per cent of their total loans. At the same time the total reserves carried by all national banks in South Carolina with the Federal reserve bank of Richmond amounted to \$3,829,000. Deducting the loans to State member banks, \$2,285,000, the loans of the Federal reserve bank of Richmond to national banks in South Carolina on June 30, 1921, amounted to \$18,820,000, and the total loans to all member banks in South Carolina on June 30, 1921, by the Federal reserve bank of Richmond amounted to \$21,105,000, against \$17,316,000 on June 30, 1920, and yet the Federal reserve bank of Richmond has been charged with restricting loans in South Carolina. I may add that the Federal reserve banks of Richmond and Atlanta were both heavy borrowers during the latter half of 1920 from other Federal reserve banks and the Federal reserve bank of Richmond has recently shown loans as high as \$25,000,000 from the Federal reserve bank of New York. It is worthy of note also that the Federal reserve bank of Richmond has never had the progressive rate and has never had a higher rate than 6 per cent. The legal rate of interest in South Carolina is 8 per cent. So you can see that there is a margin of profit to member banks in that State of two full points or 33½ per cent in their rediscount transactions with the Federal reserve bank.

The attitude of the Federal reserve board toward agriculture has been greatly misunderstood and grossly misrepresented. The board has always advocated as liberal a policy as possible, consistent with the terms of the Federal reserve act and with reasonable banking prudence toward agriculture, which it recognizes as the basic industry of the country and the foundation upon which all other industries necessarily rest. The trouble is that the loans made by the member and nonmember banks throughout the country are not well distributed and in a number of cases have not been judiciously made. Something over a third of all member banks are not borrowing from the Federal reserve banks at all and of the two-thirds which are borrowing, more than one-half are borrowing very large amounts. Many of these banks have extended themselves so far that they do not feel warranted in making any new loans, regardless of the disposition of the Federal reserve banks to rediscount the paper. They do not want their names on any more paper than they already have. They do not like the idea of increasing their contingent liability. In view of the fact that the 12 Federal reserve banks are independent bodies corporate and are controlled and directed each by its own board of directors, subject only to the general supervision of the Federal Reserve Board, whose authority with respect to discount is confined principally to defining eligible paper in accordance with the terms of section 13 of the Federal reserve act, it seems to me that

the statement which many, both in Congress and on the outside, urge be issued by the Federal Reserve Board, stating that the Federal reserve banks will adopt certain policies in connection with the rediscounting of agricultural paper, would have to be made by the Federal reserve banks themselves. And we had a conference here, as you remember, two or three weeks ago, where we got the governors of the Federal reserve banks in the agricultural districts together and had them announce their policies on the matter of loans for the orderly marketing of the crops.

The Federal Reserve Board has no power to interfere with the discretion given or the responsibility imposed by law upon the directors of a Federal reserve bank with respect to passing upon the merits of eligible paper offered for discount.

Congress did not establish a central bank in this country. It established 12 banks under the general supervision of the Federal Reserve Board, which does not exercise banking functions. These functions are exercised exclusively by the Federal reserve banks. The board has taken up repeatedly with the various Federal reserve banks complaints of a general nature regarding the restriction of agricultural credits and the banks have always made a good showing of what they have done for agriculture. Very few specific cases have been brought to the attention of the board where eligible agricultural paper has been refused for rediscount and in those cases it seems that the management of the Federal reserve banks have justified themselves in the refusal.

In some agricultural states there was two years ago unfortunately great speculation in farm lands and member and nonmember banks in those localities loaded themselves up with a large volume of real estate mortgages, which paper is not eligible for discount under the terms of the Federal reserve act, and many of them have sustained losses in deposits. In the present circumstances, they are endeavoring to work out from under the tremendous load which they ought never to have taken on and do not feel able or else are indisposed to extend accommodations for agricultural purposes which ordinarily they would be glad to do. In almost every State, however, there are a number of ultraconservative banks which have strong reserves which are not borrowing and which ought to do their part in assisting agriculture at the present time.

In the present condition of the country it seems to me that the strong position of the Federal reserve banks should be a source of satisfaction rather than the cause of so much reckless criticism. The Federal reserve banks can not be expected to encourage their member banks to make loans to the public on the basis of values which obtained 18 months ago. The inability of any banking system to maintain values in the face of a world-wide decline is evidenced by the plight of the banks in Cuba, which were heavily loaded up with loans on sugar at high prices. Surely the return of better conditions in this country would not be expedited by having American banks in the same condition that Cuban banks are in to-day.

By way of summary, let me state that while the Federal reserve act imposes a general limitation upon the maturity of paper eligible for discount of three months, it is provided in section 13 "that notes, drafts, and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months, exclusive

of days of grace, may be discounted in an amount to be limited to a percentage of the assets of the Federal reserve bank, to be ascertained and fixed by the Federal Reserve Board." Had the board been unfriendly to agriculture, as many of its critics claim it has been, it could easily have limited the amount of six months' agricultural paper which could be discounted by a Federal reserve bank to a very small percentage of its total assets. But in order to offer the fullest possible accommodations to agriculture, the board more than five years ago fixed this percentage at 99 per cent and has never changed it. It has already been pointed out that the decrease of more than \$1,100,000,000 which has taken place in the loans and earning assets of the Federal reserve banks is represented mainly by a reduction in loans secured by Government obligations and by bills and acceptances bought on the open market.

The actual reduction in commercial, agricultural, and live-stock paper rediscounted for member banks from July 9, 1920, to July 6, 1921, was \$138,257,000. This reduction is more than accounted for by the decrease of paper rediscounted by banks in Boston, New York, and Chicago. The bank liquidation which has taken place has been mainly in financial and industrial centers, and the figures of the Federal reserve banks do not indicate that there has during the past 12 months been any decrease in Federal reserve accommodations to banks in the agricultural and live-stock districts, but on the contrary there has been a considerable increase.

Now, I have the detailed statements here from Federal reserve banks showing the amount of loans to various banks, the small banks, on June 30, 1920, and the same banks on June 30, 1921.

Representative SUMNERS. This statement that you fixed a percentage of 99 per cent on agricultural paper really meant that you put no limit on the amount of agricultural paper?

Gov. HARDING. We went as far as we could. The law says it has to be limited to a certain proportion.

Representative SUMNERS. In the practical operation you put no limit on it?

Gov. HARDING. Yes. Now, I want to say regarding agricultural and live-stock loans—I have a table here—

Representative TEN EYCK (interposing). Governor, before you read that, may I ask you a question?

Gov. HARDING. Certainly.

Representative TEN EYCK. Pertinent, perhaps, to what you are about to read. Would it be possible to make the country national banks, both member and nonmember of the Federal reserve bank, report on the amount of loans made to farmers in their regular reports, in comparison to the loans made to all other industries?

Gov. HARDING. Yes; it would be possible, and it has already been done.

Representative TEN EYCK. I imagine that it has been done in this way, that it shows the loans that have been made on agricultural paper, but I bring up a distinction between paper on farm products owned by the farmers and paper on agricultural products which is in the hands of the merchants and commission men.

Gov. HARDING. I would suggest that that matter be taken up with the Comptroller of the Currency. He issues all calls to national banks for statements.

Representative TEN EYCK. This is not in criticism; this is a question asked for the purpose of getting your opinion, with a view to making a recommendation by this commission later on, so that we can consider your opinion when we are considering our final report as a commission.

Gov. HARDING. The Federal Reserve Board can only call for statements from State member banks. Now, if the Comptroller of the Currency will get out a questionnaire asking the national banks for this information, why the Federal Reserve Board, I think, will undoubtedly agree to get out a like questionnaire to the State member banks.

Representative TEN EYCK. Well, do you think it is a good thing, or not; would it be a good policy?

Gov. HARDING. You could not get the information, I think, accurately, unless you gave notice in advance so that the banks could keep their books accordingly.

Representative TEN EYCK. Well, do you think it good policy for the banks to keep their books that way? We are looking to you as an expert, and we have got to make recommendations later on, and this commission is primarily formed for the purpose of looking after the interests of the farmers, and what we want is to get the experts to commit themselves on something that we have in our minds.

Gov. HARDING. Of course, it would be possible for the banks to keep their books that way, but as to whether they would or not I do not know.

Representative TEN EYCK. I have asked this question of a number of other witnesses. It is not asked of you particularly.

Gov. HARDING. Now, if you will turn to page 32 of the annual report of the Comptroller of the Currency for 1920 you will find that he has a table there showing the distribution of loans according to occupation of the borrowers. The total loans and discounts, including rediscounts of national banks, November 15, 1920, amounted to \$13,764,721,000. According to reports of national banks, \$9,707,798,000 were made under the following classifications. You see, he was able to get information as to only a part of the loans. Whereas the total loans were in excess of \$13,000,000,000 he could get information regarding only approximately \$9,000,000,000 of it. Of that \$9,000,000,000 there was loaned to farmers, agriculturists, and live-stock raisers \$1,998,993,000; to manufacturing corporations and firms, individuals, and associations directly engaged in manufacturing, \$2,862,506,000; to merchants and mercantile corporations, firms, and individuals engaged in the jobbing business of trading, wholesale, etc., \$3,581,462,000, and so on. The other amounts are smaller.

Representative TEN EYCK. Of course, I have seen that, but that does not tell me what I want to know. In other words, I am over the hill now, on the other side that we have not been looking at in the past, and I want information on what the farmer, himself—

Gov. HARDING (interposing). Now, he says, "Of the total loans to farmers and agricultural interests, 83.25 per cent were made by the country banks; 16.75 per cent by the banks in reserve and central reserve cities."

Representative TEN EYCK. That does not go far enough. What I would like to know now is what the governor will say in answer to

my question: Whether he thinks it is feasible to obtain that information, and whether it is good information to have.

Gov. HARDING. I do not believe it is feasible to get the information, unless you give notice in advance.

Representative TEN EYCK. That is your recommendation; to give notice in advance, in order to have the data collected. Now, if we did that, do you think it is good information to have, from the farmers' standpoint?

Gov. HARDING. I think it would be good information to have.

Representative TEN EYCK. One other question. What can be done to liberalize the loans, both of member banks and nonmember banks, on products owned by the farmers?

Gov. HARDING. In order to answer that, I would like to read a report made by the deputy governor of one of the Federal reserve banks, which does a large business with banks in farming communities. The whole trouble of the Federal reserve system in meeting this agricultural situation is this: The Federal reserve banks can not and do not make loans directly to the individual or the public. They can only rediscount paper of the member banks that is brought to them. In other words, in order to get a loan from a Federal reserve bank, you have got first to get it from the member bank, and——

Representative TEN EYCK (interposing). My question did not refer to the Federal reserve bank or to the member bank only. My question was relative to a national bank, both member and non-member of a Federal reserve bank.

Gov. HARDING. The national banks are members of the Federal reserve system.

Representative TEN EYCK. And also the other banks. What I want is to get an expression from you as regards what we can do to liberalize the policy of all the banks of the country toward loaning on farm products that are owned by the farmer himself.

Gov. HARDING. Will you let me read this? I have a memorandum here that shows a very essential problem, that shows just what the problem is.

Representative TEN EYCK. The reason why I think you are competent to answer this is because the Federal reserve banks are discounting this paper, and it does come to your attention, and, therefore, I imagine that you ought to be in a position to make a recommendation at this time as to what we can do to liberalize the policy of the banks in the country in the various districts, at the point of borrowing.

Gov. HARDING. I am prepared to make a recommendation, but I would not like to make a recommendation until we have gone into this matter thoroughly, so that the recommendation will be better understood when I make it.

Representative TEN EYCK. Very well; I would like to get your recommendation before you close your testimony.

Gov. HARDING. It is my idea, before I conclude my testimony, to make such recommendation.

Representative TEN EYCK. That is perfectly satisfactory.

Gov. HARDING. I regret very much to have to take up the time of the commission in this way, but it was stated to me when these matters were attempted to be put into the record, these charges of mis-

management, etc., some of which are in the record, and some of which are not, that I would be given an opportunity to present the board's side of it. I am not going into detail more than is necessary.

Representative TEN EYCK. Governor, I do not want you to make the recommendation before you want to, but I do want, before you get through, an answer to my question.

Gov. HARDING. Here is a statement made by the deputy governor of the Federal reserve bank of Richmond, and I think it will interest every member of this commission. This is dated July 21, 1921. [Reading:]

It is perfectly true that many farmers were denied credit and it is also true that no considerable number were required to pay up at a great sacrifice to themselves, but not because of the demands of the Federal Reserve Board or the Federal reserve banks. On the contrary, such deflation of this kind as actually took place was in spite of the efforts of the Federal reserve bank to avoid it, or, at any rate, to make the burden as easy as possible. The deflation, such as it was, was not a general deflation, as is demonstrated by the fact that loans to the banks in that section remained the same or were in many cases increased.

The detailed statement of the loans of the banks shows that. While individual farmers were suffering, a statement of all the loans will show that they were greater this year than they were a year ago.

The truth of the matter is as follows:

During the year preceding the time at which the alleged deflation took place the banks had had very large increases in their deposits, in many cases far larger than they had ever been before.

The comptroller's report shows that the increases in South Carolina were the greatest in history.

While they had these large deposits they made loans accordingly. In some cases a considerable percentage was used to purchase well-known commercial paper originating in other localities and which could be counted upon to be liquidated at maturity; in many other cases the entire amount available was put out locally, some to farmers, some to merchants, no small amount to various phases of the automobile business, a great deal on cotton-mill stocks at high values, etc. In quite a number of places the small country banks not only loaned all of their inflated deposits, but actually borrowed money from correspondents and from the Federal reserve bank to make further loans.

It was difficult, if not impossible, for the Federal reserve banks to check these, because at the time the borrowings were in many cases not excessive and eligible and unimpeachable paper was offered.

Later, when the squeeze came, and when, as has been stated, the farmers needed more money, the deposits of the bank began to be drawn with practically the same rapidity with which they had formerly risen. It was then that the banks came to us to borrow heavily, and while many of them were increasing their rediscounts rapidly with us they were also cutting off loans to local customers, and in many cases pressing local customers for payment because their deposits were dropping faster than they could increase their rediscounts with us and much faster than they could make collections. As a matter of fact, in a very large percentage, if not all, of the cases we are now nursing and in which we have loaned many times the basic amount of the member bank, the trouble could be traced back to the making of injudicious loans, and loans on a very injudicious scale, at the time when the banks had actually swollen deposit lines.

There was another circumstance which greatly aggravated the situation. While the banks were fighting for their lives and trying to collect loans on the one hand, and trying to increase their rediscounts with us on the other, to obtain enough money to pay their depositors, many people who were clamoring for loans, in some cases to protect the produce which they had raised and the price of which had been seriously reduced, and in some other cases to provide adequate margin for investments, upon being turned down by the bank would appeal to some friend or acquaintance who had money in the bank. We have had made to us by member banks hundreds of statements to the effect that if they refused to make certain loans the borrower would appeal to some large depositor, offer him more interest than the bank was paying, and the bank would lose the money anyway.

Many of the implied charges against the Federal reserve system could be explained by the fact that no inconsiderable part of the trouble arose because the banks failed to realize that deposits are demand obligations, and therefore got things into a serious situation by a large volume of injudicious loans when they had extraordinarily high deposits. No small part of the alleged deflation was due to the fact that, not being able to collect these loans to satisfy depositors when the demand came, all their borrowing power with the Federal reserve banks was used for that purpose, and as it was not enough loans had to be called, and in such a situation payment is demanded from the man who can pay, regardless of the fact that he may be more entitled to the accommodation than some other customer who can not pay.

As a matter of fact, Federal reserve banks were being called upon not only to furnish additional sums which the farmers needed, but what the banks needed to meet the demands of their depositors, and since the demand of the depositor is necessarily superior in the eyes of the banker to the demand of a would-be borrower, in many cases additional funds borrowed from the Federal reserve bank were given to the withdrawing depositor rather than to the farmer.

The situation at one time—in fact, all during the year 1920—looked ominous. But the situation began really to brighten up before we knew it; it is brighter to-day than a great many people realize, infinitely brighter. And if there could be a cessation for a brief time of this pessimism that has spread all over the country, a pessimism because of the conditions which existed some time ago, as everybody admits they did, if we could restrain ourselves and not go to these extremes, we would not have these periods of depression. Fundamentally and basically, as shown by the figures of the Federal reserve banks, this situation is going to work out all right. You take the demand for wheat; or you take the cotton situation. Why, there is no comparison at all between the cotton situation this year and what it was last year. You take the Government report on the 25th of July, which indicated a yield of 8,200,000 bales, and compare that with the Government report which came out in August of last year, which indicated a yield of 12,500,000, and the actual yield proved to be 13,365,000—and bear in mind that August is the time when deterioration takes place in cotton, as the Congressman from Texas knows—that is the time when the drought and insects get in their work. Based on present reports, I feel sure the cotton situation will be much improved this year.

Now, consider the credit situation. When cotton was theoretically worth 40 cents a pound—I say theoretically, because while that was the price on the exchanges and certain grades could be sold at that figure—the demand was very sluggish, and it had to be nursed along; large offerings would have broken the market. Last year many of the banks had low reserves and could not loan as they usually did on cotton. And suppose the banks had gone along and made loans on the usual basis of 80 per cent of market value, where would they have been?

Now, this year, with cotton at the present price, with reduced supply in prospect and with the improved trade outlook, the prospects are very much brighter. In addition to all this, England had a coal strike and other labor difficulties, and those things are anticipated before they come along, and affect our exports. Already our exports of cotton are beginning to pick up, and so the member banks of the Federal reserve banks are fully warranted now, from the standpoint of sound and conservative banking, in doing things that they could not have done last fall. I want to elaborate on that a little more before I finish. It seems to me the best thing to do for the farmer

and everybody else is to get out of this everlasting pessimism and saying we are going to the dogs, because we are not. We have passed through other situations, and we will get through this one.

Representative TEN EYCK. I agree with you on that.

Gov. HARDING. If a man wants to get credit at a bank, he must make a showing or put up his collateral, and have a cheerful countenance. The banker always thinks of the obligation he is going to take; he is ever mindful of his obligation to his depositors, and if a man goes into a bank and wants to borrow \$10,000, and says that he has such and such commodities, but they are unsalable and that he does not know what they are worth, and if he does not get the money he will be everlastingly ruined, and makes a poor mouth, he is not as apt to get it as if he were cheerful and optimistic. It may be well enough to put up that line of talk to the tax assessor, but you can not borrow much money by talking to a banker like you talk to a tax assessor.

Representative TEN EYCK. You must tell the banker the truth.

Representative SUMNERS. Governor, I want to compliment you on your position on that matter.

Gov. HARDING. I have made addresses preaching optimism all this year. The Federal Reserve Board did not create the depression. It saw this condition coming, and got ready for it, and the people of this country ought to be thankful that the Federal reserve banks have protected them as they have.

Now, the very man who is one of our leading critics this year—I read from his annual reports this morning, and I want to insert one more reference in the record here of one thing which he stated. I want to call attention to this statement made in the last annual report of the Comptroller of the Currency.

Representative FUNK. What I want to know, Mr. Harding, is whether it was or was not the policy of the Federal Reserve Board to take the position that farmers' credits should be limited.

Gov. HARDING. No, sir; it never was.

Representative FUNK. It was not in San Francisco?

Gov. HARDING. No, sir.

Representative FUNK. What about Julius Barnes's letter?

Gov. HARDING. Who?

Representative FUNK. The Wheat Corporation; did you O. K. or did the Federal Reserve Board O. K. his position upon the deflation of wheat?

Gov. HARDING. I never heard of that before.

Representative FUNK. The Federal reserve bank of San Francisco?

Gov. HARDING. Not to my knowledge. I do not know anything about it.

Representative FUNK. They sent out circulars to that effect.

Gov. HARDING. Have you got the circulars?

Representative FUNK. Yes.

Gov. HARDING. What was wheat worth when the circular was sent out?

Representative FUNK. About the peak. Mr. Barnes took the position that wheat would fall, and the bank of San Francisco sent out to its member banks—

Gov. HARDING (interposing). Did it fall?

Representative FUNK. Yes; it fell rapidly.

Gov. HARDING. Did that circular accentuate the fall?

Representative FUNK. I think so.

Gov. HARDING. The Federal Reserve Board has cautioned the reserve banks against issuing circulars. It has advised the banks to do their correspondence as far as possible privately, and admonished them to do it quietly. It has admonished them not to give out any information which could affect prices. It is not the function of the Federal reserve system to regulate prices, either up or down. The Federal reserve system is a banking system, and every banker looks to his collateral, but it ought to be done in a quiet way.

This matter which I want to insert in the record is on page 291 of the comptroller's annual report for 1920 [reading]:

The past seven years have been, in numbers of persons and extent of interest involved, the most momentous and critical in the history of this Republic. We have had to face and to solve gigantic and unprecedented problems, and the banking and financial machinery of the country has been subjected to a test and strain unparalleled. It has been the duty of our country very largely to finance the world, and in carrying out the program which fate imposed upon us we have overcome successfully difficulties that at times seemed almost insurmountable and we have met every righteous demand made upon us. Our Federal reserve financial and banking system, inaugurated in 1914, has been of inestimable value; and without its aid, tasks which we have so successfully accomplished would have been impossible.

Now, Mr. Chairman, I can read here the minutes and proceedings showing the policies and attitude of the board all during the fateful year of 1920. I can show you what happened when the wool growers got into trouble and came to Washington. I can show you what happened in May, when a conference was held here, and I have never seen any quotations from a statement issued after that conference.

The CHAIRMAN. What I think the commission is interested in knowing is what the factors were which moved the Federal Reserve Board in adopting the policies which it did adopt at the various stages of this economic crisis through which we have been passing. That is, after all, the thing this commission is interested in, and it is interested in that, I believe, only in so far as an understanding of what has occurred and why it has occurred is helpful in determining what should be done in the future.

Gov. HARDING. I want to say that that change in discount rates of the Federal reserve banks was not a change in policy; it is not a change in policy, changing a discount rate; that is something that is done to meet changes in the banking situation.

I think possibly the best light I can throw on the policies of the Federal Reserve Board for 1920 is to read you a press statement which was given out after a conference held on May 28, 1920.

The CHAIRMAN. I am going to suggest, as it is now 5.20 o'clock, that we take a recess until to-morrow morning at 10 o'clock.

(And, thereupon, at 5 o'clock and 20 minutes p. m., the commission adjourned to meet at 10 o'clock a. m., on Friday August 5, 1921.)

AGRICULTURAL INQUIRY.

FRIDAY, AUGUST 5, 1921.

CONGRESS OF THE UNITED STATES,
JOINT COMMISSION OF AGRICULTURAL INQUIRY,
Washington, D. C.

The joint commission met at 10 o'clock a. m., pursuant to adjournment of yesterday, in room 70, Capitol Building, Hon. Sydney Anderson (chairman) presiding.

The CHAIRMAN. The commission will come to order. Mr. Harding, you may proceed with your statement, if you will.

STATEMENT OF GOV. W. P. G. HARDING—Continued.

Gov. HARDING. Mr. Chairman, I am anxious to conserve the time of this commission, and I think I can get through this morning. I have a great mass of material here, but I do not want to introduce very much of it now. It can be introduced later, if the commission so desires.

If I may have the privilege after I have had an opportunity of digesting the record of the proceedings here this week of either coming before the commission again at some future date, or of sending a written communication to it, I would appreciate it, and it will enable me to finish this morning much sooner than I otherwise could.

The CHAIRMAN. I do not think there will be any objection to that, whatever.

Gov. HARDING. Thank you, sir.

The CHAIRMAN. I want to say in this connection that the commission is anxious to give you every opportunity to express your views and to explain the provisions and policies of the board in any way that you desire.

Gov. HARDING. I appreciate that, and in my remarks to the commission this morning I shall try to confine myself strictly to things that are germane to the matters that this commission is inquiring into. I would like the privilege, however, of filing for the record certain statements, which are not very long, which have a bearing, I think, on the whole situation.

The CHAIRMAN. That may be done.

Gov. HARDING. I would like to file a statement of call money rates and a statement of cotton quotations over a period of months, in order that the commission may determine what relationship there is between the two sets of figures, if there is any relationship.

The CHAIRMAN. Without objection, the statements will go into the record. There appears to be no objection.

(The two statements presented by Gov. Harding for the record are here printed in full, as follows:)

Call money rates in New York on mixed collateral.

	Closing.		Ruling.			Closing.		Ruling.						
	Per cent	Per cent	Per cent	Per cent		Per cent	Per cent							
1919.														
Oct. 31	19	9	12	12	Sept. 10	6	7	7	7					
Nov. 7	12	12	10	10	Sept. 17	6	7	7	7					
Nov. 12	130	10	6	6	Sept. 24	8	7	7	7					
Nov. 14	8	14	10	10	Oct. 1	7.5	7.5	7.5	7.5					
Nov. 21	6	7	6	6	Oct. 8	6	9	9	9					
Nov. 28	10	6	8	8	Oct. 15	10	7	7	7					
Dec. 5	6	8	8	8	Oct. 22	10	9	9	9					
Dec. 12	9	6	6	6	Oct. 29	10	9	9	9					
Dec. 19	8	10	15	10	Nov. 5	9	7	7	7					
Dec. 26	15	6	6	6	Nov. 12	6	6	6	6					
1920.														
Jan. 2	6	15	6	6	Nov. 19	7	7	7	7					
Jan. 9	10	6	6	6	Nov. 26	7	7	7	7					
Jan. 16	6	6	6	6	Dec. 3	7	7	7	7					
Jan. 23	7	6	6	6	Dec. 10	7	7	7	7					
Jan. 30	14	12	14	12	Dec. 17	7	7	7	7					
Feb. 6	10	17	7	7	Dec. 24	7	7	7	7					
Feb. 13	6	6	6	6	Dec. 31	7	7	7	7					
Feb. 20	12	6	6	6	1921.									
Feb. 27	10	9	9	9	Jan. 7	7	7	7	7					
Mar. 5	6	7	7	7	Jan. 14	6	6	6	6					
Mar. 12	15	7	7	7	Jan. 21	7	7	7	7					
Mar. 19	7	7	7	7	Jan. 28	7	7	7	7					
Mar. 26	6	7	7	7	Feb. 4	8	8	8	8					
Apr. 2	10	8	8	8	Feb. 11	7	7	7	7					
Apr. 9	10	6	6	6	Feb. 18	6	6	6	6					
Apr. 16	8	10	10	10	Feb. 25	6	7	7	7					
Apr. 23	7	8	8	8	Mar. 4	7	7	7	7					
Apr. 30	12	8	8	8	Mar. 11	6	7	7	7					
May 7	7.5	7	7	7	Mar. 18	6.5	6.5	6.5	6.5					
May 14	10	8	8	8	Mar. 24	6.5	6.5	6.5	6.5					
May 21	6	7	7	7	Apr. 1	6	6	6	6					
May 28	6	6	6	6	Apr. 8	7	7	7	7					
June 4	6	6	6	6	Apr. 15	6	6	6	6					
June 11	8	8	8	8	Apr. 22	6.5	6.5	6.5	6.5					
June 18	9	9	9	9	Apr. 29	7	7	7	7					
June 25	9	10	10	10	May 6	6.6	6.5	6.5	6.5					
July 2	8	7	7	7	May 13	6.5	6.5	6.5	6.5					
July 9	10	9	9	9	May 20	7	7	7	7					
July 16	8	7	7	7	May 27	7.5	7.5	7.5	7.5					
July 23	9	8	8	8	June 3	6	6	6	6					
July 30	8	8	8	8	June 10	6	5.5	5.5	5.5					
Aug. 6	7	7	7	7	June 17	5	5	5	5					
Aug. 13	6	7	7	7	June 24	5	6	6	6					
Aug. 20	7	7	7	7	July 1	6	6	6	6					
Aug. 27	10	8	8	8	July 8	6	6	6	6					
Sept. 3	6	6	6	6	July 15	6	6	6	6					

¹ Peak.

Official quotations for middling upland cotton in the New York market.

Cents per pound.		Cents per pound.	
1919—Oct. 31	38.40	1920—Feb. 6	37.80
Nov. 7	39.75	Feb. 13	38.45
Nov. 14	39.65	Feb. 20	39.00
Nov. 21	38.40	Feb. 27	39.65
Nov. 28	39.45	Mar. 5	40.90
Dec. 5	39.25	Mar. 12	41.00
Dec. 12	38.00	Mar. 19	41.00
Dec. 19	39.25	Mar. 26	41.50
Dec. 26	39.25	Apr. 1	41.75
1920—Jan. 2	39.25	Apr. 9	43.00
Jan. 9	39.25	Apr. 16	43.25
Jan. 16	39.25	Apr. 23	41.65
Jan. 23	39.30	Apr. 30	41.25
Jan. 30	39.50	May 7	41.10

Cents per pound.		Cents per pound.	
1920—May 14.....	41.15	1920—Dec. 17.....	16.00
May 21.....	41.00	Dec. 24.....	15.25
May 28.....	40.00	Dec. 31.....	14.75
June 4.....	40.00	1921—Jan. 7.....	16.75
June 11.....	40.00	Jan. 14.....	17.65
June 18.....	39.25	Jan. 21.....	16.65
June 25.....	38.25	Jan. 28.....	14.75
July 2.....	39.75	Feb. 4.....	13.80
July 9.....	40.50	Feb. 11.....	13.85
July 16.....	42.50	Feb. 18.....	13.40
July 23.....	43.75	Feb. 25.....	12.20
July 30.....	40.00	Mar. 4.....	11.50
Aug. 6.....	39.50	Mar. 11.....	11.40
Aug. 13.....	37.50	Mar. 18.....	11.45
Aug. 20.....	33.50	Mar. 24.....	12.35
Aug. 27.....	33.50	Apr. 1.....	12.00
Sept. 3.....	31.75	Apr. 8.....	11.85
Sept. 10.....	32.25	Apr. 15.....	12.30
Sept. 17.....	31.00	Apr. 22.....	12.10
Sept. 24.....	28.50	Apr. 29.....	12.35
Oct. 1.....	25.00	May 6.....	13.00
Oct. 8.....	24.50	May 13.....	12.60
Oct. 15.....	22.00	May 20.....	12.65
Oct. 22.....	21.00	May 27.....	13.15
Oct. 29.....	22.20	June 3.....	12.95
Nov. 5.....	20.85	June 10.....	12.50
Nov. 12.....	19.40	June 17.....	11.40
Nov. 19.....	17.55	June 24.....	11.05
Nov. 26.....	15.85	July 1.....	12.00
Dec. 3.....	16.15	July 8.....	12.20
Dec. 10.....	16.25	July 15.....	12.75

Gov. **HARDING**. I would also like to file a statement made by the President of the United States, in which he gives his opinion as to the cause of the present depression. That is in the form of literal excerpts from an address made on the 12th of July before the Senate of the United States. It is a very short statement.

The **CHAIRMAN**. It may go in.

Gov. **HARDING**. It is short, and I will read it. [Reading:]

Our land has its share of the financial chaos and the industrial depression of the world. We little heeded the growth of indebtedness or the limits of expenditure during the war because we could not stop to count the cost. Our one thought then was the winning of the war and the survival of the Nation. We borrowed and loaned—individuals to the Nation, and the Government to other Governments, and to those who served the Nation, with little thought of settlement. It was relatively easy then, because national life was at stake. In the sober aftermath we face the order of reason, rather than act amid the passions of war, and our own land and the world are facing problems never solved before.

There can be no solution unless we face the grim truths and seek to solve them in resolute devotion to duty. * * * It is unthinkable to expect a business revival and the resumption of the normal ways of peace while maintaining the excessive taxes of war. * * * The slump which is now upon us is an inevitable part of war's aftermath. It has followed in the wake of war since the world began. There was the unavoidable readjustment, the inevitable charge off, the unflinching attendance of losses in the wake of high prices, the inexorable deflation which inflation had preceded. It has been wholly proper to seek to apply Government relief to minimize the hardships and the Government has aided wherever possible, and is aiding now, but all the special acts ever dreamed of, all the particular favors ever conceived will not avoid all the distresses nor ward off all the losses. The proper mental state of our people will commit us resolutely and confidently to our tasks, and definite assurances as to taxation and expenditure will contribute to that helpful mental order. The only sure way to normalcy is over the paths nature has marked throughout all human experience.

¹ Peak.

Representative FUNK. Is that the personal message he delivered before the Senate?

Gov. HARDING. I believe it was before the Senate; or was it a joint session?

Representative FUNK. He has addressed two communications recently, one personally with reference to the soldiers' bonus.

Gov. HARDING. I got this out of the Congressional Record of July the 12th.

Now, I would like to file something which is already a public document, a reply made by the Federal Reserve Board, under date of May 25, 1920, to a resolution adopted by the Senate of the United States on May 17, 1920, the resolution being as follows [reading]:

Resolved, That the Federal Reserve Board be directed to advise the Senate what steps it purposes to take or to recommend to the member banks of the Federal reserve system to meet the existing inflation of currency and credits and consequent high prices, and what further steps it purposes to take or recommend to mobilize credits in order to move the 1920 crop.

Senator HARRISON. That was May 17, 1920?

Gov. HARDING. May 17, 1920.

Senator HARRISON. Who offered that resolution?

Gov. HARDING. I think it was Senator McCORMICK who introduced that resolution, if my recollection serves me right. I ask that this go into the record.

The CHAIRMAN. Very well. Without objection it will go in the record.

(The communication from Gov. W. P. G. Harding to the President the Senate, dated May 25, 1920, is here printed in full, as follows:)

SIR: On May 17, 1920, the Senate adopted the following resolution:

Resolved, That the Federal Reserve Board be directed to advise the Senate what steps it purposes to take or to recommend to the member banks of the Federal reserve system to meet the existing inflation of currency and credits and consequent high prices, and what further steps it purposes to take or recommend to mobilize credits in order to move the 1920 crop."

In response the board desires to say that it has recognized for many months past that the expansion of bank credits in this country was proceeding at a rate not warranted by the production and consumption of goods. It has repeatedly admonished the Federal reserve banks that influences should be exerted upon the member banks to induce them to avoid undue expansion of loans and to keep their volume of outstanding credits within moderate bounds.

Beginning six months ago the rates of discount on various classes of paper at the Federal reserve banks were advanced. During the latter part of January the present rates were put into effect. These advances, while undoubtedly checking credit transactions which otherwise would have been made, have not been entirely effective in bringing about the reduction in loans desired and which normally have been expected during the early months of the year. Liquidation during these months is entirely natural and healthy and is necessary in order that the banks may be prepared to meet the demands made upon them during the crop making and harvesting seasons, but there has been no such liquidation and on the contrary commercial loans have steadily increased. Thus it appears that the public has anticipated demands for banking credit which are usually made later on in the year. The average reserves of the Federal reserve banks are now a little over 42½ per cent, as against 45 per cent at the beginning of the year and about 51 per cent 12 months ago.

The Federal Advisory Council, which is composed of one member from each Federal reserve district, elected annually by the board of directors of the Federal reserve bank, is required by section 12 of the Federal reserve act to meet in Washington at least four times each year. The council is authorized "to confer directly with the Federal Reserve Board on general business conditions; to make oral or written representations concerning matters within the jurisdiction of said board; to call for information and to make recommendations in regard to discount rates, rediscount business, note issues, reserve conditions in the various districts, the purchase and sale of gold or securities by reserve banks, open-market operations by said banks, and the general affairs of the reserve banking system."

Upon a receipt of a notice that the council would hold its regular meeting on May 17, the board extended an invitation to the three class A directors of each Federal reserve bank, who are the representatives of the stockholding banks, to come to Washington at the same time for conference with the Federal Reserve Board and the Federal Advisory Council. This conference was held on the 18th instant and it was developed at the meeting that the present credit expansion is due in great part to the abnormally high prices of goods and commodities now prevailing throughout the country and to the congestion of foodstuffs and essential raw materials at, or near, points of production because of lack of transportation facilities.

The board is convinced that if the unsold portions of last year's crops can be brought to market before the new crop matures, the liquidation of credits which are now tied up in carrying the old crops will be sufficient to offset to a considerable degree the credit demands which will be made upon the banks in moving the crop of 1920.

At the conference above referred to the board's views were outlined by its governor substantially as follows: The member banks should lean less heavily upon the Federal reserve banks and rely more upon their own resources, unnecessary and habitual borrowings should be discouraged, and the liquidation of long standing, nonessential loans should proceed. Banks were cautioned, however, that drastic steps should be avoided and that the methods adopted should be orderly, for gradual liquidation will result in permanent improvement while too rapid deflation would be injurious and should be avoided. The board pointed out the necessity for extending such credits as may be necessary to promote essential production, especially of foodstuffs, and that if for any reason it should prove impracticable to increase essential production, there should be greater economy in consumption and more moderation in the use of credit. The problem of the banking system of the country is to check further expansion and to bring about a normal and healthy liquidation without curtailing essential production and without shock to industry, and, as far as possible, without disturbance of legitimate commerce and business.

In order to effect this it seems necessary to distinguish between essential and non-essential loans, but the Federal Reserve Board feels it would be a most difficult task, which it should not undertake, to attempt by general rule of country-wide application, to make this distinction. During the war there was a broad underlying principle that essentials must be "necessary or contributory to the conduct of the war," but notwithstanding the sharp outline of this principle much difficulty was experienced by the various war boards in defining essentials and nonessentials. All the more difficult would it be for the Federal Reserve Board to make such a general definition in the present circumstances.

Section 13 of the Federal reserve act defines the eligibility of paper for discount by the Federal reserve banks and lays down a general rule that any paper maturing within the time prescribed and "issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used, or are to be used, for such purposes" is eligible. No expressed condition is made regarding the essential or nonessential character of the transactions giving rise to notes which may be offered for discount; and the Federal Reserve Board is not required, and properly could not be expected, generally to adopt such a criterion of eligibility. It is too much a matter of local conditions and local knowledge to justify at this time any general country-wide ruling by the board, even if such a ruling were deemed helpful.

On the other hand, there is nothing in the Federal reserve act which requires a Federal reserve bank to make any investment or to rediscount any particular paper or class of paper. The language of both sections 13 and 14 is permissive only. Section 4 of the Federal reserve act, however, requires the directors of a Federal reserve bank to administer its affairs "fairly and impartially and without discrimination in favor of or against any member bank," and subject to the provisions of law and the orders of the Federal Reserve Board to extend "to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks." Thus the directors of a Federal reserve bank have the power to limit the volume and character of loans which in their judgment may be safely and reasonably made to any member bank.

The recent amendment to paragraph (d) of section 14 distinctly authorizes each Federal reserve bank on its own account, without reference to action taken by any other Federal reserve bank, to establish a normal discount or credit line for each member bank, and permits the imposition of graduated rates on discount lines in excess of the normal line. This amendment, however, does not repeal or modify sections 4 and 13, and a Federal reserve bank is still free to decline to discount any paper which in its judgment does not constitute a desirable investment for it or which in its opinion would not constitute a safe and reasonable investment within the meaning of section 4.

It is the view of the board, however, that while Federal reserve banks may properly undertake in their transactions with member banks to discriminate between essential and nonessential loans, nevertheless that discrimination might much better be made at the source by the member banks themselves. The individual banker comes in direct contact with his customers; he is better qualified than anyone else to advise the customer, because of his familiarity not only with the customer's business but with the general business conditions and needs in his immediate locality. In making loans he is bound by no general rule of law as to the character of the purpose for which a loan is being asked. He is entirely free to exercise discretion and can make one loan and decline another as his judgment may dictate. He can estimate with a fair degree of accuracy the legitimate demands for credit which are liable to be made upon him, as well as the fluctuations in the volume of his deposits. He knows what industries sustain his community, and is thus qualified to pass on the essential or nonessential character of loans offered him. He knows, or should know, what rediscounts line he may reasonably expect of his Federal reserve bank, and he ought not to regard this line as a permanent addition to his capital. With knowledge of the limitations or penalties put upon his borrowings from the Federal reserve banks the banker may be depended upon to use a more discriminating judgment in granting credit accommodations to his customers, and that judgment he must exercise if the present situation is to be remedied fundamentally.

It is true that under existing conditions the volume of credit required in any transaction is much greater than was the case in prewar times, but it is also true that the resources of the member and nonmember banks would be ample to take care of the essential business of the country and to a large extent of nonessentials as well if there were a freer flow of goods and credit. If "frozen loans" were liquefied and if commodities which are held back either for speculative purposes or because of lack of transportation facilities should go to the markets, and if large stocks of merchandise should be reduced, the resultant release of credit would have a most beneficial effect upon the general situation. In the meantime everything must be done to expedite the release of these credits and to restrict nonessential credits in future.

While the problem of credit regulation and control is national and even international in its scope, yet in the last analysis it is merely an aggregation of individual problems, and the proper working out of the situation must depend upon the public and upon the banks which deal with the public. The public must be made to realize the necessity of economy in expenditures and in consequent demands for banking credit. The banks themselves are best able to impress the importance of this policy upon the public.

For the further information of the Senate the board quotes from the report of the Federal Advisory Council made to it on May 10, signed by James B. Forgan, president:

"The council has given consideration to the matter included in your communication of April 17 and begs to reply thereto in the following manner, following the order set out by you.

"(a) Causes of continued expansion of credits and of Federal note issues.

"There are many contributing causes of which the following may be regarded as paramount:

- "1. We recognize, of course, that the first cause is the Great War.
- "2. Great extravagance, national, municipal, and individual.
- "3. Inefficiency and indifference of labor resulting in lessening production.
- "4. A shortage of transportation facilities, thus preventing the normal movement of commodities.

"5. The vicious circle of increasing wages and prices.

"(b) How can the reserve position of the Federal reserve banks be materially strengthened before the seasonal demand sets in next fall, without undue disturbance of the processes of production and distribution?

"By urging upon member banks through the Federal reserve banks the wisdom of showing borrowers the necessity of the curtailment of general credits, and especially for nonessential uses, as well as continuing to discourage loans for capital and speculative purposes; by checking excessive borrowings through the application of higher rates.

"(c) If steps can not be taken at this time leading to a more normal proportion between the volume of credits and the volume of goods, when can they be taken?

"In our opinion, steps should be taken now, as outlined in answer to the last question.

"(d) What is the effect upon the general situation of the increased Treasury borrowings and what should be the policy of the Federal reserve banks in establishing rates of discount on paper secured by certificates of indebtedness?

"It is obvious that the borrowings of the Treasury have the same effect upon the general credit situation as those of other borrowers. The council would suggest the wisdom of congressional relief from the burden of Government financing by a policy

of rigid economy; the provision of the tax laws for the sake of a more equitable distribution of the burden without reducing the revenue; the enactment of the budget system, the budget to include provision for the payment of the short gradual-time obligations of the Treasury. These would of necessity preclude unwise appropriations, such as the proposed soldiers' bonus. In view of the large volume of Treasury certificates of indebtedness carried by member banks at the instance of the Treasury Department, we believe that rates established by the Federal reserve banks on paper secured by them should not be materially greater than the rates borne by the certificates."

The board feels assured that the banks of the country now realize the necessity of more conservatism in extending credits and of a reasonable reduction in the volume of credits now outstanding. The board will not hesitate, so far as it may be necessary, to bring to bear all its statutory powers in regulating the volume of credit, but wishes to point out that the more vital problems relating to the movement of the 1920 crop are physical rather than financial.

This was the unanimous view of those present at the conference on the 16th instant, at which the following resolution was adopted:

"The whole country is suffering from inflation of prices with the consequent inflation of credit. From reports made by the members of this conference, representing every section of the country, it is obvious that great sums are tied up in products which if marketed would relieve necessity, tend to reduce the price level, and relieve the strain on our credit system.

"This congestion of freight is found in practically all of the large railroad centers and shipping ports. It arises chiefly from inadequate transportation facilities available at this time and is seriously crippling business. We are informed that the per ton mile of freight increased in three years, 1916, 1917, and 1918, 47 per cent, while the freight cars in service during the same period increased 1.9 per cent.

"A striking necessity exists which can only be relieved through the upbuilding of the credit of the railroads. This must come through adequate and prompt increase in freight rates. Any delay means the paying of greater cost directly and indirectly and places a burden on the credit system which in the approaching time for seasonal expansion may cause abnormal strain. Even under the load of war inflation, high-price level, and extravagances, the bank reserves would probably be sufficient if quick transportation could be assured during the time of the greatest strain: Therefore, be it

"Resolved, That this conference urge, as the most important remedies, that the Interstate Commerce Commission and the United States Shipping Board give increased rates and adequate facilities, such immediate effect as may be warranted under their authority and that a committee of five, representing the various sections of the country, be appointed by the chairman to present this resolution to the Interstate Commerce Commission and the United States Shipping Board, with such verbal presentation as may seem appropriate to the committee."

Much will depend upon the restoration of the normal efficiency of railroad and steamship lines. If adequate transportation facilities can be provided, the board sees no occasion for apprehension in connection with the movement of crops now being grown.

Respectfully,

W. P. G. HARDING, Governor.

The PRESIDENT OF THE SENATE.

Gov. HARDING. I would also like to file for the record a statement which was issued by a committee of woolgrowers by authority of the Federal Reserve Board, following a conference which the board held with the wool people in June, 1920. This press statement bears date June 22, 1920, and the paper that I want to file is a circular letter which was addressed to the chairman of all Federal reserve banks, stating what agreement the board made as to the policy on wool loans with this committee of woolgrowers who came here to see us on June 21, 1920.

Senator HARRISON. The agreement was perfectly agreeable to them, was it?

Gov. HARDING. Here is their own statement [reading]:

At a further meeting held last night of all interests concerned it was the unanimous opinion that the plan suggested above was practical and feasible, and that no extraordinary difficulty would be encountered in the necessary financing to carry along the

present season's wool clip until a normal buying market should reassert itself, which it was the firm belief of all would be within a very reasonable length of time.

I ask that this go in the record, Mr. Chairman.

The CHAIRMAN. Without objection, it will go in.

(The communication of June 22, 1920, from W. P. G. Harding, governor of the Federal Reserve Board, to chairmen of all Federal reserve banks is here printed in full, as follows:)

STATEMENT ISSUED BY WOOLGROWERS.

DEAR SIR: For your information there is quoted below a statement which was given to the press to-day by a committee of woolgrowers who were in conference with the board on yesterday. While the board has often pointed out that the fact that an acceptance or a note is eligible imposes upon a Federal reserve bank no obligation to purchase or discount it, the board assumes that the Federal reserve banks, recognizing the obstacles in the way of marketing wool at the present time, will accord as liberal treatment as is consistent with good business principles to member banks offering eligible notes or acceptances based on wool:

"By advance arrangement with the Federal Reserve Board, woolgrowers, bankers in the wool producing sections and eastern wool markets, wool dealers, warehouse men, manufacturers and others interested in the wool trade, held an all-day session with the Federal Reserve Board yesterday. The condition of the wool market caused by the recent cessation of purchases of raw wool was laid before the board, and a full discussion was had of various plans for financing the industry until normal buying operations are resumed. Unlike most other crops, wool is marketed in the spring and early summer, and the marketing conditions prevailing during the past month have threatened great losses to wool growers which might be disastrous. Such a condition, if it developed, might cause serious sacrifice of sheep on farm and range, and result in reduced supplies of wool and mutton in future years. It was clearly shown that there was no disposition on the part of anyone to maintain artificial prices, but simply to make arrangements by which the temporary interruption of the wool market would be removed and normal marketing conditions restored.

"The plan of action finally arrived at was adopted as a more simple and satisfactory way of dealing with the situation than the cotton loan plan of 1914 which had been suggested. At the termination of a conference between the board and a subcommittee consisting of bankers thoroughly familiar with the entire situation, the board authorized the following statement:

"A wool grower may ship his wool to one of the usual points of distribution, obtaining from the railroad a bill of lading for the shipment; the grower may then draw a draft against his bank, for such an amount as may be agreed upon by the grower and the bank, secured by the bill of lading. The Federal reserve act authorizes any member bank to accept a draft secured in this manner at the time of acceptance, provided that the draft matures in not more than six months from the time of acceptance. After acceptance such a draft bearing the indorsement of a member bank is eligible for rediscount or purchase by a Federal reserve bank, provided, that it has a maturity of not more than three months from the date of rediscount, or purchase."

It was suggested that the Federal Reserve Board communicate with the Federal reserve banks, pointing out that shipments of wool to points of distribution may properly be financed by acceptances in the above manner.

While the statement refers only to acceptances based on bills of lading, Gov. Harding referred those present to the provisions of section 13 of the Federal reserve act, as to eligibility for discount of paper secured by warehouse receipts.

At a further meeting held last night of all interests concerned, it was the unanimous opinion that the plan suggested above was practical and feasible, and that no extraordinary difficulty would be encountered in the necessary financing to carry along the present season's wool clip until a normal buying market should reassert itself, which it was the firm belief of all, would be within a very reasonable length of time.

Gov. HARDING. This comes out of chronological order, but I offer it for the record now because it will save time. This is a copy of the first page of the board's press statement of June 6, 1921, the second page of which I do not offer, not being relevant. It does not contradict, of course, anything that is said on the first page. The statement is as follows [reading]:

Gov. Harding, of the Federal Reserve Board, left Sunday night for a two weeks' trip through the cattle-producing sections of the country. Stopping en route at Des Moines, Iowa, he will visit Cheyenne, Wyo.; Denver, Colo.; Albuquerque, N. Mex.; El Paso, San Angelo, San Antonio, and Dallas, Tex., returning thence direct to Washington.

Before leaving Gov. Harding gave out the following authorized statement from the Federal Reserve Board:

"It is the opinion of the Federal Reserve Board that the country is approaching a new crop season with underlying conditions far sounder than they were a year ago. While there are still large amounts of staple products being carried over, financed partly on bank credit, the reserves of the 12 Federal reserve banks combined are nearly 40 per cent higher than they were at this time last year, standing at about 57.5 per cent as against 42 per cent. There is no ground for apprehension regarding the ability of the banks to meet the requirements of both agriculture and industry.

"The Federal reserve system now holds the largest amount of gold in its entire history, more than \$2,400,000,000, and the inflow from other countries still continues. While the loans and invested assets of the Federal reserve banks have been reduced since the peak on November 5 last by more than \$1,000,000,000, most of this liquidation has come about in an orderly and natural way. Liquidation has been most pronounced in financial and industrial centers rather than in agricultural sections, as is evidenced by the fact that while the rediscounts held by the Federal reserve banks are materially less than at this time a year ago, these banks are now carrying more than twice as much agricultural and live-stock paper (maturities from 90 days to 6 months) as they had on hand a year ago.

"It should be understood that until there is a broadening of the market for agricultural products many farmers will have to be granted extensions on loans made them and will, in many cases, require additional credits pending the making and marketing of the new crops. The Federal Reserve Board is gratified to know that the Federal reserve banks are prepared to extend liberal credits to member banks, and through them to nonmember banks, for these and other productive requirements of their customers, and the board urges all banks to aid in easing along the situation in the agricultural districts until normal and regular processes of production and distribution can be further developed. The board feels that the financial emergency which menaced the country during the year 1920, has definitely passed."

Senator HARRISON. When was that?

Gov. HARDING. June 6, 1921. And a copy of that was sent to all the Federal reserve banks.

Senator HARRISON. Now, have you any other statements that that were issued by either you as governor of the board, or in behalf of the board, touching this same matter for a year prior to that?

Gov. HARDING. I have; yes, sir; and I will introduce them in a few minutes.

Senator HARRISON. You are going to put all this in the record?

Gov. HARDING. Yes. I am coming back to this because I want to discuss it.

Senator HARRISON. Very well.

Gov. HARDING. Now, I want to file also a copy of a circular letter which the board sent to all Federal reserve banks advising them that they would be permitted to discount, with the indorsement of member banks, paper which they in turn received from nonmember banks. That authority was given by virtue of a provision of section 19 of the Federal reserve act. This is a circular letter to all Federal reserve banks, reading as follows [reading]:

JULY 27, 1921.

Subject: Permission granted to member banks to apply for discounts of eligible paper acquired from nonmember banks.

DEAR SIR: As you know, section 19 of the Federal reserve act provides in part that:

"No member bank shall act as the medium or agent of a nonmember bank in applying for or receiving discounts from a Federal reserve bank under the provisions of this act, except by permission of the Federal Reserve Board."

This letter is to advise you that the Federal Reserve Board has given general authority to member banks to apply to their respective Federal reserve banks for discounts of eligible paper acquired by such member banks from nonmember banks, such authority to be effective until withdrawn by the Federal Reserve Board. The extent to which the respective Federal reserve banks will entertain such applications is, of course, a matter of policy for the determination of the officers of each bank.

The CHAIRMAN. What was the policy of the board and of the Federal reserve banks with respect to rediscounting loans of this character prior to the announcement of that circular?

Gov. HARDING. The policy of the board was to permit at all times the rediscounting of nonmember bank paper under certain conditions. You will notice the language of that section 19, which I have just quoted, says that no member bank shall act as the medium or agent for nonmember banks in applying for or receiving discounts except with the permission of the Federal Reserve Board. From the very beginning, however, the board has consistently taken this view, that where a bank had devoted much attention to carrying accounts for other banks, nonmember banks as well as member banks, and its business with other banks was an essential part of its business, that it should be permitted to rediscount nonmember bank paper, because that was really an accommodation to the member bank. There are some member banks who have more deposits made by other banks than they have those made by individuals, firms, or corporations, and in like manner there are some member banks which in some seasons of the year have made more loans to other banks which deal with them than they gave to local customers. So the board's policy has always been to permit those banks whose business was composed substantially of accounts of other banks, to receive accommodations from the Federal reserve banks, based on nonmember banks' paper.

The CHAIRMAN. Then this does not represent a change of policy on the part of the Federal Reserve Board at this time?

Gov. HARDING. What is that?

The CHAIRMAN. This circular does not represent a change of policy on the part of the Federal Reserve Board at this time?

Gov. HARDING. No; it does not represent a change of policy on the part of the Federal Reserve Board at this time. It merely extends, by virtue of the authority we have in section 19, the same principle.

The view we took of it was this: Suppose that there were two banks in a small town, one a member bank and the other a nonmember bank, and that they both did a local business, neither one of them receiving accounts of other banks. If the nonmember bank would go to the member bank and say, "Here, you lend us \$25,000," that would be an unusual proceeding, and if the member bank made a loan of \$25,000 to the nonmember bank it would do so purely with the idea of in turn rediscounting that paper with the Federal reserve bank. In other words, it would act as a medium or agent.

I recollect an instance in North Carolina last year where the board sent a letter to the Federal reserve bank of Richmond authorizing it in that particular instance, which seemed to be an emergency case, to discount nonmember bank paper for this particular member bank. But now we broaden that policy so as to make it apply generally.

The CHAIRMAN. Prior to this announcement would the permission of the Federal Reserve Board be required in any such case?

Gov. HARDING. It would.

The CHAIRMAN. So that prior to this announcement, if a bank undertook to rediscount paper which had been placed with it as collateral for a loan of a nonmember bank, before it could rediscount that paper it would have to have the permission of the Federal Reserve Board?

Gov. HARDING. If the member bank was acting as the medium or agent for the purpose of securing such discount, or if the member bank, on account of the character of its business which involved the granting of discounts and the extension of loans to a large number of member or nonmember banks in its section of the country, desired to rediscount nonmember bank paper, the board raised no objection to it. But in all cases, even under this permission recently given, the question as to whether or not a loan is safe or desirable or should be taken rests with the directors and management of the Federal reserve bank concerned.

Senator HARRISON. Well, now, Governor, when you issued this statement as you were proceeding on your trip to the West, on June 6, 1921, did that signify that the board had changed its policy toward making loans?

Gov. HARDING. No, sir; it did not signify that the board had changed its policy. It merely signified that the board desired to call the attention of the banks of the country to the importance, in the present circumstances, of banks generally over the country pursuing a liberal policy, and that they should avoid trying to force the collection of loans at an inopportune time.

Senator HARRISON. And that the reserves were higher than any year before?

Gov. HARDING. And that the reserves were higher than they had been for several years.

Senator HARRISON. And general conditions were better?

Gov. HARDING. Yes; and general banking conditions were better.

Senator HARRISON. Well now, you say the peak was reached November 5, I believe it was, 1920, was it not?

Gov. HARDING. Yes, sir.

Senator HARRISON. Do you know from the information that has come to you whether or not the agricultural interests needed money to finance themselves more during the year 1920 than they did on June 6, 1921? Whether there was a greater demand at that time?

Gov. HARDING. I presume there was a great demand at both times, but in the fall of 1920 banks in agricultural sections were receiving payments—they may not have been as large as usual, but they were receiving some payments which resulted from the sale of agricultural products.

Senator HARRISON. Well, it was very difficult to sell cotton in the fall of 1920.

Gov. HARDING. I don't know of any great staple crop in this country that has ever been withheld entirely from the market. Even if the board had undertaken the policy of trying to withhold a staple agricultural crop entirely from the market I imagine there would have been some sales anyway.

Senator HARRISON. Well, would you say that there were as many complaints that came to your office during the year 1920, in the

summer and fall of 1920, touching loans to the agricultural sections as there were in the spring of 1921?

Gov. HARDING. Senator, I am prepared here to discuss that in a very thoroughgoing way, if I can get these things out of the way first.

Senator HARRISON. Surely.

Gov. HARDING. I am not trying to avoid it, Senator. I will discuss it in a very thoroughgoing way later.

Senator HARRISON. Very well, I will be glad if you will discuss it later. I wanted to clear that up.

Gov. HARDING. Because that cotton situation was a very perplexing situation last year, and I want to have an opportunity to explain that situation, and I want the opportunity of explaining the board's policy.

Senator HARRISON. Well, I want to be here when you go over that, because I am very much interested in it.

Gov. HARDING. And I might say that it is a matter that interested me personally very much.

Senator HARRISON. I know that.

Gov. HARDING. If there was anything on earth that I could have done personally to have helped out that cotton situation I would have cheerfully done it.

Senator HARRISON. I know that.

Gov. HARDING. I want to explain all the angles of that situation, Senator.

Senator HARRISON. I want to hear it.

Gov. HARDING. I desire now to file a statement which the board issued to the press following a conference with governors of five Federal reserve banks whose districts embrace the cotton sections. This statement was given to the press on the morning of July 20, 1921.

The CHAIRMAN. Without objection, it may go into the record.

(The Federal Reserve Board statement for the press of July 20, 1921, is here printed in full as follows:)

In view of the vital importance of the problems incident to the harvesting and marketing of the coming cotton crop, the Federal Reserve Board to-day held a conference with the governors of the Federal reserve banks of Richmond, Atlanta, St. Louis, Kansas City, and Dallas, the banks located in or brought in closest touch with the member banks in the cotton States, for the purpose of reviewing the credit situation in these States, and determining what further credit will be needed to facilitate the harvesting and orderly marketing of this crop.

At the present time the five reserve banks in question are lending to their members \$455,000,000, or more than 26 per cent of the loans of the entire system, the Richmond bank borrowing from other reserve banks \$20,000,000 and the Dallas bank borrowing \$16,000,000 for that purpose. The total loans of these five reserve banks to their member banks exceed their reserve deposits by \$190,000,000, whereas the reserve deposits of the other seven reserve banks exceed their loans to their members by \$141,000,000.

The amount now loaned by these reserve banks to their members is four and one-half times the amount borrowed at any time by all the national banks of the country prior to 1914, or before the establishment of the Federal reserve system.

The Federal Reserve Board and the governors of the Federal reserve banks announce that the Federal reserve banks, in addition to credits already extended, are able and stand ready to extend further credit for the purpose of harvesting and marketing the coming crop, in whatever amount may legitimately be required, either directly to their member banks or, under a ruling now issued by the Federal Reserve Board, indirectly to nonmember banks acting through the agency and with the indorsement of a member bank. These loans will be made by the Federal reserve banks upon

notes, drafts, and bills of exchange issued or drawn in accordance with the terms of the Federal reserve act and the regulations of the Federal Reserve Board, for the harvesting or orderly marketing of the coming cotton crop.

In order, however, that these rediscount facilities of the Federal reserve banks may be made fully effective it will be necessary that member banks in the cotton States place their loaning facilities freely at the disposal of cotton producers and dealers in their respective localities with the knowledge and assurance that the Federal Reserve Board and the Federal reserve banks recognize the urgency of rendering all proper assistance to these important interests during such abnormal times.

Mr. Meyer, managing director of the War Finance Corporation, who attended the conference, reviewed the activities of the War Finance Corporation in making loans for financing cotton for immediate and future export. Gov. Strong, of the Federal Reserve Bank of New York, and representatives of certain New York member banks were also invited to the conference to discuss the necessity or advisability of having various commercial banks through the country establish a fund for the purpose of making loans upon cotton. In view of the conclusions reached by the conference as to the ability of the Federal reserve banks effectively to take care of all of the legitimate requirements of the cotton interests, it was felt that the establishment of such a fund at this time is neither necessary nor advisable. Gov. Strong stated, however, that he had received assurances from a number of important banking institutions in New York City that if the facilities now offered by the Federal reserve banks and the War Finance Corporation should prove to be inadequate, they will cooperate in the establishment of a cotton-loan fund in whatever amount the situation might demand.

Gov. HARDING. I want to call attention to one thing in this statement [reading]:

At the present time the five reserve banks in question—

Those banks were St. Louis, Kansas City, Dallas, Atlanta, and Richmond—

are lending to their members \$455,000,000, or more than 26 per cent of the loans of the entire system, the Richmond bank borrowing from other reserve banks \$20,000,000 and the Dallas bank borrowing \$16,000,000 for that purpose. The total loans of these five reserve banks to their member banks exceed their reserve deposits by \$190,000,000, whereas the reserve deposits of the other seven reserve banks exceed their loans to their members by \$141,000,000.

Senator HARRISON. Now, can you give us the figures in that connection of what those banks had borrowed, if anything, from other reserve centers? Say, along in about September, 1920.

Gov. HARDING. I can; yes, sir. On September 16, 1920, I made an address before the Chamber of Commerce of Cleveland, Ohio, from which I will quote [reading]:

The rapid expansion in loans which is just now taking place is due, undoubtedly, to crop-moving requirements. Seven Federal reserve banks are now rediscounting paper.

And when I say "now," I refer to figures of September 9 taken from the official statement of the board, and I made this speech on September 16—

with three other Federal reserve banks, and at the close of business on September 9, 1920, the Federal Reserve Bank of New York had rediscounted with other Federal reserve banks bills receivable amounting to \$35,251,000. The Federal Reserve Bank of Richmond has rediscounted \$20,000,000; Atlanta, \$30,200,000; St. Louis, \$27,422,000; Minneapolis, \$21,293,000; Kansas City, \$18,902,000; and Dallas, \$37,618,000 making a total of rediscount transactions of \$190,685,000.

I will state that that rediscount movement between Federal reserve banks increased between the 16th of September up to the latter part of October or the 1st of November, until the maximum figures were reached, \$247,000,000, in even millions, of bills discounted with each other, and about \$20,000,000 of bankers' acceptances sold.

Senator HARRISON. When was that peak reached? November 5?
Gov. HARDING. Approximately November 1. That is, within three or four days either way of the exact date. But it was approximately November 1.

Senator HARRISON. So it has been reduced, then, \$125,000,000, practically, from November 1 to July?

Gov. HARDING. But this was September 9.

Senator HARRISON. Yes; that was September 9. But I mean from November 1.

Gov. HARDING. September 9 the total was \$190,685,000.

Senator HARRISON. And November 1?

Gov. HARDING. And about November 1 it got up to \$247,000,000 of customers' paper rediscounted, plus about \$20,000,000 of bankers' acceptances sold. Now, on September 9, of the amount of \$190,685,000 the Federal reserve bank of Boston advanced \$76,195,000, the Federal reserve bank of Philadelphia \$4,000,000, and the Federal reserve bank of Cleveland \$110,490,000.

After that the advances made to other banks by the Federal reserve bank of Cleveland alone amounted to \$140,000,000, which was more than twice as much as the Federal reserve bank of Cleveland was loaning to its own member banks.

Now, right there, if I may bring out this point, is one of the most useful features of the Federal reserve system. We have 12 reservoirs of credit, like 12 tanks. If the supply runs low in one tank or reservoir we have a pipe line where we can furnish credit to others, but we can only do it as the result of transactions had by a Federal reserve bank with its own member banks, because a Federal reserve bank can not make loans direct to individuals, firms, or corporations. The essential feature of all Federal reserve accommodations is the accommodation extended in the first instance by the local member bank to its own customers. If the local member bank does not extend the accommodation then there is no way the Federal reserve bank can aid.

Representative TEN EYCK. Well, it is your idea, then, and you think this is your duty and policy, that whenever there is a fire or need in one place to switch the flow of credit to that particular region?

Gov. HARDING. As far as it is possible to do it.

Representative TEN EYCK. As far as possible?

Gov. HARDING. Yes.

Representative TEN EYCK. Regardless of the basic line or anything like that?

Gov. HARDING. Absolutely.

Senator HARRISON. To what do you attribute this reduction of loans and rediscounts?

Gov. HARDING. I am going to discuss that in my final statement after I get through with this. Now, while I am on the subject of this Cleveland speech I would like to read this extract, and I think it represents the general policy of the Federal Reserve Board, although I did not commit the board to this proposition. I felt, perhaps, that my view might be a little more advanced, possibly, than that of one or two members of the board, although I have never had any reason to think that they disagreed with it. In fact, none of them has ever contradicted me on it. But I said [reading]:

As nonmember banks can not rediscount with Federal reserve banks, and as by far the larger part of the loans of member banks are made out of their own resources it is evident that the total of bank accommodations to agriculture and live stock interests are far greater than the amounts rediscounted at the Federal reserve banks. As a majority of these loans are seasonal in their character, it is evident also that their liquidation will do more than any other single factor toward strengthening the banking position.

Speaking for myself personally, I desire to say, however, that I am a firm believer in gradual and orderly methods of marketing our great agricultural staples. Agriculture is the most important of all industries, for upon its fruits depend the lives of those engaged in all other industries. The farmer is a great consumer of manufactured products and anything that affects his buying power is soon reflected in the business of the merchant and the manufacturer. While the individual farmer may be just as well off with small production and high prices, the mass of the population is far better off with full production and moderate prices. But farming as a business must be remunerative or production will languish. It is therefore important that the efforts of the farmer be supported and stimulated, that he be aided in preserving the full measure of his harvest, and that he be afforded an opportunity of marketing his products on terms sufficiently profitable to warrant his staying in the business of farming.

Great staple crops, the production of which extends over a period of several months, must meet the requirements of consumption for a full year, and in order to prevent possibility of shortage it is desirable that there be a reasonable surplus held over from one crop pending the marketing of the next. The gradual and orderly marketing of our great staple crops is therefore a matter of importance both to producers and consumers. The dumping upon the market within a short period of time of a large part of a crop consumption of which extends throughout the year means not only a loss to the producers, often to those who can least afford it, but involves also a great strain upon our transportation facilities and upon the banks in providing the funds necessary for large purchases in advance of actual requirements for consumption.

Dumping of farm products promotes speculation and usually results in higher prices to the ultimate consumer. Farm products, however, should not be hoarded or held back from the market by the use of credit merely in the hope of forcing prices up to an artificial level. It is estimated by some that the value of this year's staple crops will be around \$22,000,000,000.

Of course, that estimate was not borne out, but it was estimated by some at that time that the values of the 1920 staple crop would be around \$22,000,000,000. [Continuing reading:]

And it is manifestly impossible for any banking system to provide funds to withhold these staples entirely from the market. There is no occasion to discuss the questions of public policy involved, for it is clear that the volume of our great staple crops is so large and the value so enormous that any efforts to valorize them by means of bank credits would inevitably result in disaster by the operation of economic law. But I think that all reasonable assistance should be given producers to enable them to market their crops in an orderly way, provided they are willing to sell enough to meet current requirements and that consumers should concede to the farmer reasonable profits in order that future production may be adequate.

What is needed is an open market in which the law of supply and demand is given free play and in which buyer and seller may meet on equal terms. Theoretically at least it is possible, if adequate warehousing facilities are provided, for the farmer to obtain the benefit of the average price for the year without any increase in cost to the consumer and with lessened strain upon transportation lines and banks by distributing the marketing process over a reasonable period.

I made that speech not to a meeting of farmers in Georgia or Texas, but to the Chamber of Commerce of Cleveland, Ohio, and that statement represented my views on the matter, and I believe the majority, if not all the members of the board, agree with me on it.

Senator HARRISON. And at that time they were in pretty prosperous condition up there, in that reserve center.

Gov. HARDING. At that time their bank was loaning \$110,000,000 to reserve banks in the farming districts, and afterwards increased the amount to \$140,000,000.

Senator HARRISON. That is what I say. They were loaning to the other reserve centers more than the other centers.

Gov. HARDING. I pointed out that their prosperity as a manufacturing district depended on the prosperity of the farming communities, because the farmer was a great consumer of their manufactured products.

Senator CAPPER. Do you think the general policy of the Reserve Board has been in line with your talk before that chamber of commerce?

Gov. HARDING. Yes, sir; it has. Sometimes, though, Senator, it is very difficult. One can outline a general policy, but it is very difficult for the Federal Reserve Board to see that the policies which it advocates are actually carried out, because we always have this member bank situation. There are 30,000 member and nonmember banks in the country, all of them independent of each other. The board has no control over their lending operations. We can not say, "You must make this loan," or "you shall not make that loan." We can not say to them, "You have some loans here that you have no business making because they are long-time loans or capital loans. You ought to have kept your resources liquid so you could meet these seasonal requirements."

And then again we have some ultraconservative banks who take fright at almost everything that comes up, and I think that is best shown in your own district, Senator, in the Kansas City district, and one of the main reasons that was given for putting in the progressive rate in your district was that there was a peculiar situation there. That district had over 1,000 member banks. An analysis made two months ago shows that about one-third of those banks were not borrowing anything from the Federal reserve bank, and about one-third were borrowing moderately from the Federal reserve bank, that is, less than their basic line, and the other one-third were borrowing excessively from the Federal reserve bank. In other words, there was a bad distribution. It is also remarkable that not only does that proportion of about one-third apply in number, but it holds good also as to the banking resources.

Thus the situation was that before the progressive rate was put in that some banks that had a large, unused lending power were not using it, and other banks had gone in very deep with the Federal reserve bank and had increased their loans to a point where some of their own directors felt that they were too badly expanded, and the idea was that if it was made more costly for those banks which are already extended to borrow additional funds, that people who would apply to them for loans would go to some of the banks that had not made large advances, and who could get discounts from the Federal reserve bank at minimum rates, and that there would be a better distribution for the loans throughout the district.

If every bank in that district had loaned its ratable proportion to the farmers and to the industries of that district there never would have been any serious money strain in the district.

Senator HARRISON. Do you not think that that was penalizing those banks that were really trying to help the farmers and were showing a liberal spirit in lending them money, because it would curtail their loans, and it was not going to help those banks that had not loaned any money, particularly, was it, because they had had plenty of opportunity to loan?

Gov. HARDING. I was telling you the theory of the Federal reserve bank directors of Kansas City who asked the board to approve their establishing the progressive rates. I said yesterday that that progressive rate proposition was something new. We never had tried it before. We have some experience now. I also expressed the hope that it will not be necessary to resort to it any more, but that if it should be resorted to in the future, in view of the experience that we have acquired in the past, undoubtedly there will be a different method of applying it. For instance, there would be a minimum rate, there would be an intermediate rate, and there would be a maximum rate, and the spread between the minimum rate and the maximum rate would not be over 2 per cent. In other words, there might be rates of 6 per cent, 7 per cent, and 8 per cent.

Senator HARRISON. Do you not think in the illustration that you offered that you were penalizing those banks that were showing a liberal disposition to lend?

Gov. HARDING. Well, when you look at the average figures that were shown it does not appear to have penalized them. But in order to correct any inequality the Federal Reserve Bank of Kansas City has recently voted to refund to the member banks of its district all excess interest charged by virtue of the progressive rate plan where the maximum rate of interest exceeded 12 per cent.

Senator HARRISON. Well, now, when the progressive rate was applied to the Kansas City district, did it show then that those banks that had not made loans before did make some loans?

Gov. HARDING. They did.

The CHAIRMAN. Let me read an extract, if I may, Senator, from the report of the governor of the Federal reserve bank of Kansas City which bears directly upon that question. I read from page 11 of that report:

How far the progressive discount rate plan has succeeded in bringing about a better distribution of credit among the members is apparent when the status existing on April 19 is compared with any subsequent date. On April 19, 1920, out of a total membership of 1,035, 351 members had borrowed not only the entire lending power of this bank but an additional \$10,000,000 represented by rediscount with other Federal reserve banks. On December 31, 1920, 352 of the 684 members which were not borrowing on April 19 had become borrowers, more than half of those banks never before having had discount relations with the Federal reserve bank. Even under the higher discount rates, as applied through the progressive rate plan, the demand for loans from members was so strong that this bank was forced to depend upon other Federal reserve banks for funds continually throughout the year.

In other words, after the application of the progressive plan 352 banks, which had not previously borrowed from the bank, borrowed.

Gov. HARDING. It effected a better distribution.

Representative SUMNERS. Well now, did that result from the fact that the progressive interest rates raised the general interest rate in the community and made it possible for these banks that had not theretofore been patronizing the Federal reserve bank to patronize it?

Gov. HARDING. There is nothing to show that the interest rate was raised. It merely meant that the borrower went to the bank that was best able to furnish him the accommodation. Here is the psychology of it, Congressman. Suppose that you had been dealing with a bank, and you know how it is when you become accustomed to dealing with a bank and know the officers, you deal there whenever you have need to, you always go to that bank. And suppose you

wanted to borrow, say, \$5,000. Well, that bank would say, "We are very heavily extended, and by virtue of the progressive rate, if we borrow any new money we might have to pay 12 per cent for it or 13 per cent, or something like that." They would say to you, "Mr. Sumners, you have done business with us for a long time, and we would like to accommodate you, but we will be perfectly frank with you. Here is our condition. Here are our deposits last night. Here are our loans. The only way we can get any additional funds for loaning purposes is to make some more rediscounts with the Federal reserve bank. Now, you don't want to pay a high rate for this money. We have been charging you all the time, say, 8 per cent, but if we get this money from the Federal reserve bank it is going to cost us 12 per cent. Now, do you want us to pay that rate? Why don't you go to the bank across the street? We happen to know that those fellows have been sitting pretty tight and they have not been borrowing anything from the Federal reserve bank. Your paper is perfectly good. We don't want to break off relations with you, of course. We know that you will come back to us when things ease up, but won't you do us the favor of going over across the street and offer this paper to the other bank and see if you can not induce them to take it?"

This plan worked in a good many cases, and it resulted in a better distribution of loans.

Senator HARRISON. But it did not cause about one-third of those banks to adopt that policy.

Gov. HARDING. What is that?

Senator HARRISON. About one-third of those banks did not adopt that policy.

Gov. HARDING. When the progressive rate was put in?

Senator HARRISON. Yes; they never did adopt it.

Gov. HARDING. But the chairman has just read that 352 banks which had not before been borrowers became borrowers afterwards.

Senator HARRISON. But it did not influence the balance, who numbered about 300, as I understood it.

Gov. HARDING. Well, there are something over a thousand member banks in that district.

Senator HARRISON. May I ask you if you have any figures on the Atlanta district? I am interested in the Atlanta district. How many were not loaning at that time, and I would like to know whether or not it had a like influence upon those?

Gov. HARDING. I do not have those figures with me, Senator, but my recollection is that it did. That progressive rate was applied in so many different directions, and there were so many exceptions to it that it never was tried out in a systematic way except in the Kansas City district.

I want to read this telegram that I received from the governor of the Federal reserve bank of Dallas on yesterday. He says:

Regarding the progressive rate as applied in the Dallas district, our basic line was so high that after adding additional charge only on five banks did entire interest charge in any one month bring the annual rate charged for that month above 7 per cent. The highest of these was the First National Bank of Hearne, which on average borrowing of \$406,000 for September, 1920, was charged superinterest amounting to \$835.70. and this amount added to the regular discount rate of 6 per cent made the average annual interest rate charged that bank for that month amount to 8.4 per cent.

But that bank could legally charge its customers 10 per cent, and I presume did charge 10 per cent.

Representative TEN EYCK. Going back to the Kansas City bank, in our previous discussion, it would be interesting to know what class of bank the one-third consisted of who used their rediscount up to the limit, whether they were banks that were so-called country banks but really were city banks, or whether they were really farm agricultural banks that had farm paper.

Gov. HARDING. Well, I have looked into that, and I find there is no classification. In the Kansas City district, for instance, two very large banks in Kansas City were borrowing very heavily, and on the contrary there were two other large banks in that city that are not borrowing anything at all. And we find the same situation all over the district. We might find the same situation in Wichita and in Topeka. One bank in Topeka, as you know, Senator Capper, was borrowing very heavily, and there was another bank there that was not.

Representative TEN EYCK. That does not quite answer the question. What I want to know is: Were those banks who were borrowing so heavily rediscounting actual farm paper, or were they discounting other paper of industries and on stocks and bonds, and so on? Do you see what I mean?

Gov. HARDING. Yes.

Representative TEN EYCK. I want to get the class of paper that that one-third was discounting.

Gov. HARDING. I have some figures regarding one of the banks pretty clearly fixed in my head, and I would be glad to give the name of the bank, but that is not desirable in open session.

Representative TEN EYCK. That is not necessary.

Gov. HARDING. One large bank in Kansas City was making a specialty of country bank accounts, and it had a great many member country banks and nonmember country banks carrying accounts on its books, and this bank was loaning very heavily to country banks all over that district, and also in other districts. It was doing a very large business. Its lending operations were by no means confined to its own district. As you know, Kansas City is on the extreme eastern edge of the Kansas City district, and this bank had accounts radiating in hundreds of miles in every direction. It had on its books borrowing accounts from member banks in three or four other Federal districts, was doing a big business, and a great proportion of its loans were to country banks, and I presume that they needed the money for seasonal operations in moving or carrying crops.

The result of this progressive rate was that it did not reduce the borrowings of this particular large member bank in Kansas City. They increased gradually for some time after the progressive rate was put up, but the result was this. What happened is what I mentioned to Congressman Sumners a minute ago. They told some of their customers, "We will accommodate you, of course, but here is the situation. Now you go to this other bank over here and try to get them to give it to you. They can get money cheaper than we can." And the accommodation was not denied at all, but there was a better distribution, because they went to the other banks and got

the funds. The bank not having heavy loans could get the credit at the Federal reserve bank up to a certain point cheaper than this other bank could.

Representative TEN Eyck. Yes; but that does not quite answer the question. What I want to know is with respect to these banks that were rediscounting heavily before the progressive system was put in vogue, what paper were they using? Was it farm paper, and were they loaning on farm products?

Gov. HARDING. Why, Congressman, it is impossible to give you a definite answer as to that. Now, in regard to all these figures we have regarding agricultural loans, I don't think the information that we can furnish you here is of any particular value, from the standpoint of absolute figures. We do not consider relativity enough in this thing. It seems to me that this whole thing is a relative proposition. The figures I have presented and that I purpose putting in before I close are correct as far as they go, but their value to this commission is for purposes of comparison. In other words, the question is on the same basis of computation what was the amount of agricultural credit extended in 1919, and what was the amount extended in 1920 by months? If there was a rising scale that shows that there was a liberal policy pursued toward agriculture in 1920, or the reverse if the figures show the other way.

The CHAIRMAN. Would not the application of the progressive rate tend to cause a liquidation in the banks that were extended, and on the other hand stimulate borrowings of the banks that were not extended?

Gov. HARDING. It is claimed by the directors of the Kansas City bank that if they had not put in the progressive rate that the lendings to the agricultural sections would really have been much smaller than they were by virtue of the operation of the progressive rate. I will tell you the reason they assign. The officers and directors of a number of the banks which were so heavily extended had reached the conclusion that they had gone far enough, that they were not going to loan any more money to anybody. If the progressive rate had not been applied to a country bank, and a customer had come in for further accommodations, the probable result would have been that the loan would have been declined, and then the customer would be shopping around among other banks, and he would come in and say, "I want to get a loan with you." The other bank would say, "Why, we don't care to make the loan. You have never done any business here. Why should we accommodate you? You have always done your banking business with the bank across the street." "Well," he would say, "They don't want to make me any more loans." "Well, if they don't want to make you any more loans we don't."

In other words, in banking psychology there was not a good excuse for the switching of the loan. But with the application of the progressive rate this customer of bank A could go over to bank B and he would say, "Mr. So-and-so, I know I am not a customer of this bank, but I want you to help me out now in the public interest. I have a large clientele to take care of down in my section. I went over to my bank this morning and told them that I wanted twenty-five or fifty thousand dollars of additional money. They did not turn me down. They said, 'Why, of course you are a good customer

of ours. We will take care of you. But here is our situation. Here is our loan account, and here are our deposits. We can not lend any more money unless we borrow more from the Federal reserve bank, and if we borrow any more money from the Federal reserve bank it is going to cost so and so. Now we don't want to stand that loss, and we don't want to charge you that rate of interest. Won't you go over now to Mr. So-and-so across the street and tell him the situation and ask him if he won't come across and help out. He knows you are good and he is satisfied with the collateral. There is no question about the collateral. We are satisfied with the goodness of the loan."

Now there is an appeal about the thing, don't you see, and the influence of the Federal reserve bank was back of it, and in a great many cases it resulted in those banks which had not been doing their part in carrying the situation along loosening up and taking these loans. "Why, yes," they would say, "I will help you out under the circumstances."

I used to be a banker. I don't want to give away any professional secrets, but sometimes bankers are just a little bit suspicious of each other. It is an old time-honored banking practice sometimes to unload on each other. Every banker has an aversion to his brother banker unloading something on his bank that he does not want. And when a customer of one bank goes to another bank and tries to open an account the first question asked is, "What do you want to come to us for?" The bank, in other words, thinks that some little trick is being played on it, don't you see. But under conditions described there is a perfectly valid, logical reason why such a thing should be done.

Senator HARRISON. But, Governor, there is pretty strong competition between banks in the same situation.

Gov. HARDING. There is never strong competition between banks for loans in tight times.

Senator HARRISON. But loans carry with them deposits sometimes, and sometimes there is competition for customers.

Gov. HARDING. Sometimes a banker who is very farsighted and who has plenty of nerve is willing to take that chance. I was in a bank in 1893, and I was president of a bank in 1907, and I never have seen a time yet in a time of a money squeeze where any bank was really out looking around for new loans, and where a customer of one bank would go to another bank and say, "You solicited my account two or three years ago, but I was not ready to give it to you then, but I will give it to you now if you want it," why, in nine times out of ten the banker would say, "I am much obliged to you, but I don't want it now."

Senator HARRISON. Now, Governor, you had the reputation down in Alabama of being one of the best bankers down there, and you went after customers and you did not let them go when you got them.

Gov. HARDING. Senator, you flatter me very much.

Senator HARRISON. That is just preliminary to what I am going to ask you. Is it not natural with these banks that have shown such a liberal disposition toward taking care of their customers and had been penalized because they could not loan them any more, due to this progressive rate, and who have lost their customers by reason

of their going over to another bank and borrowing some money, that a good many of those customers stayed with that other bank after that and became customers of the new bank, and therefore the policy inured to the benefit of that bank that before the progressive rate was applied was not getting the benefit of that particular customer?

Gov. HARDING. Senator, I will state this: I do not claim to be any better banker than others in the South, but I guess I did have the reputation of having maybe more nerve than some other bankers had. Now, some people praised me for that and others would criticize me. Some would say, "Why, Harding takes chances; he is too liberal".

But the policy that I pursued was this, and the theory I went upon was this, that unless the community and section in which my bank was located was built up and was prosperous my own bank was not going to grow and prosper. I told my directors, "If you want this bank run on a basis of loaning money on \$20 gold pieces and not making any losses at all, if that is your idea of banking, you had better get somebody else. That is not my idea of banking. It can be done, of course, that way." Now, I say that if you want to develop your business you have got to stand the gaff, you have got to stand ready to take a reasonable percentage of loss. I would say to the directors: "Under one policy we can go along and make from a hundred to a hundred and fifty thousand dollars a year and not lose any money at all. Under a different policy we can make \$500,000 a year and increase our business constantly so the profits will be growing progressively from year to year, but in making this \$500,000 a year we might lose \$100,000, but the net result would be that we would have \$400,000 as against \$100,000 on the ultra-conservative plan."

Senator HARRISON. I like your plan.

Gov. HARDING. But you complimented me by saying that I was regarded as an unusually good banker in that section.

Senator HARRISON. I am afraid that if you had been in Birmingham running your bank on that theory when this progressive rate had been applied you would have lost some of your customers, because they would have gone over to some other banks in Birmingham and you would never have been able to get them back, and you would have been penalized because of your liberal disposition.

Gov. HARDING. I don't remember losing many customers unless I wanted to lose them. I lost some that I wanted to lose.

Senator LENROOT. Gov. Harding, I want to ask you a question, and if you have covered the point contained in this question I will withdraw it. To what extent is the character of the paper offered by member banks for rediscount indicative of the purpose for which the credit is used? Now, if you have covered that point I will withdraw the question.

Gov. HARDING. Very often, Senator, the paper bears very strong earmarks and you can tell very often what the purpose is. And I think it is good banking policy always to know what the purpose of a loan is. I always did inquire in as delicate a way as I could. I don't remember ever lending a man any substantial amount of money without asking him what he wanted to do with it. Sometimes he would tell me it was none of my business. "Maybe not," I would say, "but it is a little curiosity on my part. I don't have to make you the loan, and you perhaps will have to satisfy my curiosity before I make the loan."

Senator LENROOT. Does the Federal reserve bank do that on rediscount?

Gov. HARDING. In a great many cases it does, but it depends upon the location of the Federal reserve bank very largely. For instance, if the Federal reserve bank is located in a large city where all transactions go through the clearing house, and where the clearing-house settlements are made through the Federal reserve bank, and where a bank finds that it has a debit of forty or fifty million dollars and it will be deficient in its reserve unless it rediscounts with the Federal reserve bank, it sends in eligible paper to be put to its credit for the purpose of restoring its reserve. Now, very often in the large cities that eligible paper is the member bank's own short-time note, running not over 15 days, secured by Government obligations. There isn't anything in such a transaction that will enable the Federal reserve bank to form any idea of just what transactions the member bank is having. The member bank is rediscounting on short notice, offering paper of unquestioned eligibility and of unquestioned goodness. There is nothing to base an inquiry on, and the Federal reserve bank has to put the note through instanter or else the member bank which has made the application is deficient in its reserve and subject to penalties. It would be a very serious thing for a Federal reserve bank to turn down a member bank on that basis.

But on out-of-town applications and applications on commercial paper applicants fill out in all cases a blank and they state as to whether or not the paper is eligible; in other words, whether or not the proceeds of that particular paper have been used or are to be used for agricultural, industrial, or commercial purposes.

The Federal reserve banks in places like New York, Chicago, or Boston, in dealing with their city banks have transactions very largely of the character which I have just described to you. But if they have a loan application coming in from some country bank 50 or 100 miles or 150 miles away, they have no opportunity of going out and asking the country bank just what it is going to do with this particular money, but they look at the character of the paper. Of the paper offered to banks, if it is paper signed by an individual it bears certain earmarks. When the application comes in it will state, "We offer you a note of Mr. Jones here for a thousand dollars. Mr. Jones is a farmer who lives at so-and-so, and he owns so many acres of land, or he is a tenant farmer, as the case may be, and here is what the security is. We have a chattel mortgage on his agricultural implements, or on his live stock or a mortgage on his land." And they know from that that the paper is made for agricultural purposes, for instance.

Then again, it might be paper made by a manufacturing concern. It might be a note given by a customer of the manufacturing concern and sent in with the manufacturer's indorsement through a member bank. A reserve bank can usually see then that that is a note made for industrial purposes.

With the information that the Federal reserve banks get accompanying each application for a loan it is comparatively easy, in most cases, for them to determine the character of the loan that is being applied for.

But when it comes to dealing with the larger banks in the larger cities, and where a member bank rediscounting quickly in order to

meet a clearing-house adverse balance and in order to keep its reserve intact and offers its own note secured by Government bonds, there is no way of telling what transactions it has been engaged in.

The CHAIRMAN. Up to the time when the rate on Government paper was raised a very large percentage of the rediscounts of the Federal reserve bank was made on that character of paper; is that not true?

Gov. HARDING. Do you mean on paper secured by Government obligations?

The CHAIRMAN. Yes.

Gov. HARDING. A very large amount.

The CHAIRMAN. Running as high as 10 or 15 per cent?

Gov. HARDING. Yes, and more. Very often in the case of country banks they would offer that class of paper because up to quite recently there has always been a differential in favor of paper secured by Government obligations. In other words, when a man had Liberty bonds or Victory notes or Treasury certificates and used them as security to his note with the member bank, then that member bank could rediscount that paper with the Federal reserve bank at a lower rate than it could the note of a merchant, or the note of a farmer, or the note of a manufacturer, and banks always like, when they borrow money, to borrow as cheaply as possible.

Senator LENROOT. The purpose of my question was this: Do I understand, then, that to get accurate information as to the expansion or extension of agricultural credits we must go to the member banks? It can not be found otherwise?

Gov. HARDING. Yes; an examination of a member bank made by a national bank examiner or a State bank examiner, if that examination is carefully made, will reveal more accurately the character of the bank's loans than any other system that you can devise.

Representative MILLS. Governor, you gave in your testimony before the Committee on Banking and Currency, I think, under date of June 1 or June 8, figures with reference to the amount of agricultural paper discounted, the total amount in 1920, as I remember it, amounting to \$1,900,000,000, and compared it with the amount discounted in 1919. Do you remember that when Mr. Williams was on the stand he questioned the accuracy of those figures?

Gov. HARDING. I don't think, Congressman, that for the purposes of this commission the absolute accuracy of those figures cuts any figure whatever. The only thing that concerns the commission is the basis upon which those figures are made up. For instance, if the figures for 1919 were compiled on one basis and the figures for 1920 were compiled on an entirely different basis, it does not make any difference if those figures are accurate to the fraction of a cent; they would not be worth a cent; they would be absolutely worthless. But what we should seek to establish with comparative figures is this: A uniform basis of comparison. Those figures were not given as exact figures. They were given as approximate figures. It is impossible to give you the exact figures.

But the value of those figures lies in this: It illustrates a trend. Those figures are made up on an absolutely uniform basis for the two years. Certain factors were considered. On the basis of certain

factors the figures for 1919 showed \$729,000,000, I believe, and with those very same factors, and no others considered, for the year 1920, an absolutely uniform basis of comparison, the result for 1920 was \$1,980,000,000.

Representative MILLS. Which was your estimate of agricultural paper discounted by member banks, was it?

Gov. HARDING. By member banks alone; yes.

Representative MILLS. During 1920?

Gov. HARDING. No; discounted by Federal reserve banks for member banks.

Representative MILLS. Discounted by Federal reserve banks for member banks during the course of the year 1920.

Gov. HARDING. And I do not submit those figures as having any value to you as absolute figures at all, because I state that they are not absolutely exact, and can not be.

Representative MILLS. But they are your best estimate, are they?

Gov. HARDING. They are our best estimate, and they are offered to this commission as being valuable only to show the trend, because those figures were made up on absolutely the same basis of computation. We did not change the basis from one year to the other.

Representative MILLS. Now, one other question. I do not know whether you have covered in your testimony anywhere the period of time during which the actual deflation took place. I am now speaking of the deflation which has taken place during the course of the year, from July, 1920, to July, 1921. Have you covered that at any time?

Gov. HARDING. I don't think so; and I will say that it is a very difficult matter to say just when the deflation began. I don't think it began at any uniform time. There are over 100,000,000 people in this country. There are over 30,000 banks in this country. Now, it may be that one man would become prudent and economical at an earlier date than others did. It may be that one particular bank would see dangers ahead and would begin to take in its sails sooner than another bank did; so it is impossible to say just when the spirit against excessive buying became prevalent, first became manifest. But our figures show when the net results became manifest.

Representative MILLS. Now, let me put it in a little different form, then. We know, for instance, that the wholesale prices reached their peak in May, I think it was, 1920.

Gov. HARDING. Yes, sir.

Representative MILLS. And that thereafter there was a sharp decline.

Gov. HARDING. Yes.

Representative MILLS. When did we begin to get that decline, so far as the banks are concerned, in terms of loans and discounts?

Gov. HARDING. As far as the Federal reserve banks are concerned, when you consider their total invested assets, their rediscounts for member banks plus their holdings of bankers' acceptances, plus their holdings of Government securities, in other words, their loans and all income earning investments, the peak was reached on October 15, 1920, and the peak for rediscounts alone was reached on Nov. 5 1920.

Representative TEN EYCK. What year?

Gov. HARDING. 1920. When we consider only the loans that Federal reserve banks had made through member banks, eliminating their bankers' acceptances and bonds, the peak was reached on November the 5th.

Representative MILLS. Now, how about notes?

Gov. HARDING. The peak of Federal reserve note issues was reached on December the 24th, 1920. And I will say there, that in 1918 the peak was reached either on December 24 or on December 25; and it will happen in any year that the peak of currency in circulation usually is reached about Christmas. There is a reason for this, which I can explain if you wish, for it is very simple.

Representative MILLS. So that if we compare the figures for July, 1920, and July, 1921, and we find that there has been a material reduction in the earning assets of the Federal reserve banks, and likewise a material diminution about outstanding notes, the reduction in both of those items has taken place during the first six months of 1921 and not during the last six months in 1920, is that correct?

Gov. HARDING. Except to a very limited degree. The chart will show that there was not very much decline from November 5 until December 31 in loans, and as far as the Federal reserve-note issues are concerned, there were only seven days in which to get any decline, so to all intents and purposes it is correct to say that the decline has been in 1921.

Representative MILLS. There appears to prevail in some quarters, Gov. Harding, the impression that the break in prices which took place during midsummer of 1920 was due to a restriction of credit and not to other economic causes, and that that restriction of credit was largely engineered by the Federal Reserve Board. You are familiar, of course, with that charge?

Gov. HARDING. Well, there is nothing in that charge. I have already filed a reply of the Federal Reserve Board, made under date of May 25, 1920, to the Senate resolution asking what the board proposed to do to check inflation and what it proposed to do to provide funds for moving the crops of 1920.

What the board was trying to do in 1920 was to prevent a general banking collapse. The board had reached the conclusion, based on a world-wide survey of markets—and we have a very efficient organization that studies this subject all the time—and that view was held by economists and far-sighted bankers everywhere—that a reaction was due and that there was going to be a fall in prices. Now, while the board does not believe that the Federal reserve banks or any banks should be operated with a view of depressing prices or of enhancing prices, it does believe that if we are going to conduct a banking business we must pay some regard to the ordinary dictates of business prudence and good judgment; and if there are loans which are not sufficiently secured, or if there are loans which can be collected but which have been running along in a laissez faire fashion, they might as well be collected and banks put in a position where they can meet emergency needs or seasonal requirements which are sure to develop. That is all the board tried to do in 1920.

Senator HARRISON. At what time in 1920 did you reach that conclusion?

Gov. HARDING. We reached that conclusion very easily in 1920. We reached that conclusion in January, 1920, and it became a very definite conclusion in May, 1920.

Senator HARRISON. Then, your policy was along the idea of trying to prevent a further inflation?

Gov. HARDING. Our policy ought always to be based upon the idea of conserving the assets of the banks and preventing bank failures.

Senator HARRISON. But you were more active at that time, during 1920, than you were before that, were you not?

Gov. HARDING. I can read you some correspondence a little later on that, I think, will be illuminating to you along that line.

Representative TEN Eyck. Along that line, about when did deflation start in—

Gov. HARDING. Just a minute. It has been conceded, I think, by everybody that one of the most significant signs that a reaction was coming in prices was the break in the silk market. The trouble in Japan has been referred to several times by writers, and it has already been brought to the attention of this commission. Then, you know, about the middle of May, 1920, the wool market went all to pieces, and that was another very significant sign.

We also know that in the early part of 1920 there were evidences of popular unrest, that people were saying, "How long is this thing going to keep up? Prices are too high. They have got to come down." Senator Harrison will remember that in the Southern States there was a movement inaugurated to have everybody wear overalls as a protest against the high price of clothing. I think that movement originated in Tampa, Fla., and I think Birmingham, Ala., claims credit for coming in second. I believe one or two Members of Congress appeared here in overalls.

Senator McNARY. That movement, Governor, became universal; it reached the Pacific coast.

Gov. HARDING. It did. Now, that did not amount to much in itself, but it did indicate a popular sentiment.

That very Senate resolution which I read here a few minutes ago, directing the Federal Reserve Board to inform the Senate what steps it was taking or proposed to take to check further expansion and consequent high prices, indicates that there must have been a popular sentiment all over the country that it was time to call a halt on the tendency to constant expansion of prices and wages. I can not see why the Senate should have passed the resolution it did pass if there was not a popular sentiment behind it.

Senator LENROOT. But this policy of the board to check further expansion did have a substantial effect in that direction?

Gov. HARDING. Well, it was not immediately noticeable in the statements of the Federal reserve banks, for our loans advanced until the 5th of November. Our rediscounts for member banks advanced until they reached the peak. The chart shows the fluctuations. Those fluctuations did not mean anything as far as the Federal reserve banks are concerned, because they represent Government transactions. Whenever the Government collects quarterly income taxes or puts out a new issue of Treasury certificates, that means temporary bank deposits. But if you reduce the figures to an average

you will see that my statement that there was a constant, steady, and continuous advance up to the 5th of November is correct.

Senator LENROOT. Well, what do you think would have happened if the board had not adopted this policy?

Gov. HARDING. You know what happened in Cuba, Senator, where the Cuban banks continued to expand their loans and accommodate people. They all collapsed. You know what happened to the Philippines National Bank.

Senator LENROOT. That is just what I am getting at. Then the policy of the Federal Reserve Board did have, in your judgment, a very substantial effect in preventing further expansion and a further rise in prices? Is that true?

Gov. HARDING. I do not know; these things come in cycles, Senator.

Senator LENROOT. But you just made the statement. I asked you, Governor, what in your judgment would have happened but for the adoption of this policy, and you referred me to Cuba.

Gov. HARDING. Well, I think if the board had not adopted this policy prices possibly would have continued to advance for a month or two longer, and when the collapse did come the consequences would have been even more serious. We would have had an aggravation of the present conditions in agriculture and industry plus general banking insolvency all over the country.

Senator LENROOT. Granted that is true, if the board had adopted that policy a year before it did, would there not have been less disturbance than we now have?

Gov. HARDING. That is quite probable, Senator.

Senator LENROOT. Now, why was it not done?

Gov. HARDING. For reasons relating to Government finance.

Representative FUNK. What was that policy? You speak of "this policy" and "that policy." You adopted a policy; what was it, in general terms?

Gov. HARDING. You know, during the war the board adopted the policy, in order to assist the Government in meeting its needs, of fixing very low discount rates, which were not warranted if those rates were related to market rates, but which seemed to be necessary in order to float the issues of Government bonds and Treasury certificates, particularly at the rates at which they were put out. Now, in 1919 it was the policy of the Treasury Department to offer certificates of indebtedness to the people at 4½ per cent interest. They would be subscribed for by banks, and distributed. The banks were very large purchasers of them. If the Federal Reserve Board had put in a 6 per cent rate I do not think the Treasury could have sold those certificates. But I am sure you do not wish me to discuss Treasury policies. I have nothing to do with the Treasury, and I have no responsibility for Treasury policies.

Representative MILLS. I would like to ask you a question along those lines.

Gov. HARDING. Before you begin I would like to say this, that these great movements seem to come in cycles. We had a tremendous impulse to go forward. You take all the charts that have been made up for the last 100 years, and you will find that there are certain periods extending over months where there is a constant tendency toward rising prices, and then there is a halt and a downward trend. The banks have to go along with the tide. I do not believe that banks

can create conditions to the extent that people seem to think they can; I think the banks have to adjust themselves to conditions. Of course they can tack and go along in that way, but they are always obliged to adjust themselves more or less to existing conditions.

There are a great many elements that enter into any set of conditions. The basis of it all is the individual all over the world, and aggregations of individuals. For example, a boom period is on. If people felt that they had an opportunity of making a large amount of money in a short time; if by investing all the money they had and by borrowing ten or fifteen thousand dollars more they could make a profit of fifteen or twenty thousand dollars in the course of a week or two, it would seem impossible to regulate borrowings by Federal reserve bank discount rates, because with any rate within reason they would go to the bank and borrow. What does a man care about the rate of interest for a few days if he thinks he is going to make a handsome profit by reason of a rise in speculative values?

So it is very difficult instantaneously to stop a "bull" movement, just as it is equally difficult sometimes to stop a decline when things are running the other way.

But I admit, Senator Lenroot—I want to be perfectly frank with you, because you have certainly been very fair to me in your questions—I want to admit that if it had been possible for the Federal Reserve Board to advance its rates before it did, in my opinion—and of course it is only a matter of opinion, because others who are just as well informed as I am may hold the contrary view—in my opinion this runaway movement could possibly have been checked to a certain extent.

Senator LENROOT. Just one more question. However expansion may be stopped, whether by action such as you have taken or otherwise, has it not always been true that when the peak has been reached the expansion stops and there is an inevitable fall of prices? There is no level at the top?

Gov. HARDING. I think that is true; yes, sir.

Representative MILLS. Now, Governor, I would like to ask you a question, and I know it is difficult to give an absolute answer to a general question of this kind; but, in your judgment, would not the drop in prices have taken place irrespective of the action of the Federal Reserve Board?

Gov. HARDING. Unquestionably.

Representative MILLS. Now, the only possible effect which the action of the Federal Reserve Board could have had in putting on the brakes was to protect the banks when the crash came, so that they could not have been caught?

Gov. HARDING. That was it.

Representative MILLS. And to assume that prices would have continued at their high level simply through the action of the Federal Reserve Board in maintaining the low discount rate is, from your standpoint, a fundamentally erroneous economic conception?

Gov. HARDING. Yes, sir.

Right here, before I forget it, I would like to put in the record a letter that I wrote some time ago to Senator McLean, with the approval of the Federal Reserve Board. I do not know whether it was a unanimous approval, but anyhow it was with the approval of the board as represented by a majority of its members.

Representative MILLS. May I follow up this line of thought before you put that letter in?

Gov. HARDING. Yes, sir.

Representative MILLS. You are familiar in a general way with economic conditions throughout the world—in a general way?

Gov. HARDING. I think possibly, in a general way; yes.

Representative MILLS. So far as the trend of price movements is concerned?

Gov. HARDING. Yes; if I am not, I ought to be.

Representative MILLS. Have you followed the trend of price movements, generally speaking, throughout the world during the year 1920 and the year 1921?

Gov. HARDING. Yes, sir.

Representative MILLS. Now, is it not a fact that sometimes two or three months ahead of our collapse and sometimes two or three months later, but generally speaking throughout the civilized world there has been a collapse of wholesale prices during the year 1920?

Gov. HARDING. Yes; except possibly in countries which are notoriously on an irredeemable paper basis—

Representative MILLS. Notably Germany.

Gov. HARDING. And where their currency is at a very tremendous discount as compared with its normal value.

Representative MILLS. Or a threat of inflation through the printing press?

Gov. HARDING. Yes.

Representative MILLS. And wholesale prices the world over have dropped during the year 1920 from the maximum which they reached in 1920?

Gov. HARDING. Yes; that is the information which the board has

Representative MILLS. Let me complete this line of thought. The action of the Federal Reserve Board could not conceivably have affected wholesale prices in France or England?

Gov. HARDING. No, sir.

Representative MILLS. But the collapse of the world-wide inflation movement in prices would have affected prices throughout the world?

Gov. HARDING. Yes, sir.

Representative MILLS. In other words, much more powerful influences were at work to bring the period of speculation and rise in prices to an end than any action of your board?

Gov. HARDING. Certainly. I think, Congressman, if we had attempted in 1920 to stem that movement it would have been like butting our heads against a stone wall, and the result to the man who was doing the butting would have been disastrous.

Representative TEN EYCK. Is it not a fact that really some of the deflation started as early as 1919?

Gov. HARDING. Yes.

Representative TEN EYCK. Reading in the Wall Street Journal of August 3, 1921, under the head of "Brokers' loans lowest in about eight years," they give a table, and they say that on July 31, 1919, the loans to brokers were \$1,750,000,000, and show a decline every month right straight through the year up to the present time, August 2, 1921, of \$500,000,000.

Now, I believe that these loans are rather a barometer, and if you watch them very closely you will see what is going to happen. It

looks to me, with a decrease from \$1,750,000 on July 31, 1919, in brokers' loans to \$500,000,000 on August 2, 1921, that it is a deflation of a considerable amount.

Gov. HARDING. Congressman, a great many people hold the view, and I think there is something in it, that these great changes are anticipated, either consciously or unconsciously, sometimes by movements in stock exchanges. I am not here as an advocate of stock exchanges or their methods or anything of that sort. I do not want to go into the details very closely, because the governor of the Federal reserve bank of New York, I understand, is going to appear here before you after I finish, and he has a very much better knowledge than I have of these details. But I recall that there was a very severe stock market break in New York on November 12 or 13, 1919; I recall also that before the panic of 1907, which did not actually eventuate until about the 28th of October, there was in the month of March of that year a very serious stock market break.

Those things when they are analyzed seem to mean something. The same thing happened in 1893, when certain failures occurred in March and April and the panic did not begin until midsummer, along in August. Far-seeing people seem to construe those movements in the stock exchanges as having a deeper significance than appears on the surface, and they prepare accordingly. It is indicative of a change that is coming, just as a barometer will indicate a change in atmospheric pressure.

Representative TEN Eyck. In concluding, this article says, "It has been proven in the face of low money rates that the foregoing happened." In other words, what they try to convey by this is that the rates do not necessarily cover the speculation and the loans to the brokers.

Representative SUMNERS. Governor, you have spoken of the policy inaugurated around the beginning of 1920 that tended to develop more conservative practices and possibly to prevent a continuation of inflation. Briefly, what was that policy, and through what agencies, instrumentalities, or communications did you exercise or express that policy to the several Federal reserve banks of the country?

Senator LENROOT. And what was it?

Gov. HARDING. The only public statement by the board regarding that policy was its reply to the Senate resolution of May 17, 1920, and a statement which it gave to the press on the morning of the 19th of May, 1920, which followed a conference with members of the Federal advisory council here in Washington on May 18, 1920. I will put that statement in the record.

(The statement referred to is here printed in full, as follows:)

EXHIBIT E.

STATEMENT BY GOV. W. P. G. HARDING.

Figures compiled by the board's statistical division indicate that since June 30, 1914, there has been an expansion of banking credit in the United States, properly attributable to the war, of about \$11,000,000,000. Since that date there has been an increase in money in actual circulation of about \$1,900,000,000. When it is considered that our Government has during the past three years floated \$26,000,000,000 of securities to meet its war requirements and its advances to governments associated with it in the war, the credit expansion which has taken place is neither excessive nor alarming when viewed from the standpoint of war necessity.

The continued expansion, however, which has occurred since the flotation of the Victory loan last May in the face of a decreased production of essentials is one of the disquieting features of the present situation. The expansion of national bank credits was 16 per cent, or at the rate of 10½ per cent a year, during the 19 months of the war. From April 1, 1919, to April 1, 1920, the increase in bank loans was approximately 25 per cent, and during the same period the rise in commodity prices was about 26 per cent. Assuming an index number of 100 for the year 1918 for each of the following—live stock, grain, lumber, coal petroleum, pig iron, steel ingots, copper, and cotton and wool actually consumed—the average index number for the same articles in 1919 is 89.07. While neither of these indices can be accepted as definite evidence of the trend of production in this country, they do indicate a falling off of at least 10 per cent in the actual output or marketing of goods in 10 important lines. While production figures for the first quarter of the present year in some leading lines, such as soft coal, steel, cotton, and wool, are indicative of grater industrial effort, the difficulties in the transportation field which became acute during April are bound to affect both the production and shipment figures for the last two months.

It is this tendency of production to decline, particularly in some essential lines, which constitutes a very unsatisfactory element in the present outlook. It is evident that the country can not continue to advance prices and wages, to curtail production, to expand credits, and to attempt to enrich itself by nonproductive operations and transactions without fostering discontent and radicalism, and that such a course, if persisted in, will eventually bring on a real crisis.

There is a world-wide lack of capital, and with calls upon the investment market which can not be met there is an unprecedented demand for bank credits. The fact must be recognized that however desirable on general principles continued expansion of trade and industry may be, such developments must accommodate themselves to the actual supply of capital and credit available.

Official bank rates now in force in the leading countries are higher than at any time during the present century except during the war panic week at the beginning of August, 1914. Only within the last few weeks the official rate in Italy has been raised from 5 to 5½, the Bank of France rate from 5½ to 6, and the Bank of England rate from 6 to 7 per cent.

Every effort should be made to stimulate necessary production, especially of food products, and to avoid waste. Planting operations in many sections have been delayed because of adverse weather conditions, and should there be an inadequate yield of crops this year the necessity for conservation and conservatism will be accentuated. War waste and war financing result inevitably in diminished supplies of good and increased volume of credits. The normal relationship between the volume of goods and the volume of money and credits thus unsettled can be restored in either of two ways—one, the drastic method of contraction of credit, and the other, by far the more desirable way, increased production. In the same way progress toward the restoration of the normal relationship may be made by reducing credit more rapidly than production is diminished, or by increasing production at a greater rate than credit is expanded. If it should prove impracticable in the existing circumstances to increase essential production, then we must through economy in consumption and through moderation in the use of credit check the tendency toward a further widening of the margin between goods and credit.

Our problem, therefore, is to check further expansion and to bring about a normal and healthy liquidation without curtailing essential production and without shock to industry, and, as far as possible, without disturbance of legitimate commerce and business.

As a rule there is a substantial reduction in the volume of commercial loans during the first quarter of the year. This liquidation is entirely natural and healthy, and is necessary in order that the banks may be prepared to meet the demands made upon them during the crop-making and harvesting seasons. There has been no such liquidation during the present year; on the contrary, commercial loans have steadily increased. Thus the public has anticipated demands for banking credit which are usually made later on in the year. The average reserves of the Federal reserve banks are now about 42 per cent, as against 45 per cent at the beginning of the year about and 51 per cent 12 months ago.

The solution of the problems confronting us will require the cooperation of all banks and the public. Whatever personal sacrifices may be necessary for the general economic good should be made. The war-time spirit to do things that are worth while must be revived, and there should be the fullest cooperation in an effort to produce more, save more, and consume less. The banks should lean less heavily upon the Federal reserve banks and rely more upon their own resources. Unnecessary and habitual borrowings should be discouraged, and the liquidation of long standing non-

essential loans should proceed. Drastic steps, however, should be avoided and the methods adopted should be orderly. Gradual liquidation will result in permanent improvement while too rapid deflation would be injurious and must be avoided.

There should be a clear understanding of the parts to be played by the board, the Federal reserve banks, and by the member and nonmember banks and trust companies. With respect to credits, the problems of the Federal reserve board, the Federal reserve banks, and the member banks, while interrelated, are distinctive. The Federal Reserve Board has but little direct contact with the member banks; it deals with general conditions and principles rather than with individual cases and details. The Federal reserve banks, on the other hand, are in daily contact with their member banks and have constant dealings with them. Between the Federal reserve banks and the Federal Reserve Board, as the supervisory and coordinating body, there is necessarily a close and intimate relationship. The member banks transact the greater part of the primary banking business of the country. They receive the deposits of the public and are the media through which ordinary commercial credits are extended.

The primary duty of the Federal Reserve Board is to see that the Federal reserve banks function normally in the manner prescribed by the Federal Reserve act. The character of business which may be engaged in by the Federal reserve banks is described in detail in sections 13 and 14 of the Federal reserve act, and all regulations of the board bearing upon the loans and investments of the Federal reserve banks must be in conformity with the provisions of the law. Regardless of the extent of its legal powers it would be a most difficult task for the Federal Reserve Board, sitting in Washington, to attempt by general rule of country-wide application to distinguish between "essential" and "nonessential" loans. During the war there was a broad underlying principle that essentials must be "necessary or contributory to the conduct of the war," but, notwithstanding the sharp outline of this principle, much difficulty was experienced by the various war boards in defining essentials and non-essentials. All the more difficult would it be for the Federal Reserve Board to make such a general definition now, when there is no longer that purpose as a guide.

The Federal Reserve Board is not a temporary organization. It is a permanent board, and it must be guided by the terms of the Federal reserve act. Section 13, in defining the eligibility of paper for discount by Federal reserve banks, lays down the general rule that any paper maturing within the time prescribed, and issued or drawn for commercial, agricultural, or industrial purposes, or the proceeds of which have been used or are to be used for such purposes, is eligible. No express condition is made regarding the essential or nonessential character of the transaction giving rise to a note which may be offered for discount, and the Federal Reserve Board is not required and properly could not be expected generally to adopt such a criterion of eligibility. It is too much a matter of local conditions and local knowledge to justify at this time any general country-wide ruling by the board, even if such a ruling were deemed helpful.

On the other hand, there is nothing in the Federal reserve act which required a Federal reserve bank to make any investment or to rediscount any particular paper or class of paper. The language of both sections 13 and 14 is permissive only. Section 4 of the Federal reserve act, however, requires the directors of a Federal reserve bank to administer its affairs "fairly and impartially and without discrimination in favor of or against any member bank," and, subject to the provisions of law and the orders of the Federal Reserve Board, to extend "to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claim and demands of other member banks." Thus the directors of a Federal reserve bank have the power to limit the volume and character of loans which in their judgment may be safely and reasonably made to any member bank.

The recent amendment to paragraph (d) of section 14 distinctly authorizes each Federal reserve bank on its own account, without reference to action taken by any other Federal reserve bank, to establish a normal discount or credit line for each member bank, and permits the imposition of graduated rates on discount lines in excess of the normal lines. This amendment, however, does not repeal or modify sections 4 and 13, and a Federal reserve bank is still free to decline to discount any paper which in its judgment does not constitute a desirable investment for it or which in its opinion would not constitute a safe and reasonable investment within the meaning of section 4.

It is the view of the board, however, that while Federal reserve banks may properly undertake in their transactions with member banks to discriminate between essential and nonessential loans, nevertheless that discrimination might much better be made at the source by the member banks themselves. The individual banker comes in direct contact with his customers; he is better qualified than anyone else to advise the customer because of his familiarity, not only with the customer's business but with

the general business conditions and needs in his immediate locality. In making loans he is bound by no general rule of law as to the character of the purpose for which a loan is being asked. He is entirely free to exercise discretion, and can make one loan and decline another as his judgment may dictate. He can estimate with a fair degree of accuracy the legitimate demands for credit which are liable to be made upon him, as well as the fluctuations in the volume of his deposits. He knows what industries sustain his community, and is thus qualified to pass upon the essential or nonessential character of loans offered him. He knows, or should know, what redis count line he may reasonably expect of his Federal reserve bank, and he ought not to regard this line as a permanent addition to his capital.

With knowledge of the limitations or penalties put upon his borrowings from the Federal reserve bank the banker may be depended upon to use a more discriminating judgment in granting credit accommodations to his customers, and that judgment he must exercise if the present situation is to be remedied fundamentally.

It is true that under existing conditions the volume of credit required in any transaction is much greater than was the case in prewar times, but it is also true that the resources of the member and nonmember banks would be ample to take care of the essential business of the country and to a large extent of nonessentials as well if there were a freer flow of goods and credit. If "frozen loans" were liquified, and if commodities which are held back either for speculative purposes or because of lack of transportation facilities should go to the markets, and if large stocks of merchandise should be reduced, the resultant release of credit would have a most beneficial effect upon the general situation. In the meantime everything must be done to expedite the release of these credits and to restrict nonessential credits in future.

While the problem of credit regulation and control is national and even international in its scope, yet in the last analysis it is merely an aggregation of individual problems, and the proper working out of the situation must depend upon the public and upon the banks which deal with the public. The public must be made to realize the necessity of economy in expenditures and in consequent demands for banking credit. The banks themselves are best able to impress the importance of this policy upon the public.

The Federal reserve banks may be depended upon to do their duty to the member banks and the public, but to accomplish results the banks and the public must do their part in accelerating the processes of production and distribution and in restricting waste and extravagance.

Gov. HARDING. That is the only public statement of policy, to the best of my recollection, that was made by the board during the year 1920. Individual members of the board in some of their addresses may have referred to it, but they always referred, with one exception—there was one member of the board who acted on his own responsibility always, but other members of the board in referring to board policies adhered to the lines of this statement which was given to the press on May 19, 1920.

Representative MILLS. Was there any other policy but the one that was included in that statement?

Gov. HARDING. No, sir; there was not. Does the commission wish to have that statement read, or is it satisfied to have it in the record?

Representative SUMNERS. I do not care to have it read, but just at this point—

Gov. HARDING. Congressmen, when I come to discuss the cotton situation I am going to bring out all these matters, and I think that those of you who are from the Southern States will be particularly interested in what I have to say about cotton.

Representative SUMNERS. Here is what I think ought to be done, Governor, if it can be conveniently done. There is a good deal of criticism of the board that has grown out of the impression, however it may have been created, that during the year 1920, and perhaps beginning in the latter part of 1919, from time to time the word was passed out from the Federal Reserve Board to the several banks, and some statements possibly made to the country, calling attention to the fact that the time had come when liquidation must come about.

Gov. HARDING. I understand. Congressman, there was no word passed out by the board to the Federal reserve banks which was in conflict with the general policy or principles enunciated in this press statement of May 19, 1920, which I have put in the record. I am aware of that sentiment, and I will tell you how it originated. It is a perfectly natural thing.

In what I am going to say I am not criticizing any member bank, because all of us who had any insight at all into economic conditions in this country in 1920 were uneasy; it was not a time when bankers were carefree or when any man of large business interests was fully easy in his mind.

Now, the country banker was, in a great many cases, carrying a very heavy load. I have been a banker. I started as a runner in a little bank of \$20,000 capital in a town of less than 2,500 people. I went to Birmingham when it was a town of 10,000 people—just a mining camp—and was in a bank there that had \$100,000 capital and about \$100,000 deposits. When I left Birmingham to come to Washington I was president of a bank in that city with \$1,500,000 capital and \$1,500,000 surplus, with deposits of about \$12,000,000, which have since been increased to \$26,000,000, and I know something about cotton loans, farm loans, and industrial loans. I have had practical experience in all those matters. I think I know something of banking psychology, and I know this, that the average banker, when he has an application made to him for a loan—bear in mind that the majority of applications that a banker in a small town has made to him are made personally, and bankers resort to various expedients in declining applications for loans, in order to retain the good will of the parties applying for them. I am going to tell you one or two instances in my own knowledge.

Some of you may remember a former United States Senator from Alabama, the Hon. Joseph F. Johnston, who died in August, 1913. He had been a banker for a number of years. He used to tell this joke on himself.

He said that one day there was a man, without any credit responsibility whatever and no visible means of support, just an all-around good fellow, who, I suppose, had some little political influence, possibly, in municipal elections, came into the bank and wanted to borrow \$300. Mr. Johnston asked him what collateral he had. "Well," he said, "I have not got any. If I had the collateral I could sell it, and I would not want to borrow any money." "Well," he said, "who is going to indorse your paper for you?" The man replied, "I do not know anybody that will indorse my paper for me."

Mr. Johnston did not want to offend the fellow, and so he said, "I will tell you what I will do. I can not make you the promise offhand, but I will see our directors about it"—there were only seven directors, all living right there in town—"and I will see what they say about it, and if they approve the loan I will be very glad to make it for you."

This fellow got busy then and went around and saw each one of the directors of the bank, and then he asked when the directors were going to meet, and he was told when. Well, the day following that directors' meeting he came in with his note all filled out, and he said,

"All right; here is my note; I want my money now." Mr. Johnston said, "I am very sorry, my friend, but I can not make the loan; the directors turned it down." The man exclaimed, "What? Did they turn that loan down?" "Yes, they did." "Well," he says, "that is very queer. I saw Mr. So-and-so, and Mr. So-and-so; I saw every one of them, and they all said I could have it; all of them were in favor of it." "Well," Mr. Johnston said, "I can not help what they told you. They met here, and I brought it up, and they all voted to turn it down." "Well," the man said, "all I have to say then, Mr. Johnston, is that personally and separately your directors are a very clever set of men, but collectively they are the damnedest set of liars in Birmingham." [Laughter.]

Now, to go a little further: No bank in declining an application for a loan desires to make a personal enemy, because whether a man has any money on deposit himself or not, he may have had at some time before, or he may have some prospects or hold out some promise that he will become a depositor in the future, or he may have some influential relatives who have money in the bank. Every banker in a small town knows just the effect of having the enmity of people who say, "This is an unaccommodating, tightwad bank," and he does not want to incur that enmity. Of course, there are some bankers who have the art of saying "no" frankly and doing it in such a pleasant way that the man will go out and feel that he has been accommodated. But not all bankers have that faculty.

Now, this has happened in the last two or three years, and it has come to my attention frequently. I have told this story at bankers' conventions, and they have always given it a laugh, and said, "You ought not to give us away like that." A man will come into a bank and want to borrow some money. The banker will say to himself "I do not want to tell this fellow he is no good, but I would not want to lend him any money under any circumstances. I do not want to tell him I am loaned up full and hard-up, because he talks a lot and will go around and tell people, 'Why, that bank you have got your money in must be in a mighty tight fix, because I went over there and wanted to borrow \$100 from them, and they said they did not have the money.'"

So the banker passes the buck—we in Washington know what that means. The banker will say, "Now, old man, I'll tell you what the situation is. You are all right, and I wish I could let you have that money, but I can not make the loan, because the Federal reserve has told us not to make any more loans, and I can not let you have it." That lets him out all right, but it creates a false impression, and a bad impression, generally, toward the Federal reserve. But if you will think for a moment you can see that the Federal Reserve Board is not sending out word to member banks and non-member banks—because nonmember banks use us indirectly as well as member banks—that they must not make loans, and all that sort of thing. There is nothing to it.

Representative SUMNERS. What I was getting at is this: The statement is in the record with reference to a certain policy adopted which had a tendency to prevent a continuation of inflation, or might have had some effect in that regard. In view of that statement and other statements made in the record, I am concerned, in justice to

everybody, to the system and its officers as well as the public, to have in this record before the hearing shall have been concluded a very clear statement, and the clearest statement can perhaps be made by the instruments themselves that have been sent out—

Gov. **HARDING**. Congressman, there was no statement made during the year 1920 by authority of the Federal Reserve Board which is at variance with this statement of May 19.

The **CHAIRMAN**. Governor, suppose you file with the commission copies of the various circulars of instruction, or whatever you call them, that you did issue to the various Federal reserve banks during the year 1920—public announcements of any kind.

Gov. **HARDING**. As far as circulars which may have been sent out by individual Federal reserve banks are concerned, I have this to say, that they are independent institutions under the law, as explained yesterday. They act under the supervision and control of their boards of directors. They send out statements, and the board only sees those statements after they have been sent out. Some of them have issued many statements. Some of them have written a great many letters to banks that applied for loans or had excessive loans with them. It is impossible for me to say just what might have gone in some of those letters, but I repeat the proposition, that as far as the Federal Reserve Board is concerned, no statement has ever been given out in the year 1920 with its authority which is at variance with the principles set forth there in that statement of May 19, 1920.

Representative **TEN EYCK**. Was it your intention, Mr. Chairman, to have the bulletins that were sent out by the board to the reserve banks inserted in the record?

The **CHAIRMAN**. I suggested that the governor file with the commission copies of general letters stating the policy, or letters of instruction, whatever they are called, issued to the various Federal reserve banks, beginning January 1, 1920, and down to date.

Senator **HARRISON**. You can do that, can you not, Governor?

Gov. **HARDING**. Certainly; with pleasure. I will ask the secretary of the board, who is present in the room, to take notice of the request and get those circulars together and send them to you.

Senator **HARRISON**. In connection with that I would like to have any statement that was issued during that time by the governor or the Federal Reserve Board. He has incorporated in the record one statement, for instance, that was made before leaving this year for the West. I would like to have any other statements during that time that were issued to the public.

Gov. **HARDING**. I would like to read to this commission right here a letter which I wrote to the chairmen of all Federal reserve banks on November 24, 1920, on the subject of extension of credit to farmers.

Senator **HARRISON**. Before you do that let us make it clear what we are going to get. You have some other statements that you have issued to the press during that term?

Gov. **HARDING**. I do not recall them now. We did not issue many statements in 1920. It was not a time to be talking too much.

Senator **HARRISON**. I think you are exactly right in that, but we want to know what you did. Will you have your secretary look through your files and see if you did issue any such statements?

Gov. HARDING. Certainly.

Senator HARRISON. And, Mr. Chairman, if we can get them, any statements that were issued by the Federal reserve banks to the member banks.

The CHAIRMAN. I have no doubt the statements issued by the Federal reserve banks can be obtained, and if the members of the commission would like to have them we will get them.

Gov. HARDING. Now, I would like to read this statement I wrote on November 24, 1920, by authority of the board, and I want to say that all these letters I write as executive officer of the board are first submitted to the board for its approval before they go out. I do not know whether the board was unanimous on this or not; I think it was. I do not remember any difference of opinion on these circulars; I think also the board was unanimous on the statement of May 19, 1920. [Reading:]

FEDERAL RESERVE BOARD,
Washington, November 24, 1920.

Subject: Extension of credit to farmers.

DEAR SIR: The board has received several telegrams recently from individuals and boards of trade in towns located in northeastern Nebraska, South Dakota, and North Dakota, all couched in substantially the same words and phrases, urging the Federal Reserve Board "to declare that an emergency now exists and to arrange for credit extension to farmers."

For your information a copy of one of these telegrams is sent to you herewith, together with a copy of the board's reply.

Very truly, yours,

_____, Governor.

TO CHAIRMEN OF ALL FEDERAL RESERVE BANKS.

Here is a copy of the telegram. I suppose I got 50 of them, just exactly alike:

HON. W. P. G. HARDING,

Governor, Federal Reserve Board, Washington, D. C.:

Our country is full of corn, oats, immature pigs, and partly fattened cattle. Your board is insisting that farmers sell these products to reduce existing indebtedness. The only salable produce is corn at 40 cents and oats at 33 cents per bushel. A sale at this price will not pay the cost of raising the crop and will not liquidate any indebtedness but will simply force the crops into the hands of speculators and a very large part of the farmers into bankruptcy, and at a time when the consumer is able to pay a fair price.

This means that general bankruptcy will follow. We earnestly urge your board to declare that an emergency now exists and to arrange for credit extension to farmers so that some of the existing indebtedness can be paid out of the proceeds of the present crop. Your board outlined a policy last spring to bring down prices and in so far as prices of farm products are concerned you have certainly more than accomplished your purpose. If your board will bring pressure to make a decent market our farmers would gladly sell their products.

Representative MILLS. Whose letter is that?

Gov. HARDING. That is a form of telegram which came to us from 50 different sources, from all over Nebraska and North Dakota and South Dakota. As I said before, the only policy the board outlined was on May 18, which is referred to in our answer to the Senate resolution of May 18 and was given out in that statement to the press

Here is a form of reply to the senders of that telegram. This copy was sent to all Federal reserve banks for their information [reading]:

NOVEMBER 24, 1920.

DEAR SIR: A telegram dated November 22, signed by yourself and in behalf of 185 others, has been received and duly considered by the Federal Reserve Board.

Our information is that the price conditions of which you complain are due in part to the difficulty of maintaining a large volume of exports because of the credit situation abroad, in part to the unusually large crops which have been produced this year, and in part to the fact that the farmers, for one reason or another, carried over a larger amount than usual of last year's crops. The fall of prices has also been accelerated because of greater economy on the part of consumers and their reluctance to pay the prices which prevailed some months ago.

The Federal Reserve Board regrets the embarrassments which are attendant upon the commerce, business, and agriculture of the country, but desires to state most positively that these conditions have not been brought about by any acts or policies of the Federal Reserve Board or the Federal reserve system. On the other hand, the board confidently asserts that but for the precautionary measures taken several months ago conditions would have been far worse to-day than they are and the prospects of stabilization and recovery much more remote. The Federal Reserve Board has not insisted that farmers sacrifice their products or that they adopt any particular policy. The Federal reserve banks do not deal directly with the public but are permitted by law to rediscount for member banks paper defined by the Federal reserve act as eligible.

There has been no reduction in the volume of credit extended by the Federal reserve banks during the past year, for the volume of paper rediscounted by Federal reserve banks and the amount of Federal reserve notes outstanding are each higher by several hundred millions of dollars than a year ago. Member banks have rediscounted with Federal reserve banks a much larger proportion of their total loans and discounts than they have ever done before, an amount about 10 times greater than normal. The Federal reserve banks in the agricultural districts have discounted for their member banks amounts so large that in many cases their own reserves would have been reduced to less than one-half of the legal minimum but for the fact that they were permitted by the Federal Reserve Board to rediscount with other Federal reserve banks. The total volume of these interbank rediscounts which have gone for the larger part to member banks in farming sections has at times been in excess of \$250,000,000. This represents a sum more than eight times as great as the maximum deposits ever made by the United States Treasury with national banks to aid in crop-moving operations.

The Federal Reserve Board is advised by the Federal reserve bank in your district that credit facilities are not being denied to your member banks, although many of them have under discount amounts far in excess of what would be regarded as a normal and reasonable line. The Federal reserve bank has merely insisted that as notes which have been rediscounted with it are paid the borrowing member bank apply the proceeds to the reduction of its indebtedness to the Federal reserve bank.

Neither the Federal Reserve Board nor the Federal reserve banks undertake to direct the credit policy of member banks; this rests with the directors of each such institution, and, of course, the Federal reserve system has no control whatever over the credits of nonmember banks. No doubt many banks feel that they are unduly extended and are endeavoring to secure liquidation or reduction of loans at maturity, but any direct pressure brought to bear upon the farmer to sell his products is exerted by the member and nonmember banks and not by the Federal reserve bank.

Numerous telegrams have been received during the past two days, couched in substantially the same words and terms as yours, from individuals and trade bodies in your section indicating organized effort to bring pressure to bear upon the Federal Reserve Board. In each of these telegrams the board is urged "to declare that an emergency now exists and to arrange for credit extension to farmers."

Just at this particular time the financial situation was very critical. It is past history now, and I do not mind saying it, because when we have the reserve that we now have we can talk a good deal more boldly and freely than we did last fall. Here is what they asked us to do—

to declare that an emergency now exists and to arrange for credit extension to farmers.

Such a declaration by the board would be liable to cause a real emergency and would accentuate the distress instead of relieving it. An extension of loans to farmers can be granted only by the banks with which the farmers deal and to which they are indebted. The Federal Reserve Board has been a consistent advocate of orderly marketing of crops, but as has been pointed out by members of the board in public

addresses, orderly marketing does not mean the tying up of bank credits and the withholding of entire crops from the market by means of additional credits from banks, but means gradual sales. The application of the proceeds of these sales to existing indebtedness would place the individual farmer, the merchant, and the local bank in stronger position and would make it possible for the local bank to do more for the farmer than it can do if crops are withheld entirely. I am sending you a copy of an address which I made several weeks ago before the chamber of commerce, at Cleveland, Ohio, and would invite your attention particularly to those paragraphs which have been marked.

In conclusion, I would say that the Federal Reserve Board recognizes the fact that agriculture is a basic and vital industry. The board has always assumed a sympathetic attitude toward all matters relating to agriculture, and it has done, is doing, and will continue to do all it can in a legitimate and proper way to assist the farmer in his credit problems. It will not, however, be forced into the adoption of policies which in its judgment would be unwise and ruinous, and which would eventually involve the farmer, as well as others, in disaster.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Senator HARRISON. Let me ask you this, in that connection. Is it your opinion now that the effect of any of the statements issued by you as governor of the Federal Reserve Board, or of the action of the Federal Reserve Board, was to reduce the price of the raw agricultural products?

Gov. HARDING. I do not think so.

Senator HARRISON. You do not think it was?

Gov. HARDING. I do not.

Senator HARRISON. That was not the idea of the Federal Reserve Board, was it?

Gov. HARDING. It was not.

Senator HARRISON. Do you think it affected those people materially in getting the credits that they had been getting—the statements that were issued?

Gov. HARDING. I do not think so.

Senator HARRISON. Now, I notice in a statement issued by the Federal Reserve Board to the press on October 17, 1920—you probably have it there—this statement:

The board is advised that credit has been steadily available for the successive seasonal requirements of agriculture, as well as for the needs of commerce and industry.

You were of that opinion at that time?

Gov. HARDING. Yes, sir.

Senator HARRISON. And further in this statement it says:

The disturbances in price and demand which have recently manifested themselves in markets for various agricultural and other commodities, not only in the United States but in other countries as well, are inevitable and unavoidable consequences of the economic derangements occasioned by the World War.

Gov. HARDING. That had already been stated publicly by other high authorities besides the Federal Reserve Board.

Senator HARRISON. Yes; but do you not think that, naturally, the impression that in the opinion of the board prices must come down would cause the member banks who read it to go slow in making loans where they were secured by agricultural products, and cause many of them who had faith and confidence in the security of agricultural products to lose that faith?

Gov. HARDING. You must know the amount of pressure that was brought to bear upon the board to say something or other. We kept quiet as far as we were permitted to keep quiet, and any statement we issued, further than the statement of May 18, was issued practically

under protest, because if we had not issued a statement the effect would have been worse than if we had. You certainly would not have had the Federal Reserve Board come out and issue a false or misleading statement, would you?

Senator HARRISON. Oh, indeed not. I am sure there was nothing in my question to give that impression.

Gov. HARDING. Would you have had the Federal Reserve Board say, "Hold on to your stuff, because we think you are going to get \$3 for your wheat in January," and so on? People would have come back at the board and said, "Upon what basis do you reach that conclusion?"

Senator HARRISON. I think it would have been very foolish to do that, and I hope my question did not give the impression that I thought you ought to do that.

Gov. HARDING. Let me ask you this, Senator. If you were a member of the board, and put in the position where you were absolutely forced to issue some statement or other, just what sort of statement would you have issued?

Senator HARRISON. I do not know that I would have issued a statement which would have driven down prices of raw agricultural products.

Gov. HARDING. I do not think any board statement drove down the prices of raw agricultural products.

Senator HARRISON. Is it your opinion now, when you read this in the light of what has happened, where you say—

The disturbances in price and demand which have recently manifested themselves in markets for various agricultural and other commodities, not only in the United States, but in other countries as well, are inevitable and unavoidable consequences of the economic derangements occasioned by the World War.

Do you not think that would naturally have caused these bankers to sit up and take notice?

Gov. HARDING. There are higher authorities than any member of the Federal Reserve Board who had issued such statements previously. For instance, last year the Secretary of the Treasury had already issued such a statement, and now the President of the United States has recently made a similar statement.

Senator HARRISON. I understand. Everybody at that time was trying to drive down prices. I agree with you thoroughly.

Gov. HARDING. No, sir; not at that time; I do not think so.

Senator HARRISON. Do you not think that influenced bankers to be more prudent and cautious?

Gov. HARDING. The Federal Reserve Board stated they were anxious at that time to stabilize the situation, as indicated by this letter I have just read. But you can not expect the Federal Reserve Board to come out and issue an absolutely insincere statement which is not corroborated by facts, which is not justified by the logic of events.

Senator HARRISON. I do not want you to get out any insincere statements. Following this statement that was gotten out there were a good many protests, of course, as you have indicated, such as this telegram that came from Nebraska.

Gov. HARDING. Yes, but they said "last spring;" they did not refer to that statement. I do not remember any protest about this statement.

Senator HARRISON. That was in November, 1920?

Gov. HARDING. November 24, 1920, when this telegram came. and they referred to what the board did "last spring."

Senator HARRISON. Yes, but that was issued after this statement of October 17, 1920?

Gov. HARDING. Yes. But the very fact that it was issued after that statement and those people did not refer to that statement would indicate that those people had either not seen this statement or did not pay any attention to it.

Senator HARRISON. At that time there was a meeting here in Washington of the farm organizations of the country, and they signed a statement and released it for publication and, I understand, sent a copy to the governor of the Federal Reserve Board. Among other things, they say:

The statements given out by the Secretary of the Treasury, the governor of the Federal Reserve Board, and the Federal reserve banks have been construed to the effect that commodity prices, particularly prices of farm products, were too high and that a prewar basis, or a resumption of a prewar basis, of prices must be reached within a short time. The consequent effect of these utterances upon the member banks of the Federal reserve system and the banking interests of the country generally was to cause them to withhold such accommodations as they might have otherwise extended, because of the fear that the security taken would necessarily decline.

Did that come to your attention at that time?

Gov. HARDING. I do not remember; I think possibly it did. But you will notice this paper refers to statements given out by the Secretary of the Treasury, the governor of the Federal Reserve Board, and the Federal reserve banks, and how they have been construed.

Senator HARRISON. Yes.

Gov. HARDING. Now, if a statement had been given out by a higher official which had been construed as going further than our statement, I do not see how our statement had any effect on prices.

Senator HARRISON. And then on the same day did there come to your attention—

Gov. HARDING. I have here and I can put in the record the statement of the Secretary of the Treasury issued on or about that time.

Senator HARRISON. Yes; I think that ought to go in the record. (The statement referred to is here printed in full, as follows:)

[For release, Monday morning newspapers, Sept. 27, 1920.]

TREASURY DEPARTMENT.

Certain statements in circulation purporting to represent the views of the Secretary of the Treasury on a phase of the credit situation are either inaccurate or have been misinterpreted. What the Secretary said is this:

"I am in favor of every legitimate effort to promote the orderly marketing of all commodities, but the Government can not be a party to an undertaking to hold commodities off the market to enable the owners artificially for speculative purposes to maintain war prices or higher than war prices. As a matter of fact, the banks of the country during the last 12 months have been extending large credits to meet the demands from industry and agriculture. Since August, 1919, the loans and investments of about 800 reporting member banks increased over two and one-half billions of dollars.

"As these reporting banks represent about 40 per cent of the resources of all the banks, it is estimated that the total increase in loans and investments since August, 1919, has been over five and one-half billions of dollars. Even from January 23, 1920, when the increase in discount rates went into effect, to August 27, 1920, the loans of about 800 reporting member banks, exclusive of loans secured by Government obligations and other stocks and bonds, increased about one and a quarter billions of

dollars. This would reflect a total increase of commercial loans in all banks, it is estimated, of perhaps three billions. Since the crop-moving demands came on the bills discounted and purchased by the Federal reserve banks have increased at the rate of about fifty millions a week, and the Federal reserve notes at the rate of from thirty to forty millions a week. The increase in the volume of Federal reserve notes from January 23, 1920, to August 27, 1920, was \$360,000,000."

Gov. HARDING. Bear in mind, any statements issued by the Secretary of the Treasury or the Comptroller of the Currency, who have independent powers, are issued not by authority of the Federal Reserve Board, whereas any statement that I issued as governor and executive officer would naturally be by authority of the Federal Reserve Board. And I have no more influence on the Federal Reserve Board, no more power, than any other member of the board. I am merely its executive officer.

Senator HARRISON. It is modest of you to say so.

Gov. HARDING. I have only one vote, just as any other member of the board.

Senator HARRISON. Now, on the same day that statement was issued by you as governor of the Federal Reserve Board there was given to the press, and I am wondering whether you saw it, signed by the representatives of the farming interests of Louisiana, Kansas, Wisconsin, Texas, Virginia, and California, a letter addressed to C. S. Barrett, chairman of the joint agricultural conference here in Washington, in which they say:

The undersigned committee appointed for the purpose of remaining in Washington in order to consider and report upon the statement of the Federal Reserve Board issued to-night beg leave to report as follows:

"The statement issued to-night by the Federal Reserve Board not only does not attempt to meet the situation and will not alter conditions but is even couched in terms to support price declines."

Gov. HARDING. Who said that?

Senator HARRISON. That is these representatives of the farming interests. Let me finish reading this:

The board's declaration that the present disturbances are unavoidable and inevitable is indefensible in this crisis.

Gov. HARDING. What should the board have said then?

Senator HARRISON. I am not arguing about what they should have said; I am just trying to get at whether or not there was this policy to depress the prices of raw agricultural products, and whether or not it did not influence the making of loans by the member banks.

Gov. HARDING. You may remember, Senator, that some time last September you suggested something that you thought the board ought to say and we did not say.

Senator HARRISON. I do not know about that. There were a good many things I thought they should have said that they did not say.

Gov. HARDING. Do you think it would be proper for me to put in the record a memorandum of our conversation?

Senator HARRISON. You may put it in, absolutely. I tried to get you at that time to reduce the rates of the board because I thought they were too high.

Gov. HARDING. Let me call your attention to a public statement that was issued not very many weeks ago by ex-Gov. Cox of Ohio, who was the Democratic candidate for President last fall, in which he referred in complimentary terms to the great assistance the Federal reserve system had rendered the country. I want to follow that

statement by saying that about the middle of January of this year a reception was given to Gov. Cox here at a noonday luncheon at the house of one of the Cabinet officers, and I was invited to attend. I had met Gov. Cox when I went to Columbus, Ohio, in 1918, at a bankers' convention. I had a very slight acquaintance with him and did not know whether he remembered me or not.

This was about the middle of January, 1921. Gov. Cox was on the other side of the room, and he looked over, and he showed signs of recognizing me. So I went up with others in line and shook hands with him. He greeted me very cordially, and he said, "I am glad to meet you again." He referred to my previous meeting with him in 1918, and said, "Last summer and fall I was hoping that the Federal Reserve Board could modify its policies, but I want to say to you now that I think you were right, and I have greater respect for you than I would have had if you had changed your policies at that time."

I make that statement, and you can verify it if you want to.

Senator HARRISON. That is a good indorsement from a very able source.

Representative MILLS. Governor, prices did drop, did they not?

Gov. HARDING. Yes, sir.

Representative MILLS. And your estimate of the situation was a perfectly correct one?

Gov. HARDING. I think it was.

Representative MILLS. So that if you are being criticized at all, you are being criticized for making a correct estimate of the situation and telling the people of the country the truth?

Gov. HARDING. I want to say one other thing right here. I am going into this cotton situation in detail this afternoon. I want to explain exactly the board's policy with respect to cotton, because that is an important agricultural staple and it affects me personally more than anything else. What material interests I have are mainly in Alabama, and as that is a State which grows a considerable amount of cotton, cotton prices affect everything I have. For personal and sentimental reasons, then, there is no man in Washington, hardly, that is more interested in seeing the cotton farmer prosperous and seeing high prices for cotton than I am. Certainly no member of the Federal Reserve Board has that interest, because ever since I have been in Washington I have been the only member of the board that has represented a cotton State. There was one ex officio member of the board who came from a State which grows 30,000 or 40,000 bales of cotton a year, but that is a bagatelle. His State is not classed as a cotton-growing State. I was extremely anxious to do everything I could, properly, for cotton.

I wish here to put this statement into the record. I believe, and I think I can prove, that the cotton farmer of the United States received some terribly bad advice during the year 1920, but he did not receive any bad advice from me. I am going to tell you of the advice I gave him in a perfectly legitimate way through official channels.

There were many people who took the position that because the 1920 crop had been raised at an exceptionally high cost—and I think there is no doubt that the cost of raising the 1920 crop was higher by far than that of raising any other crop ever grown—for some reason

or other the farmer was going to get, because he was morally entitled to it—you all know we do not always get our deserts in this world, but they assumed that because the price of making the crop was high—regardless of world conditions, regardless of the fact that cotton is a crop which depends more than any other upon the export demand, he was going to get cost of production plus a reasonable profit; that he ought to have it and therefore he was going to get it.

There were many prominent men in this country, men of influence, who made it their business during the year 1920 to attend cotton conventions and issue statements, saying, "Forty cents a pound for cotton looks high, but it is cheap under the circumstances. It ought to be worth 50 or 60 cents a pound. Hold your cotton. Do not take a cent less for it." There were conventions held by the American Cotton Association, at which delegates were present from all over the South, one as late as the 2d of September, in Montgomery, Ala. That convention adopted resolutions, which I have here and which I shall put in the record this afternoon, in which they described all these circumstances, the high price of making the crop, and so on, and said, "We therefore declare that it is the opinion of this convention that there should be, and we do hereby fix a minimum price for cotton of 40 cents a pound; and that the price will be raised 1 cent per pound per month after November 1, 1920." And appeals were made to the Federal Reserve Board for help for the cotton farmer on the basis of 40 cents a pound.

Now, I am going to explain this afternoon the predicament the board found itself in and why it was impossible for the board to pursue any other policy than that which it did pursue. I am going to read a correspondence extending all over the year, and then I am going to leave it to this commission to judge whether or not any intelligent board could have done anything else.

I think that the people who advised the cotton farmers of the South—many of them ignorant, many of them negroes, many of them tenant farmers—and took upon themselves the responsibility of advising them to hold cotton, which they could have sold at a comparatively high price, in the hope of getting a higher price, assumed a tremendous responsibility, and that they and not the Federal Reserve Board are responsible for the loss of millions of dollars to farmers.

Representative TEN Eyck. What would have happened, Governor, if a different propaganda had gone out, stating that cotton was at the highest price at that time, and every one had sold? Who would have bought it?

Gov. HARDING. That propaganda ought not to have gone out. It was a time when it would have been better not to have held any conventions.

Representative TEN Eyck. But what would have happened if they had forced the cotton on the market at that time?

Gov. HARDING. I know of farmers—not isolated cases; I can name many cases—who borrowed money to hold their 1919 crop, which they could have sold on a basis of 40 cents a pound or better. They were holding cotton back to come in competition with the 1920 crop. And one reason why cotton went so low in 1920 was the fact that so much cotton from the 1919 crop had been held back. It may be that part of the holding was unavoidable, because there

was no market for some of the grades, but for other grades there was a market, and ordinary common sense would have urged the marketing of that cotton. Much of it could have been sold, and it would have lightened the load.

Representative TEN EYCK. Where would it have gone, may I ask?

Gov. HARDING. To the New England mills and the southern mills. A part of it would have gone to the British mills. If a cotton mill buys cotton at a high price it is not interested in depressing the price of cotton naturally below the price at which it bought the raw product, because there is a certain relationship between the price of the manufactured goods and the price of the raw cotton. It is not a stable relationship; it fluctuates from day to day; but the same principle enters into it that enters into retail operations. You know why retail prices did not follow the wholesale prices down. The retail merchants were unwilling to take a loss and to sell goods on a fair profit based on replacement cost. Their idea was to sustain prices and avoid loss on old stock.

And I do not blame them for that. It was perfectly natural. In many cases they could not afford to take the loss. I think that is the reason why the fall in retail prices was not coincident with or as rapid as the fall in wholesale prices. The retailers were anxious to work out their accumulated stocks with a minimum of loss.

Now, if cotton manufacturers have large stocks of raw cotton on hand they certainly would not be interested in depressing the cotton market until they had worked up this stock of raw cotton into goods and sold those goods.

Representative TEN EYCK. Do you think it was the merchants who had stocks of cotton on hand that wanted this propaganda to go out so that the producer would hold it?

Gov. HARDING. No. I think the mistake was made with the best intentions in the world. I am not criticizing the men, because they are some of the best men in the South and were deeply interested in the movement. Unless fully informed it seemed a perfectly natural and logical thing to do, because there is no question that morally the farmer is entitled to cost of production of his stuff plus a fair living profit.

But the question arises, Is it not possible in some exceptional instances that discretion is the better part of valor, and that the farmer had better be advised in a quiet way, by people he can understand and in whom he has confidence, that in some circumstances what he ought to have it is impossible to give him? His attention should have been called to world-wide conditions. There is no use blaming any particular board or any particular men; the depression in agriculture to-day is due to, more than anything else, the inability to sell in the markets of the world our surplus of agricultural products.

The CHAIRMAN. Gov. Harding, it is now 25 minutes of 1. I suggest we take a recess until 2 o'clock this afternoon.

Gov. HARDING. I want to say before we go that the cotton situation now is distinctly different from last year, and in my judgment the outlook for cotton now is very much better. I am going to give the reasons this afternoon why I think so.

(Thereupon, at 12.35 o'clock p. m., a recess was taken until 2 o'clock p. m.)

AFTER RECESS.

At 2 o'clock p. m. the commission reassembled, pursuant to the taking of recess.

The CHAIRMAN. The commission will come to order. Mr. Harding, you may proceed, if you will.

STATEMENT OF HON. W. P. G. HARDING, GOVERNOR OF THE FEDERAL RESERVE BOARD, WASHINGTON, D. C.—Resumed.

Gov. HARDING. I would like to insert in the record here, Mr. Chairman, a letter which I addressed, by authority of the Federal Reserve Board, on the 16th day of December, 1920, to the Hon. George P. McLean, chairman of the Committee on Banking and Currency, United States Senate, relative to discount rates.

The CHAIRMAN. The letter referred to may be inserted, without objection.

(The letter referred to is here printed in full, as follows:)

DECEMBER 16, 1920.

DEAR MR. CHAIRMAN: You have requested the views of the Federal Reserve Board with regard to Senate bill No. 456^o, which, if enacted, would fix the maximum rate of interest or discount which Federal reserve banks could charge member banks in any contract, agreement, or any other financial transaction had with them at 5 per cent per annum.

The Federal Reserve Board desires to put itself on record as unalterably opposed to this bill or to any other bill which in any way attempts to limit the power now vested in it and in the Federal reserve banks to regulate the rates of discount which those banks may charge.

It is essential to the proper functioning of any central banking system that the central bank or banks of discount shall have complete control over their rates. This control over rates in normal times is the usual and most effective means of protecting the gold reserves of a country against withdrawals for foreign account, and in domestic transactions it insures the accumulation in normal times of a reserve sufficient to meet the seasonal and emergency demands of the central bank or banks. It is the general practice of central banks to fix their rates slightly above the market rates. This is particularly true of the Bank of England, and in view of the frequent references which are made to this institution in public discussions, it may be of interest to review this experience in the matter of discount rates since the passage of the bank act of 1844, as shown by the table on page 33 in a book entitled "Bank rate and money market," by R. H. Inglis Palgrave, F. R. S. The annual average bank rate of the Bank of England during the years 1845 to 1871, inclusive, was higher than the annual average market rate in 16 of the 26 years and was lower than the annual average market rate in the other 10 years, but from the year 1872 to the end of the period covered by the table, 1900, the average bank rate was higher than the average market rate in every year. From 1900 down to the present time the average bank rate has continued to be higher than the average market rate.

Up to the year 1833 the Bank of England was subject to the usury laws. In his book entitled "Essai Sur La Fondation Et L'Histoire de la Banque D'Angleterre, 1694-1844," Dr. A. Andreades, of the University of Paris, refers, on page 361, to the release of the bank from the application of the usury laws and describes the conditions which led to this action by Parliament. The conditions then existing in England were not altogether unlike present conditions in this country, and it is noteworthy that instead of attempting to impose restrictions upon the bank, Parliament liberalized its powers and relieved it from the old restrictions which had seriously impaired its efficiency in dealing with the situation.

In explanation of the fact that the discount rates of the Federal reserve banks are at the present time below the market rates it may be appropriate to quote the following from an address which I made to the American Farm Bureau Federation at Indianapolis on December 7, 1920:

"Normally the discount rate of a Federal reserve bank should not control the rates at which member banks loan money to their customers. In the countries which have central banks there is a well-established policy that the central bank discount rate

should be maintained at a figure slightly in excess of the current market rate. The wisdom of a such a policy is apparent for it eliminates all consideration of profit in rediscount transactions and gives the central bank better control over its own reserves and causes the banks which deal with the public to rely to a greater degree upon their own resources in extending accommodations while still affording them an outlet for any undue accumulation of loans. Because of the exigencies of war financing, it has not been practicable for the Federal reserve banks up to this time to adopt this policy, and as a rule Federal reserve bank discount rates are lower than the rates charged by member banks. It is believed that conditions are gradually adjusting themselves so that Federal reserve bank rates may be maintained at a level slightly higher than the current rates not only without any disturbance to commerce and business but to their distinct benefit. In fact, this adjustment has already begun in some cities where member banks have reduced their rates on commercial paper."

The enactment of a law fixing the maximum rate to be charged by Federal reserve banks at 5 per cent would, of course, make it impossible to bring this necessary corrective principle into permanent operation, for it would be effective only at times when current market rates for money might fall below 5 per cent. The board desires to call your attention to the fact that only 3 States—Illinois, Louisiana, and Michigan—have a legal rate of interest as low as 5 per cent and in each of these States a higher contract rate is permissible—Illinois and Michigan 7 per cent, Louisiana 8 per cent. In 32 States the legal rate of interest is 6 per cent, 7 States have a legal rate of 7 per cent, and in 6 States and in the District of Columbia the legal rate of interest is 8 per cent. In 11 States—Arizona, Arkansas, Florida, Kansas, Minnesota, Nebraska, North Dakota, Oklahoma, Oregon, Texas, and Wisconsin—a contract rate of 10 per cent is allowed, and in 10 other States—Colorado, Connecticut, Idaho, Montana, Nevada, New Mexico, South Dakota, Utah, Washington, and Wyoming—12 per cent is the contract rate. In 7 States—Georgia, Indiana, Iowa, Mississippi, Missouri, Ohio, and South Carolina—having a legal rate of less than 8 per cent, a contract rate of 8 per cent is allowed. Four States—California, Maine, Massachusetts, and Rhode Island—permit any rate to be charged under contract, and in New York any rate agreed upon in writing is legal on collateral demand loans of \$5,000 and over.

The theory that discount transactions should yield a profit to the member banks is a fallacy which owes its wide credence in part to the fact that the Federal reserve banking system, which has some of the attributes of a central banking system, is comparatively new, and partly to the abnormal times through which we have passed, the inevitable effects of which are now being experienced. The fact is, however, that the potential profits of the member banks should not be permitted to influence the determination of the Federal reserve bank rates. On the contrary, member banks should rely mainly upon their own resources in normal times in order that when seasonal and emergency demands arise the reserves of the Federal reserve banks may be available to meet those demands and sufficient to prevent the emergencies from developing into panic conditions. In this connection your attention is invited to an editorial which appeared in the Dallas (Tex.) Morning News of Friday, June 11, 1920, copy of which is inclosed herewith.

If Federal reserve bank rates were fixed at 5 per cent at the present time there would undoubtedly be a very strong incentive to the member banks to utilize to the utmost the rediscount facilities of the Federal reserve banks, because in an 8 per cent money market there would be a spread of 3 per cent between that rate and the Federal reserve bank rate which would represent a profit to be derived by the member banks on rediscount transactions. In States which have no important financial centers, but in which rates as high as 10 and 12 per cent are authorized by law, the incentive to rediscount with the Federal reserve banks would be even greater.

It is the opinion of the Federal Reserve Board, confirmed by past experience, that the lowering of the Federal reserve bank rates to 5 per cent would have but very little if any effect on the market rates which could not be fixed by legislative enactment but which are determined by the inevitable operation of the law of supply and demand. Nor are banks generally inclined—particularly banks in agricultural sections—to give their customers the benefit of Federal reserve bank discount rates. It should be borne in mind also that with Federal reserve bank rates at 5 per cent the incentive to speculation would increase the demand for credit and the net result would be that borrowers for legitimate commercial and agricultural purposes would find it difficult and expensive to obtain credit. Ultimately, of course, the limit of expansion would be reached, and in the board's opinion it would be reached within a very short time, for it must not be forgotten that there are about \$25,000,000,000 of Government obligations available as collateral for loans eligible for rediscount by Federal reserve banks. If the limit of expansion should be reached, the board believes that a condition of depression infinitely more serious and more widespread than that now existing would follow.

The board calls the attention of the committee to the fact that the bill under consideration would operate as a repeal of the provisions of section 11 (c) of the Federal reserve act which require the Federal Reserve Board to impose a graduated tax upon a Federal reserve bank whenever its reserves fall below a specified minimum, the Federal reserve bank being required "to add an amount equal to said tax to the rates of interest and discount fixed by the Federal Reserve Board." If the bill under consideration were enacted, 5 per cent would be the maximum rate a Federal reserve bank could charge even if its reserves were rapidly dwindling to the vanishing point.

In conclusion and by way of summary, if this bill should become a law it is the board's firm belief that the Federal reserve banks would find it impossible while functioning in a normal way to protect their gold reserves, that the Federal reserve system would within a very short time cease to be in any sense a reserve system and would become a mere instrument for the acceleration and perpetuation of expansion, and that a wholesale scramble for the funds of the Federal reserve banks would ensue which would leave those banks only two alternatives—one, to lend their funds at the rate prescribed until the exhaustion of their reserves had been completed, and the other to fix a definite limit upon their total volume of loans, thus adopting a rigid system of credit rationing. In the one case they would reach a point where they would be unable to make further rediscounts no matter how insistent or meritorious the demands might be, and in the other they would find it necessary to place all applications for discount accommodations on a waiting list until repayment of prior loans made new funds available.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Hon. GEORGE P. McLEAN,
*Chairman Committee on Banking and Currency,
United States Senate.*

Gov. HARDING. I would also like to read, with the permission of Secretary Mellon, which permission I obtained yesterday, a copy of his letter dated July 30, 1921, to Senator O. E. Weller, of Maryland. It relates to a letter addressed to Senator Weller by a mercantile firm of Baltimore, suggesting a reduction in the discount rates of Federal reserve banks.

The CHAIRMAN. Without objection, the letter may be inserted in the record.

(The letter last referred to is here printed in full, as follows:)

JULY 30, 1921.

MY DEAR SENATOR: I received your letter of July 8, 1921, inclosing a letter from Mr. ———, Baltimore, with reference to a suggested reduction in the discount rates of the Federal reserve banks to 5 per cent and asking that I advise you whether or not the subject has been under consideration and if any action has been taken thereon.

As you probably know, the Federal reserve banks of Boston, New York, Philadelphia and San Francisco have recently taken action to reduce their rates to 5½ per cent, and a 6 per cent rate now prevails in practically all of the other banks, including the Federal reserve bank of Richmond. The 5½ and 6 per cent discount rates are below the current commercial rate for money which prevails in many sections, and until the money situation becomes easier it would only subsidize borrowing by member banks if the Federal reserve banks were to make their discount rates as low as 5 per cent. Discount rates, of course, as has been said by the board, can not be "pegged or fixed arbitrarily, for there are certain basic conditions related to the demand for and the supply of money in this country and throughout the world which must be taken into account, and the formal establishment of a Federal reserve bank rate is merely an interpretation of these conditions."

I think that the Federal Reserve Board and the Federal reserve banks are quite alive to the necessities of the existing situation and that the country may be assured that as and when conditions justify lower discount rates the Federal reserve banks and the board will take the necessary action.

I am inclosing for your information a copy of a public statement of July 29, 1921, issued from the White House, and return Mr. ——— letter herewith.

Very truly, yours,

A. W. MELLON, *Secretary.*

Hon. O. E. WELLER,
United States Senate

Gov. HARDING. I would also like to insert, as a matter of information for the commission, a table made up from the official abstracts of the Comptroller of the Currency, which shows the net deposits—that is, demand deposits plus Government and time deposits—loans and discounts, and also rediscounts and bills payable of national banks on date of comptroller's calls, at various times since September 4, 1906.

The CHAIRMAN. Is that of Federal reserve districts or the United States as a whole?

Gov. HARDING. The United States as a whole, and relates to national banks only.

The CHAIRMAN. Without objection, the table may be inserted in the record.

(The table referred to is here printed in full, as follows:)

Statement showing net demand, plus Government and time deposits, loans and discounts, also rediscounts and bills payable, of national banks on dates of comptroller's calls specified below.

[In thousands of dollars.]

Date.	Net demand, plus time and Government deposits.	Loans and discounts, gross, i. e., including rediscounts, and overdrafts.	Total rediscounts and bills payable.	Percentage of total bills payable and rediscounts to total loans and discounts.
Sept. 4, 1906.....	5,024,641	4,331,459	48,842	1.13
Aug. 22, 1907.....	5,399,367	4,709,027	59,177	1.26
Sept. 23, 1908.....	5,809,887	4,781,522	53,285	1.11
Sept. 4, 1912.....	7,140,596	6,061,009	82,375	1.36
Sept. 12, 1914.....	7,382,621	6,417,910	150,071	2.34
Sept. 12, 1916.....	10,247,920	7,921,070	91,893	1.16
Sept. 12, 1917.....	11,676,340	9,231,289	285,104	3.09
Aug. 31, 1918.....	12,412,213	10,111,113	1,294,005	12.79
Sept. 12, 1919.....	14,561,218	11,541,503	1,505,516	13.04
June 30, 1920.....	15,011,021	13,627,897	2,206,068	16.19

Gov. HARDING. The interesting part which I want to feature is this: This table shows the rediscounts of national banks on the 30th of June, 1920, and on September 12, 1919, and also their deposits and loans. It may be of interest to the commission, in order to show how credits expended between the 12th of September, 1919, which was at the beginning of the crop moving season, up to the 30th of June, 1920, which was before crop moving time began for the 1920 season.

The national banks had, on September 12, 1919, deposits aggregating \$14,561,218,000; they had loans at that time of \$11,541,503,000 and rediscounts and bills payable of \$1,505,516,000. The percentage of total bills payable and rediscounts to total loans and discounts of all the national banks on September 12, 1919, was 13.04 per cent.

On June 30, 1920, the national bank deposits had increased about \$440,000,000, up to \$15,011,021,000; their loans and discounts had increased \$2,100,000,000, up to \$13,627,897,000; and their total rediscounts and bills payable had increased \$700,000,000, up to \$2,206,068,000; and the percentage of their total bills payable and rediscounts to total loans and discounts had increased from 13.04 to 16.19 per cent.

Those figures relate to national banks alone. And the figures as to rediscounts and bills payable do not relate exclusively to their rediscounts with the Federal reserve banks, but they include their rediscounts and credit accommodations with each other.

In order to give you an idea of how the operations of the Federal reserve system have tended to increase the facility with which rediscounts may be obtained, and how they have tended also to increase the volume of rediscounts with the consequent accommodations which that increase involves, I want to call your attention to the figures for September 4, 1906, when the total deposits of national banks were \$5,024,641,000, about one-third what they were on June 30, 1920; and their total loans and discounts on September 4, 1906, were \$4,331,459,000; at that time their total rediscounts and bills payable were \$48,842,000, making 1.13 per cent of their total loans and discounts.

On August 22, 1907, which was only a few weeks before the panic of 1907 eventuated, the national banks had deposits of \$5,399,367,000; and total loans and discounts of \$4,709,027,000; and total rediscounts and bills payable of \$59,177,000, 1.26 per cent of their total loans and discounts.

There was not a single Federal reserve bank last year that had not extended to its member banks accommodations considerably in excess of the total borrowings of all national banks in the United States just prior to the panic of 1907.

On September 12, 1914, just after the outbreak of the European war, when the cotton exchanges and the stock exchanges were all closed, and when we were having issues of emergency currency—that was before the establishment of the Federal reserve banks—the national banks had \$7,362,621,000 of deposits, and \$6,417,910,000 of loans and discounts, and \$150,071,000 of rediscounts and bills payable, or 2.34 per cent of their total loans and discounts.

On September 12, 1916, before this country entered the war, all the bills payable and rediscounts of all the national banks—the Federal reserve system then being in operation—had declined to \$91,893,000, 1.16 per cent of their total loans and discounts.

On September 12, 1917, after we had entered the war and after the first Liberty loan had been placed, the national banks had deposits of \$11,676,340,000; loans and discounts of \$9,234,289,000; and total rediscounts and bills payable of \$285,104,000, or 3.09 per cent of their total loans and discounts.

On August 31, 1918, the percentage had increased to 12.79 per cent, and on September 12, 1919, it had increased to 13.04 per cent.

This shows—and I will give you the actual figures—that the figures of August, 1918, were about a billion dollars higher than all borrowed money that all the national banks had in September 12, 1917, the figures for August, 1918, being \$1,294,005,000.

Of course, that increase is attributable to the placing of Liberty loans during that period for the prosecution of the war.

Between August 31, 1918, and September 12, 1919, loans and discounts increased from \$10,111,113,000 to \$11,541,503,000; total rediscounts and bills payable on August 31, 1918, were \$1,294,005,000; and on September 12, 1919, \$1,505,516,000, the percentage of total bills payable and rediscounts to total loans and discounts on the latter

date was 13.04 per cent of their loans, and is attributable also to the Liberty loan in October, 1918, and the Victory loan in May, 1919. But between May, 1919, and June 30, 1920, there were no new Government bond issues floated at all.

On the contrary, the issues of Government certificates had been reduced during that period; and yet we find that the condition is that all national banks between September 12, 1919, and June 30, 1920, had increased their rediscounts and bills payable \$700,000,000, or from \$1,505,516,000 to \$2,206,068,000, and that the percentage of all national bank borrowings had increased from 13.04 per cent to 16.19 per cent.

Now, I have here, Mr. Chairman and gentlemen, a detailed list of the total loans and discounts made by Federal reserve banks in various agricultural sections—I have not got them from San Francisco as yet, although I telegraphed for them, but on account of the distance they have not reached here yet. I do not wish to place this information in the record, because it is of a private nature; it relates to the dealings of the Federal reserve banks with their member banks. The names are given in each case and ought not to be made public, but I am perfectly willing to let you have this information, if the commission desires it, and to turn this detailed list over to the commission confidentially, and I am sure they can secure from it some interesting information. They can see from it that the borrowings in the larger towns and cities have decreased very considerably between the 30th of June, 1920, and the 30th of June, 1921; while, on the other hand, the borrowings of the smaller banks which are presumably in the agricultural districts, have increased very substantially. Each member of the commission can look over it and see some bank he is familiar with; he may know something about the character of the business that bank has done. The presumption would be, I assume, that the borrowings of a bank located in a purely agricultural community, where there are no manufacturing interests, must have been mainly for agriculture. Here is the list. I will say that two or three Senators had asked me for this information, and I had given it to them, but by their courtesy I have gotten it back for presentation to this committee, with the understanding that I would return it to them. I would be glad to leave these lists if the commission desires.

Now, Mr. Chairman and gentlemen, I would like to discuss the cotton situation, and in doing that, in order to present it intelligently and consecutively, I think I shall have to go back a few years; and I will state in advance that the figures that I am quoting here are from memory and only approximate.

The CHAIRMAN. Are you taking up the cotton proposition now?
Gov. HARDING. Yes, sir.

The CHAIRMAN. Before you go on to that, I want to ask you, if I may, about an announcement which you put in the record, an announcement which was made by a group of woolgrowers, with the consent of the Federal Reserve Board, touching the board's policy with regard to the discount of paper secured by warehouse receipts for the sale of wool. Do you know whether the board's policy with respect to wool was carried out, for instance, by the Kansas City Federal reserve bank?

Gov. HARDING. We heard some complaints regarding that bank's policy. I had some correspondence with the governor of that bank,

but afterwards received assurances from him that in every case where he felt that he could with safety make loans on wool he did so.

However, there is a confusing element that comes into this matter, because all loans of a national bank are limited under the terms of section 5200 of the Revised Statutes of the United States. They can only lend to one person, firm, or corporation 10 per cent of their own capital stock, certain exceptions being provided in the statute relating to bills of exchange drawn against actual existing values, and so on.

In section 13 of the Federal reserve act an amendment was made to the original act some years ago which provided for domestic acceptances. That section originally provided that any member bank might accept for periods not longer than six months bills of exchange growing out of transactions involving exportation or importation of goods; and after a year or two that was amended by adding a further provision that any member bank might accept—the exact quotation is this:

Any member bank may accept drafts or bills of exchange drawn upon it having not more than six months' sight to run, exclusive of days of grace, which grow out of transactions involving importation or exportation of goods.

Then here was the amendment, which is now a part of the law—
or which grow out of transactions involving the domestic shipment of goods provided shipping documents conveying or securing title are attached at the time of acceptance; or which are secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title covering readily marketable staples.

Now, of course, that involves a definition by the Federal Reserve Board of marketable staples, and that definition was given two years ago or more, and it includes all major agricultural products, such as wheat and cotton. But the essential part of that amendment is this, that the acceptance of member banks must grow out of transactions involving domestic shipment of goods. In other words, it does not seem to be the intent of Congress, which limited the lending power of a national bank to 10 per cent of its own capital and surplus to any one particular individual, firm, or corporation, to allow that limitation to be defeated by permitting a bank to accept up to 50 per cent of its capital and surplus, which this act provides for, by taking receipts as security, having the borrower draw on the bank at 30 days, 60 days, or 6 months, and having the bank accept it. The essence of it is there must be a shipment. The law says:

That the aggregate of acceptances growing out of domestic transactions shall in no event exceed 50 per cent of such capital stock and surplus.

So the board has ruled that on domestic acceptances there must be a shipment.

But there are many cases where no ruling of the board is required, for the member bank or the State bank member may lend money on warehouse receipts. There is a limitation fixed on such transactions, and the law does not seem to contemplate that it may be evaded if there is no shipment of goods by having the bank accept up to 50 per cent of the capital and surplus.

In dealing with this question the board has been just as liberal as possible. It has construed this to mean that if a shipment is in contemplation acceptances may be made.

The CHAIRMAN. You know what I am talking about. The governor of the Federal reserve bank at Kansas City states that after a conference with the woolgrowers' committee a statement was made with the consent of the board, and after this statement was made a ruling was made that in order for this paper to be eligible it must apply to goods actually in transit, and the effect of that, of course, was simply to assist to a negligible extent, so far as the wool was concerned.

Gov. HARDING. He was advised, Mr. Chairman, that neither he nor his board of directors had any right to make a ruling as to the eligibility of paper. That power is given by law to the Federal Reserve Board.

The CHAIRMAN. He did make a ruling, did he not?

Gov. HARDING. That power is given by the law to the Federal Reserve Board, and he was informed that he must consider all applications for rediscounts of eligible paper; that then, under section 4, that it was their right to determine whether the loans applied for were safe or undesirable, etc., but they had no power to pass on the eligibility of paper. That is the sole function of the board.

The CHAIRMAN. There has been a great deal of criticism of this action of the Kansas City board?

Gov. HARDING. There has, and there has been something to say on both sides. The board has taken the matter up repeatedly. We have traced complaints, but in the last analysis before we get to where action is demanded, complaints have been withdrawn or disproved.

With all the criticism that has been received by the board as to the conduct of that particular bank, no formal and sustained charges have ever been filed with the board, and nobody has ever demanded that the board remove any officer or director of that bank. We are ready at all times to receive any well-founded complaints and act on them. Now, if complaints come in, general in character, as most of these were, all we can do is to write to the bank and to the complainant and ask for more particulars and investigate those particulars. We have done that in all instances, and there has never been anything that we have been able to uncover which justified any drastic action on the part of the board.

The CHAIRMAN. Was this particular ruling of the Federal reserve bank at Kansas City ever rescinded in any way?

Gov. HARDING. I understand that it is.

The CHAIRMAN. How long after it was made?

Gov. HARDING. Why, I think that within 30 days the governor of the bank and the Federal reserve agent went to Wyoming and Colorado and had a conference with bankers and wool growers, and they advised me they had gotten the matter straightened out. Now, in some cases the bank was clearly within its rights, because what was attempted was to put this wool, for which there was no market—no sale in prospect—in a local warehouse or storehouse; it may be the method of storage was unsatisfactory; it may have been in a place where the stuff could not have been insured; or there would be no shipment in prospect in which circumstances an acceptance equal to 50 per cent of a member bank's capital stock and surplus, would not be permissible under the law. When such a question has been brought up, the board has been obliged to say that those acceptances were not in accordance with section 13 of the Federal reserve act. All the

wool grower could do would be to effect a loan at his bank, in the usual way.

I think a great deal of this misapprehension has arisen because the individuals and the banks interested have not understood the distinction between ordinary loaning by the bank, which requires no ruling, so long as it is within the law, and domestic acceptances.

The board has ruled—although the law says plainly that acceptances may be made against domestic shipments—that where a shipment is in contemplation—where it is shown that there will be a shipment in a reasonable time, it will regard that prospect as a shipment and admit the eligibility of the acceptance. That is as far as we could possibly go under the law.

Are you ready now for me to take up the cotton situation?

The CHAIRMAN. Yes.

Gov. HARDING. I wish to state in advance that, except where I refer to documents or correspondence, I am quoting from memory, and I am not trying to give exact figures. But for the purposes of this commission's inquiry, I think that the approximate figures will be close enough.

In 1912 and 1913 the cotton crops were sold at, I should say, satisfactory figures. Of course, there are always some people who are never satisfied with the price of cotton; they think it ought to be higher. But taking the general sentiment in the South, I think I am safe in saying that the cotton crops of 1912 and 1913 sold at satisfactory figures—at from 12 to 14 cents a pound.

In 1914 there was a large acreage planted in cotton, and the European war broke out on the 1st of August of that year, just at a time when some of the early cotton from the more southern districts in Texas was beginning to come on the market. The war dislocated all financial arrangements all over the world and interfered with transportation. The cotton exchanges were closed for several months, and the stock exchanges were closed; the Federal reserve system had not been established then, and Aldrich-Vreeland emergency currency was issued. German raiders were loose upon the seas, and ocean insurance rates went up very high, and what transportation was available was used for more pressing purposes than the shipment of cotton.

There was considerable congestion for awhile of grain at the ports. When a war breaks out there is a more immediate demand for food-stuffs than there is for cotton.

The situation was very bad in the South in the fall of 1914. It developed that a very large crop was in process of being made ready for the market. The season was favorable, and I think the actual output of that crop was between 16,000,000 and 17,000,000 bales of cotton; the largest crop of cotton ever produced in the history of the country, was it not, Senator Harrison?

Senator HARRISON. Yes.

Gov. HARDING. There was no market for cotton. Farmers had their obligations coming due in October, and there was widespread distress that is comparable to that which existed last year and obtains at the present time. Of course, it does not seem as bad now as the present distress is, because things that we have gotten through with and that are over with are never as bad as the unpleasant processes we are going through in the present.

As I remember, the last sales of cotton before the war broke out were at a price between 11 and 12 cents a pound. The market had been weak because, I assume, there were rumblings of war which had been interpreted by the better informed, and then there was a realization that the new crop was going to be an extraordinarily large one. When the war broke out, conditions became very bad, and there was no market for cotton. I remember the "buy a bale" movement was organized, and it created some sympathetic sentiment, and many people bought a bale at 10 cents per pound, but not enough cotton could be sold in this way to do any good. The cotton manufacturers were reluctant to buy cotton, because the cotton exchanges were not open, and they could not hedge on their purchases. And there was talk of cotton going to 3 cents a pound, and the conditions were badly demoralized.

In November, 1914, a cotton loan pool was organized. The Secretary of the Treasury and the Comptroller of the Currency, and the members of the Federal Reserve Board all took an interest in it, and I think the first two officers named did a great deal to get banks and trust companies and individuals interested and to induce them to subscribe to this pool. A prominent banker of St. Louis did excellent work to get it started. And New York bankers subscribed \$50,000,000 to the pool and took an interest in its organization. And certain banks in New York, which I could name, did considerable work in getting it started, and in subscribing and securing subscriptions; and other subscriptions came in. I recollect that over \$2,000,000 was subscribed in Boston, and a considerable amount in San Francisco, and that subscriptions came in from all over the country. The idea was that the total amount of the pool should be \$135,000,000, \$100,000,000 to be subscribed in non-cotton-growing sections, and \$35,000,000 to be subscribed in the cotton-growing sections. And while I do not remember the exact workings of the plan, it was something like this: That in order to receive any benefits from the plan, the bank in a cotton-growing district would have to carry a part of the risk. For instance, if a bank in a cotton-growing district wanted to borrow \$100,000, that it would get \$65,000, or something like that. I will not attempt to give the plan in detail; it was a complicated plan. The point I wish to bring out is this: That what happened, the cotton exchanges being closed down, the first operation was to establish a loan value, and the loan value was fixed, if I remember correctly, at 6 cents a pound, less a 3 per cent guaranty fund, which brought the net down to something like 5½ cents a pound, and while the pool had a good sentimental effect the loan value very naturally had the effect of establishing, in a way, a market price for cotton, and the result was that most of the cotton sold in the fall and winter of 1914 was sold on a 6-cent basis.

In 1915, after the *Emden* and other German raiders had been destroyed, and the sea cleared, the situation improved. In 1916, 1917, 1918 and 1919 the South was prosperous.

In 1919 I accepted an invitation to address a joint session of the South Carolina Legislature, at Columbia, and I talked about cotton exports; from there I went to Memphis, and from there to Texas, to Dallas, Houston and Galveston. I was fearful that as the war demand for cotton ceased—and during the war there was a great demand for cotton, and especially for the lower grades of cotton, for

use in the manufacture of explosives for projectiles—there would be a slump in the cotton market in 1919, which really took place in 1920.

And in my speech at Columbia, before the legislature, and at Memphis, and before the commercial bodies in Texas, I suggested that they seriously consider the formation of finance corporations to aid in the export of cotton. I told them I feared that unless something was done to make it possible to finance it on longer credits than could be obtained in the ordinary channels and to assist in selling the normal amount of cotton to Europe, under the circumstances then existing, that the South might find itself unable to send abroad the normal proportion of cotton that it had been accustomed to export.

It is a well-known fact that more American cotton is raised than there is any American demand for. Take the Texas crop, for instance. Texas raises more cotton than any other State. I understand of the Texas crop fully 80 per cent is exported; only 20 per cent goes to the domestic manufacturers. Of course, when you come to Georgia and the Carolinas where they have many cotton mills, a large proportion of the crop goes to the nearby cotton mills. Taking the South as a whole, I should say, in round figures—not quoting exactly—about 50 per cent of the cotton crop is exported and the rest is used at home.

That is a larger proportion of exportable surplus than exists in any other staple agricultural product and I believe it is a larger proportion than exists with any of the metals. So you can see how very sensitive the cotton market is to foreign demand.

Now, there isn't any use in relying too much on statistics in the cotton market. You can prove a lot of things by statistics, but I am not going deeply into statistics. You recollect the old saying that there are three kinds of lies: Lies, damned lies, and statistics. Statistics are useful, but they are very misleading, unless we use them correctly.

Nor was there any use in figuring in 1920 on how much cotton was consumed in Russia before the war, or in Poland, or in Austria, because the fact that people are in need of a commodity does not create a demand for that commodity; in order to create an economic and actual demand for a commodity, there has got to be not only the need for it, or the desire of the people to have the commodity, but there has got to be the ability on the part of the people to procure it, either by means of cash or credit; otherwise the theoretical need does not amount to a row of pins.

The condition which I anticipated and which I warned the southern people about in the spring of 1919 did not materialize until the fall of 1920. The reason, I think, was due primarily to the fact that the shortage was so great in Europe for certain goods that a certain amount had to be had on any terms; but more particularly to the fact that the credits which the Congress of the United States voted during the war to other Governments associated with us in the war, amounting in all to about \$10,000,000,000, had not been exhausted; there still remained, when the armistice was signed, about \$2,500,000,000 available to those nations, and this remainder was used largely to facilitate our exports to Europe in the summer and fall of 1919.

But as the season of 1919 advanced, if you will look at the figures I gave this morning, cotton went up; in the fall of 1919 it went up

to about 40 cents. The maximum price, as shown by New York quotations, was 43.75 cents on the 23d of July, 1920.

But a curious situation developed. The demand for cotton in the South was for particular grades. Now, cotton is a peculiar commodity. I presume there are more different grades of cotton than there are of any other merchantable commodity. It depends, largely, not only upon the kind of cotton that is planted in the ground—the seed or variety—it depends upon the soil; it depends upon the climatic conditions; it depends upon the amount of moisture the ground receives during the growing season, and it depends very largely on the care with which cotton is picked and ginned and prepared for market. If there is a rain just about the time cotton is ready to be picked and a lot of dirt gets beaten into it, or the cotton gets stained, all that affects the price. Then there is what we call bumblebee cotton—a plant about 9 or 10 inches high, growing on the hillsides. This is low-grade cotton and has a short staple. Ordinarily the differentials in price are based on what are called middlings. If cotton grades as middling, that is the standard; and if it is middling fair, it commands a premium, but on low middling the buyer gets a concession, the differential increasing with each lower grade.

The great outlet, normally, for low-grade cotton has been Germany. I am told that German manufacturers have the machinery and have the peculiar type of labor which will enable them to take a low-grade cotton and to shake out all the dirt and leaves and trash that may be in it and make good spinnable cotton, and that they find it more profitable to buy this low-grade cotton in America and make it fit for spinning than they do to buy good spinnable cotton in the first instance. But our American mills, as a rule, have no use for the lower-grade cotton. Some of the lower grades are used in the manufacture of mattresses.

But, owing to the inability to ship cotton to Germany in the fall of 1919, there was a large amount of low-grade cotton held over. That was one of the threatening things hanging over the cotton market in the spring of 1920. Not only that, but the boom spirit was on. I do not want the gentlemen of this commission to blame my fellow citizens of the South for the view they took. It was only natural that they should take the same view that people in other sections took. Cotton was their great staple; they were familiar with it; they were pleased at the price it brought, although the high prices received did not avail them much, in exchange for goods and services, for the reason that everything was high, and many felt that they were not getting all they should get for cotton. While they were getting three or four times as much for cotton as they formerly did, they had to pay correspondingly for what they had to buy.

It was perfectly natural that they should want a higher price; they felt, as everyone feels, that they should get what they were entitled to. There was plenty of argument on their side. However, there was a great deal of holdover cotton and the banks were not carrying all of it. Much was held by owners without the aid of loans. I think that in the fall of 1919 there was more prosperity in the South than there had ever been in the history of that section. I know of cases where negroes on Mississippi farms would buy pianos, victrolas, and automobiles. I know of one case where a negro farmer, a good respectable man, acquired a competence and bought land; and during

this period of prosperity he bought an automobile for himself and two for the members of his family; three automobiles in that family.

There were other cases where both negroes and white men, who had farms and raised long staple cotton in the delta country of Mississippi, for which they received high premiums, went heavily in debt in purchasing additional land. They raise long staple cotton in the delta counties of Mississippi, and in Arizona and California, where they irrigate. Often a man who had a farm of 250 acres, on which he raised a bale of cotton per acre, selling at, say, \$500 a bale, would look around to see if he could get more land, and if he could he would make a payment down and sign notes for deferred payments on his land. There was a great deal of trading in land not only in the South, but also in Iowa and other Western States.

But all this time there were 5,000,000 bales of unsold cotton hanging over the market.

In the spring of 1919 there was a movement to curtail the cotton acreage. People were cautious then. It was right after the close of the war, and many felt that probably a reaction was coming in the fall of that year. I recall an association which was formed in the South, the American Cotton Association, in the spring of 1919, and many of the best people of the South were and are connected with that organization; there were State and county organizations, all over the cotton-growing States. This undertook to effect a reduction in cotton acreage and held many meetings and discussed the matter in various localities. Some success attended their efforts, but nevertheless a good acreage was put in cotton.

In the spring of 1920, although the quotations for the higher grades of cotton were satisfactory, and other grades could be sold at a discount, there wasn't any snap to the market. The quotations were there all right, but if a man would offer very much at any one time he was apt to find he could not make a sale unless he would make concessions. Some of the low grades could hardly be sold at any price.

In the meanwhile the season was propitious. The August statement of the Department of Agriculture indicated a yield—if I remember correctly—of 12,500,000 bales, and the actual outturn of the 1920 crop, as since reported by the Department of Agriculture, was greater, 13,365,000.

Meanwhile economic and financial conditions in Europe and in Great Britain, especially, were not satisfactory. Europe had its troubles of various kinds—political, economic, and financial. My recollection is that in England there was a very serious coal strike; a strike which threatened to tie up all the transportation lines on two different occasions. And the depression in Great Britain has been even more pronounced than has been the depression in this country. And it began to be noticed that our exports were falling off. Then, as I have already stated, all the indications were, in the opinion of students of economics, that we were in for a period of reaction; that the reaction which many anticipated in 1919 was merely postponed, and was due to come with greater force in 1920.

I am going into these things particularly, because I want to explain exactly what the board's position was with respect to cotton.

Personally, I had an additional responsibility. As I said this morning, I am the only member of the Federal Reserve Board from the cotton section; and members have always shown me the courtesy

of being guided largely by my views on credits based on cotton. I want to repeat what I said this morning, that all my material and sentimental interests are decidedly with the cotton farmer; if there was anything I could have done to strain a point personally, or anything I could legitimately have done officially to have helped the cotton farmer out, I would have done so. But the situation, as I saw it in the spring of 1920, was that cotton was in for a tumble.

There was this unsold stock held back, largely of low grades and unsalable grades, which had formerly been sent to Germany to be worked out, and as it turned out the total supply of American cotton in the fall of 1920 was between 17,000,000 and 18,000,000 bales; 4,000,000 or 5,000,000 bales held over of the old crop and 13,000,000 bales of the new crop; and the only thing to look forward to was the American and Canadian consumption, which began to show signs of falling off, and the diminishing exports to Great Britain and the Orient. There was little hope in the European demand.

I am bringing this out because I shall speak of present prospects in a moment. I want to show statistically what the situation was last year.

We had already had the slump in silk, and had seen the wool market go down until wool was not salable at any price. We could not see how, with those other two great textiles slumping as they did, with the demand for cotton goods falling off, with the exports falling off, anything could be done to sustain the price of the other great textile, cotton.

I have explained to this commission already the banking considerations involved, and the duty of the banker, and so on, and I will not go into that again. But I want to tell you what policy we tried to pursue. We felt that that cotton situation was fraught with great danger. Even handled to the best advantage, it would undoubtedly be very serious. We felt that it would be absolutely futile, even if we had any legal power to do it, to attempt to throw the resources of the Federal reserve system back of the cotton situation and to attempt to hold up prices.

As I have already stated, the Federal Reserve System can make advances only through member banks. In other words, there must be a member bank to initiate a loan. Some of the banks were afraid of conditions, and would not make extensive cotton loans; other banks had cotton loans and were afraid to take on more.

Now, if the Federal Reserve Board had issued encouraging statements and manifests advising "Hold on to your cotton; it is going up," when we did not think it was going up, or that it could advance, we would not only have been dealing in falsehoods, in those circumstances, but we would have been a party to an attempt to keep up a fancied security, and many might have been lulled into a feeling of security, and would immediately have tried to secure loans, thus having a burden of debt over them, while the actual movement of cotton would not have been accelerated, and when the crash came it would have involved the banks just as the Cuban banks were involved in the sugar slump.

It was a situation which seemed to me to call for silence. I did not want to talk cotton at all. I was invited to a conference on the cotton situation in Montgomery, Ala., in April, 1920. I could not go for some reason or other, but I sent down a thesis on the subject of the orderly marketing of cotton.

Now, Mr. Chairman, I desire to read some correspondence which I had with Mr. J. S. Wannamaker, a banker, and also president of the American Cotton Association. He is a man who exerts a large influence in the South, because his organization has ramifications all over the South. I wrote to him very frankly and confidentially. I do not know that he ever availed himself of any of the advice I gave him, nor have I ever seen any quotations from anything I said to him, but I felt I was going as far as I could, when I was communicating with the official head of a great organization of Southern people engaged or interested in the production of cotton, and told him what I thought of things. There was certainly no undue publicity given to my views, and no harm was done by my letters.

I will not burden you with all of Mr. Wannamaker's letters. Some of you may have had letters from him. They are frequently very long.

Here is my letter to him of June 24, acknowledging receipt of his letter of the 21st instant.

Representative TEN EyOK. What year?
Gov. HARDING. 1920. [Reading:]

JUNE 24, 1920.

DEAR MR. WANNAMAKER: I have received and carefully considered your letter of the 21st instant. There is no doubt that the disposition of off-grade cotton is going to be a serious problem and for some time past I have been giving this question a good deal of thought and study. Of course, the solution lies in opening up central European markets, which I think can be done only by the extension of credits longer than usual commercial credits.

The first Federal foreign banking association has recently been organized and is now ready for business. Mr. A. H. Titus is president, and its offices are located at 40 Wall Street, New York City. This corporation was organized under the terms of the Edge Act, and I would suggest that you communicate with them and draw them out in the matter of financing, say, 10,000 bales, to Germany, Austria, and Poland.

I hope that you will drop in to see me the next time you come to Washington. and am, with kind regards,

Sincerely, yours,

Mr. J. S. WANNAMAKER,
President American Cotton Association, St. Matthews, S. C.

That association has a small capital and does a conservative and comparatively small business; I did not think it could do very much in the matter, but I did not know but that it might take on a small amount and show how the business could be done.

I got a letter from Mr. Wannamaker on June 28, 1920, in which he says [reading]:

Through investigations made abroad, we find that there will be no trouble whatever to sell the cotton, the only trouble being finances for moving it. If we can market this cotton it will prove a wonderful relief and protection to the producers and our entire banking system.

There are two or three pages of this letter.

Now, under date of July 3, 1920, I wrote to him as follows [reading]:

DEAR MR. WANNAMAKER: In reply to your letter of June 28 I would state that I have a very close friend who is now abroad and who told me before leaving that he would pay particular attention to the matter of selling cotton to Germany, German Austria, Poland, and Czechoslovakia. It will be several weeks, however, before he returns, and until he gets back I am afraid I will not have any constructive suggestion to offer.

The new crop is beginning to appear in Texas and I presume that in Georgia and South Carolina it will be in evidence in the course of the next five weeks. It seems

to me that farmers having low grades on hand will have to sell some of their new high-grade cotton in order to put themselves in position to hold onto their low grades until there is a market for them.

With assurances of my sympathetic interest in the problems which are confronting you. I am,

Sincerely, yours,

Mr. J. S. WANNAMAKER, *St. Matthews, S. C.*

Senator HARRISON. What was he trying to get you to do; what was the occasion of his writing to you?

Gov. HARDING. Well, he used to write to me every few days without any particular occasion. I do not want to burden this commission with reading all of his letters. I will be very glad to read them if you want to hear them.

Then he wrote me a letter on July 9, 1920, and I acknowledged it on July 12, 1920. [Reading:]

DEAR MR. WANNAMAKER: I have your letter of the 9th instant and am sorry to say that I can not see any very bright prospects ahead for the cotton producers. The low grades are going to be hard to sell, and should it be deemed wise to nurse them along it may be necessary for the growers to sell rather liberally of their higher grades in order to be in position to hold the lower. The situation ahead of the cotton belt this fall is what I expected it would be last winter when in the spring of 1919 I was advocating the organization of a great southern cotton export finance corporation. By some means or other cotton exports were financed last season, but the outlook this year is by no means so good.

Very truly, yours,

Mr. J. S. WANNAMAKER, *St. Matthews, S. C.*

Now, here is another letter that he wrote me on July 9, 1920, as follows [reading]:

MY DEAR GOV. HARDING: I am extremely anxious to have you deliver an address before a mass meeting of the farmers, merchants, bankers, business and professional men, to be held in Columbia, S. C., on August 18. This meeting will be one of the most important and largely attended that we have ever held in this State. People are intensely interested concerning finances and financial affairs and the request that we invite you to address this meeting comes from every section of the State and from every line of industry named above.

I sincerely hope that you will accept this invitation. Use your own discretion as to the subject of your address. This address will prove of great benefit and will receive marked attention not only of the people of our State but by the cotton-producing industry of the entire South, who feel greatly concerned over existing conditions and who feel that relief will come through the great Federal reserve banking system, and I know that if it is possible to render the service that this relief will come through your own good self.

Assuring you of highest personal regards, I am,

Very sincerely,

J. S. WANNAMAKER, *President.*

I acknowledged receipt of that letter on July 12, 1920, as follows [reading]:

DEAR MR. WANNAMAKER: I have your letter of the 9th instant, inviting me to deliver an address before a meeting of farmers, merchants, bankers, and business men to be held in Columbia, S. C., on August 18. I regret very much that I can not accept your invitation, as one or two of the members of the board will be away on their vacations at that time and it will be necessary for the rest of us to remain in Washington in order to maintain a quorum of the board.

Have you considered extending an invitation to any of the Federal reserve bank of Richmond?

Sincerely, yours,

Mr. J. S. WANNAMAKER,
President American Cotton Association, St. Matthews, S. C.

Here is a letter I wrote in July, 1920. I want to call the commission's attention to the fact that the highest price cotton ever reached in over 50 years was reached on July 23, 1920. Of course, that was the New York cotton exchange price quotation, 43.75 cents. I wrote Mr. Wannamaker under date of July 21, 1920, as follows [reading]:

DEAR MR. WANNAMAKER: I have received your letter of the 17th instant with inclosures, which I have read and return herewith as requested.

Several days ago I received a letter from the Acting Secretary of Agriculture calling attention to the pressure of low-grade cottons upon the market and stating that agents of the department had been advised that the impression is prevailing that the Federal Reserve Board had instructed member banks to make no loans on cotton except such as had actually been sold and was in the process of transportation. I inclose for your information a copy of the board's reply.

This is a copy of the letter which I inclosed to Mr. Wannamaker, addressed to Hon. E. D. Ball, Acting Secretary of Agriculture. This letter is dated July 16, 1920. [Reading:]

DEAR SIR: I acknowledge receipt of your letter of the 14th instant in which you refer to the pressure on southern markets of large stocks of low-grade cotton.

This is dated July 16, 1920. I am not telling you here to-day of new matters, but I am telling you what I wrote at that time. This was written more than a year ago, July 16, 1920. The letter proceeds (continuing reading):

You say: "It was stated to a representative of this department that the Federal Reserve Board has issued instructions to member banks not to make loans on cotton unless shipping instructions therefor were shown the bank— in other words, that member banks were forbidden to finance cotton unless it had been already sold for prompt shipment."

The Federal Reserve Board has issued no such instructions. It has no power to require member banks to make or refuse any loans which they may wish to make. Member banks are required only to live up to the requirements of section 19 of the Federal reserve act relating to reserves, and the national banks can engage in all transactions which are permitted under the Revised Statutes of the United States and of section 13 of the Federal reserve act. State banks which are members retain, under the provisions of section 9 of the Federal reserve act, all of the powers derived from their State charters and continue to be subject to the supervision of their respective State banking departments.

The board has not been advised of any circulars issued by the Federal reserve banks in the cotton-growing districts giving advice to member banks as to what loans they should make or decline to make, and the board would request that you ask your representative who has given you the information conveyed in your letter to me to transmit any such circular, if any are in existence, or else to state how he received his information as to the alleged advice to member banks. Perhaps some confusion has arisen as to the distinction between loans on cotton and domestic acceptances against staples in warehouses.

The board did rule several months ago that member banks could not accept against warehouse receipts in cases where no immediate sale was contemplated. The law permits member banks to accept drafts and bills of exchange "growing out of transactions involving the importation or exportation of goods, or which grow out of transactions involving the domestic shipment of goods, provided shipping documents are attached at the time of acceptance," etc.

In order to facilitate the financing of this year's crops, the board requested Congress early in the year—

Now, we saw this thing coming and did not lose any opportunity to protect it if we could. [Continuing reading:]

the board requested Congress early in the year to amend section 5200 of the Revised Statutes. This section originally restricted loans by a national bank to any one individual, firm, or corporation to an amount not exceeding 10 per cent of the bank's capital and surplus. Congress, however, acted upon the suggestion of the board, and section 5200 as amended now provides that for a period of 6 months out of any con-

secutive 12 months a national bank may lend to an individual, firm, or corporation up to 25 per cent of its capital and surplus where loans in excess of the regular 10 per cent limitation are secured by warehouse receipts for readily marketable staples.

In all of the criticism of the Federal Reserve Board and myself, personally, I have not seen anything about the real facts. There has been a great deal of talk about this and that, but none of these critics has had decency enough to present these facts. Here is something we did, and I have no doubt it had something to do with aiding the situation. The board foresaw this depression coming and sent a bill up here to Congress and asked Congress to pass it, and Congress did pass it. I think some of our critics ought to mention these things. [Continuing reading:]

The accumulation of low-grade cotton is due in part to the difficulty in making financial arrangements necessary to sell it to mills in the central European countries, which have always been the principal consumers of low-grade cottons. The member banks in the South no doubt feel reluctant to carry too large a volume of loans on collateral which is not readily salable.

This is to the Acting Secretary of Agriculture. [Continuing reading:]

You say that "prior to the enactment of the Federal reserve act there were independent banks in the cotton belt which made it a practice to lend on cotton as collateral" and that "most of these banks are now members of the Federal reserve system, and their policy as to loans is largely determined by regulations of the Federal Reserve Board." As a result of the changes in the banking law made by the Federal reserve act, the lending power of all banks has greatly increased since 1914.

I have read to you a table showing how the discounts had increased. [Continuing reading:]

The banks in the cotton belt, in cases where they are not over loaned in other directions, can make much larger loans on cotton this fall than ever before. To what extent, however, these banks will be able to rediscount at the Federal reserve banks I am unable to say. Section 4 of the Federal reserve act requires the board of directors of a Federal reserve bank to administer the affairs of the bank "fairly and impartially and without discrimination in favor of or against any member bank or banks" and that said board "shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks." I feel sure, however, that the Federal reserve banks will do all that can reasonably be expected of them to aid in the orderly marketing of the cotton crop.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Hon. E. D. BALL,
Acting Secretary of Agriculture, Washington, D. C.

Now, I inclosed a copy of that letter to Mr. Wannamaker when I wrote him under date of July 21, 1920, and I will now proceed with the reading of that letter. [Reading:]

As you know, the Federal reserve banks can not make loans direct to producers; they can only discount notes for member banks. The live-stock people and the wool-growers appear also to be badly in need of assistance, and it is the board's policy to do everything within reason to help them. It is manifestly impossible, however, for the banks of the Federal reserve system to enable producers of essential agricultural commodities to hold back their entire product from the market, and even if it were practicable to do so, it would be bad public policy.

You do not want to be selling two crops when you should be selling only one. Here was the situation at that time. The new fall crop of cotton was coming on the market, so that instead of 13,000,000 bales, there were 18,000,000 bales to be sold, and the market was very

dull. That was the whole trouble. The inability of our country to send abroad the usual proportion of our staples and the inability to sell here broke the market. [Continuing reading:]

The board went on record several years ago in favor of a policy looking toward the orderly marketing of crops, and it has adhered consistently to that position.

Now, listen to this about the maximum price. [Continuing reading:]

I notice that current quotations for the better grades of cotton are about at the maximum.

Grades for which there is an active demand are more readily available as collateral at banks than those for which there is no market.

Representative SUMNERS. What is the date of that?

Gov. HARDING. July 21, 1920.

Representative SUMNERS. What was the date of your letter to Mr. Wannamaker, approximately?

Gov. HARDING. I wrote to him very frequently. It is all shown in the record. May I finish this?

Representative SUMNERS. Yes; I withdraw the question.

Gov. HARDING. I do not want to miss the point here. [Continuing reading:]

As a rule the cotton produced by any one farmer is not of uniform grade, and in view of the difficulty of finding a satisfactory market for the low grades I would suggest that instead of relying upon the ability of banks to make loans of indefinite duration on the security of the low-grade and unsalable cotton it would be better policy for producers to sell the better grades for which there is a market, thus placing themselves in position to hold the low grades until a market for them develops, without being dependent upon bank accommodations.

I did not make this public; I wrote this to the president of the American Cotton Association to do what he pleased with it. I presume he put it in his pocket; he did not act upon it. [Continuing reading:]

The Federal Reserve Board appreciates the importance of fostering agriculture and will do all that it can consistently do to help the farmer—not only the cotton producer, but the cattle man, the woolgrower, and the wheat farmer—to market his product in an orderly manner without being forced to sacrifice the fruits of his labor; but in order to achieve the best results it is necessary that the board have cooperation all along the line—from the Federal reserve banks, from the member banks, and from the producers.

It has never been possible to withhold a great staple crop entirely from the market, and such action is not feasible now under the Federal reserve system, for the amount of money and credit involved is too great; but when a reasonable discretion is used in marketing our major crops it has always been found that the peak of the pressure comes early in the season and that the stringency is of short duration, for the amounts received from early sales liquidate indebtedness and tend to ease the situation so that the process of marketing may be continued over a period of months without bringing about aggravated financial conditions, which would inevitably depress instead of enhance the market value of the staples.

I hope, therefore, that you will urge your friends to sell their better grades at the prevailing prices.

It was at the top right then, and it did not go down to 25 cents until the 1st of October, as you will see by the chart presented. They had until the 1st of October to get better than 25 cents a pound for their middling cotton. [Continuing reading:]

Thus putting themselves in position to hold their low grades with the minimum of assistance from banks instead of using the high grade cotton as a basis for loans. An overextended banking situation in the South, particularly in view of general conditions throughout the country and in Europe, would be very dangerous and would,

in my opinion, inevitably lower the price level for agricultural staples held back as a basis for loans.

I would suggest further that it would be advisable for representatives of cotton producers to discuss the situation with bankers throughout the cotton belt and through them keep in touch with the Federal reserve banks of Richmond, Atlanta, St. Louis, and Dallas. The Federal Reserve Board is authorized to determine or define the character of paper eligible for discount within the meaning of the Federal reserve act and has general supervisory powers over the Federal reserve banks, but the routine work of a Federal reserve bank and the power to pass upon the paper offered it for discount is under the supervision and control of the board of directors of the reserve bank, who are charged under the law with the performance of the duties usually appertaining to the office of directors of banking associations.

Representative TEN EYCK. Have you any way, Governor, of knowing how much of the better grades of cotton were sold between the date of that letter and the date in October when it went down to 25 cents?

Gov. HARDING. I do not know. I only know of specific cases where cotton was held. I seriously thought of going to the convention and of making that kind of talk to those in attendance. But if I had done that, they would immediately have said that I was trying to break the price of cotton, if I made any public utterance on that matter, and, therefore, I thought the better thing for me to do was to write in this way to the president of the association, getting the information to him, and having him use it in a way that would benefit the members, and in that way it would come quietly from inside the cotton growers' organization.

Representative TEN EYCK. Were there any other statements or speeches made about that time on the subject?

Gov. HARDING. I do not know of any other statements that were made advising the farmer to sell his cotton. Other statements were urging him to hold and telling him cotton would go to 50 or 60 cents a pound.

Senator HARRISON. Not all of them.

Gov. HARDING. No; many of them—not all of them. Bear in mind this, also: The farmer found after he got done buying some things he had to have, he did not have any money left. The price of cotton, relatively, was not high enough.

Representative TEN EYCK. I wonder whether anybody had the nerve to get out and tell them what they thought.

Gov. HARDING. I would have told them that. I never have found myself yet in a position where I was afraid to tell what was on my mind. But I restrained myself, because I doubted whether it was good policy to talk.

Representative TEN EYCK. You have a dual capacity?

Gov. HARDING. I am not a talkative man; I do not talk unless I am obliged to talk. I usually sit in my office and do some thinking and reading.

Now, on July 25, 1920, Mr. Wannamaker wrote me as follows [reading]:

MY DEAR GOV. HARDING: I have read your several letters with great interest and wish to assure you that I appreciate the same very much.

Then he goes on to tell me that he has been sick, and then continues [continuing reading]:

I am very anxious to release to the press throughout the South, and also to the Northern press, something from you concerning credits on cotton, either the letter you wrote on this or a special letter prepared for publication. If you have the time to prepare a special letter it would answer the purpose much better, when you under-

stand the facts. Certain people are conducting a tremendous campaign for the purpose of destroying the confidence of the producer and friendly allied business interest in their ability to market their cotton crop this fall, based upon supply and demand. They insist that credits will be absolutely lacking; in fact, they have conducted this campaign to such an extent that a tremendous amount of cotton has been already sold here for fall delivery at prices far below the cost of production. It is conservatively estimated that from two and a half to three million bales of cotton have been sold for September and October delivery at from 33 to 35 cents per pound, basis middling. Our committee on the cost of production is composed of some of the most able economists in the country; they inform me that the present cotton crop will be the most costly ever produced, and while of course they can not issue an intelligent statement on the cost of production until the harvesting time, at the same time there is no scintilla of doubt as to the enormous cost of production. The labor question is quite serious, both on account of the shortage of competent labor and the high price demanded for same. By reason of the fact that the markets for off grade cotton is practically sealed up and also due to the fact that the New York bears continue to control the New York exchange market, running it up and down at their own sweet will, usually keeping the price of spot cotton from 800 to 1,000 points above futures, is all adding to the alarm of the producer and inducing the sale of cotton at far below the cost of production. Merchants and bankers are becoming alarmed; they fear a repetition of 1914.

In talks with many friends they do not hesitate to state that they know they are selling cotton below the cost of production and that the world is in need of 15,000,000 bales of American cotton, but at the same time they are convinced that there will be absolutely no credit extended for the carrying of cotton this fall and that we will be absolutely at the mercy of the bear gamblers and that self-preservation is the first law of nature and for this reason they are attempting to protect themselves to some extent by selling cotton while they have an opportunity to do so, as they are convinced that on account of the withdrawal of credits we are almost facing a repetition of 1914. As to this, it is, of course, absolutely farcical. I have to-day a letter from Dr. Todd, who is recognized as one of the foremost English economists and he frankly and bluntly states that there will be a need of 15,000,000 bales of American cotton from the growing crop. This estimate is confirmed by many leading economists.

Now, here is a long letter which tells me about the desperate need for cotton in Germany, Austria, Poland, and Czechoslovakia, and so on. There are about 10 pages of this, and I will not take the time of the commission with it.

On July 28, 1920, Mr. Wannamaker wrote me, after I had written him that I could not come to Columbia on August 18. I want to read this to show you how sentiment can change, even in the South, as in any other section. [Reading:]

MY DEAR GOV. HARDING: It is of course a great disappointment to me and your many other friends, both bankers, merchants, and producers, that you can not be with us on August 18, and we are so extremely anxious to have you fill the engagement that if you find it impossible to be with us on the date named we will gladly make a change in this date. The people hold the most profound regard for you as a man and appreciate most deeply the great service you are rendering to the South and to the Nation, and will be more influenced and guided by your advice than by the advice of any other man that we can secure.

It will be a distinct disappointment to me personally if you can not fill this engagement. I am firmly convinced that as the result of your filling this engagement it will promote the interest of the great Federal reserve system, one of the greatest pieces of constructive legislation ever put on the statute books, this being fully demonstrated by the remarkable service performed during the war. Personally, I believe if it had not been for the Federal reserve banking system that the length of the war would have been greatly extended and the result might have been far different and there is every possibility that the financial effect upon the Nation and the world would have been most disastrous.

I am extremely anxious to have you fill this engagement on account of the Federal Reserve system and on account of the American Cotton Association, the economic handling and marketing of American cotton and the placing of the agricultural interests of the South upon a business basis. I sincerely hope that you can reconsider your decision in this matter and comply with our request.

Please let me hear from you.

Assuring you of highest personal regards, I am,

Very sincerely,

J. S. WANNAMAHER, *President.*

91841—22—VOL 2—26

That was written on July 28, 1920.

I wrote Mr. Wannamaker on July 30, 1920, as follows [reading]:

MY DEAR MR. WANNAMAKER: I have received your several letters of recent date. Personally I would like very much to go to Columbia and address your meeting, and while I might be able to arrange to go there on the 18th of August, I am wondering whether an address by me at this time would be of any real benefit. I could not, of course, make insincere statements and I am by no means sure that what I would be obliged to say would be well received or that the present is an opportune time for me to discuss any question except from purely a banking standpoint. Sometimes, as you know, silence is golden, and this may be the case at present.

However, I will think the matter over very carefully and will write you definitely some time next week.

With kind regards, I am,

Sincerely, yours,

W. P. G. HARDING.

Now, here is a letter which I wrote to Mr. Wannamaker on August 4, 1920 [reading]:

DEAR MR. WANNAMAKER: When I wrote you last, I stated I would let you hear definitely from me some time this week as to whether I could attend your meeting in Columbia on the 18th instant. I regret very much that it will be impossible for me to leave here at that time and with the pressure of work ahead of us, I do not feel safe in suggesting any other date.

I have carefully considered your suggestion that I prepare some statement for the press on the cotton situation but have reached the conclusion that it would be unwise to do so. I am inclosing for your information copy of a letter which I wrote to-day to Mr. Joseph O. Thompson, general manager Alabama section, American Cotton Association, which relates to the board's ruling as to the eligibility of factors' paper.

I am leaving to-morrow for Atlanta on a flying trip and will discuss the cotton situation with the directors of the Federal reserve bank there on Friday, but I will be obliged to be back in Washington on next Monday morning. I would suggest that if you can you go to Richmond and confer with the officers of the Federal reserve bank there in order that you may have a definite understanding as to the policy of the bank in the matter of cotton loans. The four banks in the cotton-growing districts are all rediscounting heavily with other Federal reserve banks and the aggregate of rediscounts by these four banks with other Federal reserve banks is more than \$100,000,000. The board has received assurances from all of them that it is their intention to do all they can under the terms of the Federal reserve act and with reasonable regard for safety to facilitate the movement of the cotton crop.

It seems to me that among the adverse conditions in the cotton market just now are the following: (1) The Government report indicating a yield of about 12,500,000 bales. (2) Bolshevik invasion of Poland, (3) adverse exchange conditions in England and on the continent, (4) slowing down of the textile industry, and (5) the slump in silk and wool.

If I were to make a comprehensive statement or address I would be obliged to refer to these conditions and I do not know of any favorable factors with which to offset them, except the theoretical world shortage of cotton. I do not want to say anything that would interfere with the efforts you are making or to scare anyone, and therefore, I think the best thing for me to do at the present juncture is to keep quiet.

Sincerely, yours,

W. P. G. HARDING.

I received a reply to that letter, saying [reading]:

MY DEAR GOV. HARDING: I have read your three letters with much interest.

I sincerely hope that you can find that you will be able to be with us on August 18. It is barely possible that we may change this date to a few days later; if so, I will immediately notify you.

I feel convinced that your address will bring much benefit, and many friends are persistently urging us to use every effort in our power to induce you to be present at that time.

Please let me hear from you as soon as possible.

Assuring you of highest personal regards. I am,

Very sincerely,

J. S. WANNAMAKER, *President.*

I sent a telegram on August 24, 1920—I sent two telegrams, but I will read the shorter one first. They were having their meeting of the cotton association at Columbia, S. C., at that time. [Reading:]

J. S. WANNAMAKER,

*President American Cotton Association,
Liberty National Bank Building, Columbia, S. C.:*

In order that you may be fully informed of the extent of the assistance rendered by other sections of the country to the cotton-growing regions, would state that the Federal reserve banks of Boston, New York, and Cleveland, have under discount to-day for the Federal reserve banks of Richmond, Atlanta, St. Louis, and Dallas paper amounting to \$120,000,000.

I will state that at the peak of the strain last winter the Federal reserve bank had discounted for its member banks in North Carolina and South Carolina approximately 500 per cent of the basic line of the borrowing banks in those States, an amount aggregating \$58,000,000, which is only \$1,000,000 less than all the banks had rediscounted at a period in August, 1907, just before the panic of that year. I have the detailed list here showing the advances made to the various banks, if the commission desires to see it. These discounts were given to the member banks, and it was the business of the member banks as to what they did with it; they treated the individual cases. But we did everything we could do to help out the situation.

I want to read you my statement to Mr. Wannamaker. I finally yielded to Mr. Wannamaker's urgent request and sent him a statement by telegraph. Here is his telegram to me [reading]:

W. P. G. HARDING,

Governor Federal Reserve Board, Washington, D. C.

All buyers have withdrawn from cotton market. Manufacturers claim can not sell manufactured product. Combination beating down price and floating South with bear propaganda urging sell cotton and insisting Federal Reserve will only extend credits for harvesting of crops, but will not permit warehousing of same, and holding until there is legitimate demand from manufacturer above cost of production. This is most costly crop ever produced, and if South unable to secure finances enabling them to warehouse cotton, but is forced to sell regardless of price, then we are facing calamity which will bring serious conditions not only to producer but to every legitimate line of cotton industry, and this in face of acknowledged fact that world is in need of enormous increase in raw cotton production—

He overlooks the distinction between need and demand, you see. [Continuing reading:]

and that, based upon supply and demand, producer entitled to price above cost of production. Every State in cotton belt holding convention. Beg you telegraph me prior to convention to-morrow, Wednesday, in Columbia, which convention will be attended by representatives of agricultural and commercial interests of various cotton-producing States, acceptance to invitations showing attendance of three to five thousand that Federal Reserve will extend necessary credits to enable producer to harvest his crop and warehouse same until there is legitimate demand from manufacturer above cost of production so that he will not be forced to sacrifice his cotton. Bears insist that statement issued that Federal Reserve will furnish credits for proper marketing of crops means that cotton must be immediately placed upon market after ginning regardless of price, and not put in warehouse. Such construction of position of Federal Reserve absolutely unthinkable. I beg you issue statement clarifying situation and telegraph me fully, permitting the reading of your telegram to convention assembled. Answer care American Cotton Association, Liberty National Building, Columbia, S. C. This of vital importance to entire agricultural and commercial life of South.

J. S. WANNAMAKER,

President American Cotton Association.

I will show presently that the cost of production was estimated to be at least 32 cents a pound, and this telegram strongly urged the Federal Reserve Board to make a public statement that producers would be financed to hold their cotton in warehouses until the manufacturer would pay a price above the cost of production.

Now, in the face of these facts—you understand, my sympathies were with them, but I am trying to inform this commission of this very acute problem that was put up to us, and ask you how you would have handled it if you had been in our situation. I will show you how we did handle it. I don't know whether you approve of it, or not. But there is our statement.

He says, "Bears insist that statement issued that Federal Reserve will furnish credits for proper marketing of crops means that cotton must be immediately placed upon market after ginning, regardless of price, and not put in warehouse."

The Federal Reserve Board had issued no such statement as that; we had not issued any statement; we were very careful. I am going to read our telegram now. Of course, you will admit that the Federal Reserve Board could not have made the statement desired; it would have related to matters beyond our control. I have already explained to you that we could not make any advances to anybody, except to member banks.

Now, the conditions referred in Mr. Wannamaker's telegram were not calculated to inspire confidence in the cotton situation. If the Federal Reserve Board had come out and urged all banks to loan, say, 80 per cent of the market value of cotton, some banks would possibly have done so, but others would not have. That would have meant advising loans on the basis of 32 or 33 cents a pound. Unless there could have been created a demand for it, the cotton would have been on hand. The cotton would have been in warehouse, it could not have been hidden, it would have been "in sight" and the position would have been very vulnerable from a market standpoint. It was a very acute situation.

If, on the other hand, the Federal Reserve Board had responded and said that we felt it safe for all banks to make advances on cotton on the basis of 10 or 15 cents a pound, you can see what would have happened; quotations would have immediately declined, and the Federal Reserve Board would have been blamed for it.

In response to Mr. Wannamaker's telegram, I got consent from my colleagues to send this reply, which was the best I could do [reading]:

J. S. WANNAMAKER,

*President American Cotton Association,
Liberty National Bank Building, Columbia, S. C.*

Answering your telegram, would state that policy of Federal reserve banks for many months past has been so shaped as to enable them to render all reasonable assistance to member banks in facilitating processes of production and orderly distribution of essential commodities, including products of mines and factories as well as farms. Crop movement is a seasonal one and in its early stages requires large additional credits. Federal reserve banks are prepared to meet all legitimate demands made upon them by member banks for moving the crops, but your attention is called to the fact that under the law Federal reserve banks can not make direct loans. They can only rediscount for member banks, which institutions are obliged to observe the limitations prescribed by law upon their loans. Growers and distributors of agricultural products usually have no broad financial connections and are obliged to depend for accommodations upon local banks. Consequently, notwithstanding the

lesire to respond fully to needs of farmers, member banks frequently find it impossible to extend all accommodations desired. Complaints are made by wool growers and wheat farmers as well as by cotton men of lack of ready markets and of insufficient transportation facilities. The board urges cooperation between banks and producers in order that burden of carrying crops awaiting transportation to market may be as evenly distributed as possible.

If producers can manage to get along with reasonable advances awaiting actual sales and full returns, it is thought that the most pressing needs of farmers can be provided for without exhausting credit facilities of local banks, which have their legal limitations. Had interview yesterday with minister of Czechoslovakia, who stated that seasonal needs of mills in his country alone for cotton amount to 700,000 bales, but owing to depreciation in exchange and inability to ship gold it was impossible for mills to take anything like this amount of cotton unless nine months' credits are provided. He stated that mills in his country will be able to pay for raw cotton furnished them as soon as manufactured and sold, and expressed opinion that syndicate of mills and banks in his country, backed by guaranty of his Government, could give satisfactory assurance of payment at end of time specified. I anticipated present situation in spring of 1919 when I urged formation of large cotton export corporation. Since then Congress has legislated, passing the Edge Act, under which these corporations can be formed under Federal charter. Central Europe has the spinning and weaving capacity, the mills, and the labor, but lacks raw material. The South has the raw cotton. If corporation could be formed under Edge Act, taking cotton in payment for stock, there would be opportunity for direct dealings between southern producers and European mills. A movement of this kind would put new life in the market, for it would stimulate buying by domestic and British mills. The degree of risk appears to depend upon stability of governments in central Europe, and if capital which is not interested in cotton growing does not care to assume this risk, it must be borne by producers themselves if anything is to be done. Do not think cotton situation can be improved by calamity talk, which can only lead to further depression, but believe it can be saved if there is inculcated a get-together spirit of courage, self-reliance, and determination, followed by prompt action along practical and constructive lines. People who help themselves are assured of the most dependable and effective help. Courage breeds confidence, and nothing succeeds like success.

W. P. G. HARDING.

I received a letter from Mr. Wannamaker about this telegram, dated August 27, 1920. [Reading:]

MY DEAR GOV. HARDING: It will be impossible for me to express my deep appreciation for the great service you have rendered, as the result of the telegram you sent to be used at the meeting of the South Carolina division of the American Cotton Association in Columbia on the 25th instant. This meeting was attended by between 4,000 and 5,000 farmers, merchants, bankers, business and professional men, and was not only one of the most largely attended but was one of the most successful meetings ever held in this State. The reading of your telegram was listened to with intense interest and it will carry with it a great influence.

And then he proceeds to tell about another convention, and what he is doing, and comes back to the 40 cents a pound idea.

Then, on August 31, 1920, he sent me a telegram about the Montgomery conference, saying there will be a large attendance, as follows [reading]:

W. P. G. HARDING,
Governor Federal Reserve Board, Washington, D. C.:

In addition to representatives agricultural and commercial life entire South, have especially invited president each State bankers' association together with committee 25 bankers. I beg you telegraph Federal reserve governors Richmond, Dallas, Atlanta, and St. Louis urging they attend conference Montgomery, September 1 to 3, or at least for September 3, on which date have arranged special conference on banking and financing; if they can not attend in person have them send representative. At your suggestion I invited all governors these districts, however, with exception Judge Ramsey, of Dallas. All other governors render various excuses why can not attend or send representatives. Am pressingly urged from leading men various sections South use every effort my power induce you attend convention to join in conference, deliver address; convinced your invitation governors will assure their attendance; fully con-

vinced their attendance together with yours will promote closer relationship between banks and reserve system and prove outstanding benefit entire agricultural and commercial life South. Leaving for Montgomery to-night.

J. S. WANNAMAKER.

Representative SUMNERS. Governor, have you a copy of your address on that occasion?

Gov. HARDING. I did not go. There was nothing for me to talk about at that time.

Here is a telegram I sent to Mr. Wannamaker at the Exchange Hotel, Montgomery, Ala., as follows [reading]:

J. S. WANNAMAKER,

President, American Cotton Association, Exchange Hotel, Montgomery, Ala.

Your telegram 30th. For reasons stated in my letter and in view of necessity of my being in Washington, can not accept invitation to go to Montgomery. Am sure governors of banks mentioned attach due importance to conference but doubtless find pressure of business, which is always heavy at this time of the year, requires their presence at bank, and I do not believe I should urge them to attend conference.

W. P. G. HARDING.

I will come to the resolutions adopted at that conference, and with your consent will read an extract from them.

I would like to place in the record at this point a letter from Gov. Seay, governor of the Federal reserve bank at Richmond, giving his correspondence at the same time with Mr. Wannamaker. That will throw light on what one of the Federal reserve banks was actually doing in the loaning of money to producers through member banks.

The CHAIRMAN. Without objection, it may go in.
(The correspondence referred to is as follows:)

SEPTEMBER 4, 1920.

Hon. W. P. G. HARDING,

Governor, Federal Reserve Board, Washington, D. C.

DEAR GOV. HARDING: I have observed a report that the American Cotton Association, at its recent convention in Montgomery, appointed a large committee to wait upon you in behalf of "King Cotton." Thinking that it will be of interest to you and possibly helpful to be acquainted in advance with the position of President Wannamaker, whose views were adopted by the convention, I am sending you a copy of a letter from him and my reply thereto. I also sent him, in partial answer, a copy of our last Monthly Letter, on page 5 of which we refer to this situation.

Mr. Wannamaker takes the advanced view that cotton should go from the gins to the warehouse and, inferentially, be fed out at a price satisfactory to the growers, if not to others. If this theory were applied to all crops, a pretty state of affairs would prevail.

Mr. Wannamaker asked for a telegraphic statement from us giving a "clean cut" declaration of policy of the Federal reserve bank, which I declined, in diplomatic manner, to do.

While the cotton crop is of tremendous importance to all interests in the South, and while it is, of course, entitled to every reasonable consideration, and even the most liberal treatment, it is nevertheless not sacred beyond other forms of agriculture and industry.

I am looking forward to conference with the board in October with great interest, having returned to the bank fully restored in vigor. With high regard, I am

Sincerely, yours,

GEORGE J. SEAY, Governor.

SEPTEMBER 2, 1920.

J. S. WANNAMAKER,

President American Cotton Association, St. Matthews, S. C.

MY DEAR SIR: Upon return to the city after an extended vacation, I find your letter of the 30th ultimo addressed to Mr. Peple, deputy governor. Mr. Peple is absent from the city on his vacation. Other important officers are absent from the city. It is not practicable for any officer of this bank to attend the cotton convention at Montgomery, September 13.

You are, doubtless, well acquainted with the general credit situation, which affects not only cotton but every other industry and pursuit. The Federal reserve bank of Richmond is already lending to the banks of North and South Carolina—very largely for crop raising purposes—a relatively larger proportion of the resources of this bank than to any other member banks in the district. You are also doubtless aware that this bank has loaned all of its available resources down to its legal reserves, and that, in addition, it is borrowing \$25,000,000 from other reserve banks for the purpose of lending to its own member banks in this district. It has not only been liberal in its grant of credit to member banks, but it has met emergency demands from a very large number of its members who seemingly lacked the foresight to so conduct their affairs as to avoid excessive borrowing, thus helping to impose burdensome demands upon the general supply of credit.

It will interest you to know that those Federal reserve banks from which this bank has borrowed in order to lend to its members have been authorized to charge a rate of 7 per cent for such rediscounts. This bank has not, as yet, charged a rate above 6 per cent to its members on commercial and agricultural paper, and by sympathetic cooperation with borrowing members, exercising a firm and benevolent discrimination in the grant of credit, it has been able to avoid, so far, the establishment of progressive discount rates, which would have fallen rather heavily upon those banks which were called upon to assist in crop raising.

In general terms, it may be stated that the policy of this bank with respect to the marketing of cotton will be as liberal as its own resources and the general credit situation will admit of. There are other crops and other industries which must have credit and support; otherwise, they would react strongly against cotton and the entire commercial situation. This bank is compelled by law to maintain a position to not favor unduly or discriminate against any form of agriculture or industry, and it will meet the demands upon it, so far as its resources will enable it to do so, in a fair and just and liberal and helpful spirit.

As you know from experience, this bank deals with its member banks according to their condition and circumstances, with which in general it is in close and intimate touch. It is the purpose and endeavor to foster their business and to lend to them to limit of prudence and safety whenever and wherever it is necessary for them to borrow from us to meet the reasonable demands of their customers. We believe that our member banks fully understand this, and we do not think that any sound or prudent banker would have any disposition or occasion to find fault with our policy.

It is not practicable to express the foregoing in a telegram, according to your request.

Wishing you a helpful and successful conference, I am,

Very truly, yours,

GEO. J. SEAY, *Governor.*

AMERICAN COTTON ASSOCIATION,
St. Matthews, S. C., August 30, 1920.

Mr. CHAS. A. PEPLE,
Deputy Governor, Federal Reserve Bank, Richmond, Va.

MY DEAR MR. PEPLE: Your letter of August 28. It will of course prove a distinct disappointment to the convention at Montgomery on September 1-3 to learn that the Richmond district will not be represented at this convention. Representatives of the agricultural and commercial life of every section of the 14 cotton-growing States will be present and we have extended special invitations to the presidents of the various State bankers' associations of each of these States to attend this conference, together with 25 representative bankers from each of the States, for the specific purpose of holding a joint conference with the representatives of the various Federal reserve banks of the South. At any time such a conference would prove beneficial, and especially so at this time. I note that you state:

"It may interest you to know that very recently we held a conference with the officers of a large number of our member banks by which the cotton situation in this district is to be handled. At this conference views were fully and freely exchanged, with reference to the method of assisting in the marketing of the crop and the credit situation in this district."

I am glad to note that the matter of marketing of the cotton crop and the credit situation in this district were fully discussed, and, as I understand it, plans were adopted. I will appreciate it very much if you will kindly telegraph me concerning the action that the Federal reserve bank of Richmond will adopt concerning loans to be granted on cotton and what course they have decided to pursue on the credit situation in your district.

Cotton is selling far below the cost of production. The markets of central Europe are entirely closed and these markets were formerly our best customers, especially for low-grade cotton. Based upon the estimate of the United States Agricultural

Department and also based upon the estimate on the cost of production, as shown by our special committee, it is absolutely impossible to sell cotton to-day, even of the very best grade, without a very serious loss to the producer, regardless of the fact that we are face to face with an enormous increased demand for cotton and face to face with the fact that the manufacturers have accumulated enormous earnings upon the manufactured product. Under these conditions, I feel that you will agree with us that it is absolutely necessary to warehouse cotton and hold same, stretching the sale of the cotton over a sufficient period so that it will only be sold when there is a legitimate demand from the manufacturer at a price sufficiently above the cost of production to bring to the producer a reasonable profit; that it would be suicidal to sell cotton to the gamblers and manipulators at present prices, which, as explained, are far below the cost of production.

It is my understanding that the Federal reserve system will finance the cotton crop, so as to enable us to adopt the orderly marketing of same. In the handling of the American cotton crop there is now a loss of one entire crop out of every ten, or around \$200,000,000 per year, based upon the prices of the last crop, as shown by the United States Agricultural Department, due to the uneconomic manner in which the said crop is handled. The proper marketing of the cotton crop would certainly be to take it from the ginhouse to the warehouse and store it in said warehouse until it can be sold in accord with the law of supply and demand to the manufacturer, instead of forcing it upon the market, at a sacrifice of price, to the gambler.

Will the Federal reserve bank of Richmond extend to the member banks the financial accommodation on cotton so stored to enable them to carry out this policy in the handling and marketing of same?

Through our representatives in England we find that on August 1 the manufacturers of England in many cases paid quarterly dividends of from 200 per cent to 400 per cent; that the exports of England for the first six months of 1920 amounted to \$3,500,000,000, this being in excess of the total exports for the entire year of 1913 and breaking the record for all exports since 1900. These exports were largely composed of the manufactured product American cotton.

Through our representatives in central Europe we find that England is doing an enormous business in yarns, and even in raw cotton, with the people of those countries, who would be very glad to secure the raw cotton direct from America and who are our former customers. These credits from England are arranged through a credit board established in 1914, this credit board being composed of bankers, merchants, and business men, credits being extended for three, six, and nine months, based upon securities which can be obtained in these countries. These credits are safe.

Through our representatives we find that these people are desperately anxious to secure raw cotton from America, especially of the low grades. We are now concentrating our efforts upon the formation of an export corporation, the stock of which is to be taken in cotton, and I am fully convinced that this corporation can be formed and that it will bring tremendous relief to the raw-cotton industry. Our association has arranged to put into effect and force plans that will bring relief to the present existing conditions, first, by the sale of cotton, especially the lower grades, into central Europe, as outlined above; second, by the reduction of the cotton acreage for the coming year by at least 33½ per cent, planting the lands so reduced in small grains this fall and in food and feed crops next spring; and, third, by the holding of every bale of cotton for a price at least above the cost of production.

We are facing the certainty of the sixth short crop. The matter of raw cotton will prove of serious concern to the entire world before another crop can be produced. Raw cotton has never sold for an inflated price. Had the entire cotton crop produced last season been sold at one time on a basis of 40 cents middling, there would have been a difference of all grades below middling of 13 cents per pound, which would have made a bulk line of 27 cents, and it was even impossible to sell the low grades on account of conditions in central Europe, as explained above.

I consider the Federal reserve system one of the greatest pieces of legislation ever put upon our statute books. Had it not been for the great Federal reserve banking system, the World War, in all probability, would have lasted years longer and the final outcome, in all probability, would have been far different. The financial fabric of the Nation and world could not have stood the strain.

One of the greatest needs of to-day is intense commercial activity, world-wide. It is only possible to promote this condition through an enormous increased production, and it is, of course, absolutely necessary for the producer to receive a profitable price for his product to enable him to compete with other lines in endeavor, and it is only possible for him to receive a profitable price for his produce provided he can receive the necessary financial assistance and protection.

An invitation was extended to the representatives of each of the Federal reserve banking systems of the South, and I am convinced that they will be represented at

the Montgomery convention. I, of course, feel an especial interest in the Federal reserve bank of which my bank is a member, and for this reason am especially anxious to have you favor us with a telegram to Montgomery, outlining in full the position that the Federal reserve bank of Richmond will take concerning cotton and concerning the credit situation now existing in this district. Kindly address your telegram to me in care of the convention and give me permission to read the same to the convention.

Assuring you of my kind regards and with best wishes, I remain,
Sincerely,

J. S. WANNAMAKER,
President, American Cotton Association.

(Page 5 of the Monthly Letter referred to is here printed in full, as follows:)

CROP MOVEMENT.

The Federal Reserve Bank of Richmond fully realizes the importance of rendering the fullest possible measure of assistance within the limit of its resources to member banks for the purpose of properly marketing all crops grown in the district, and is using (and endeavoring to conserve) its resources for such purposes. On the other hand, it is the duty of every member bank in the district to cooperate fully in this conservation and use of the volume of available credit, and to see that no undue strain in one direction shall be allowed to create an embarrassing shortage of credit in some other direction. A demand from one bank for a volume of credit out of all proportion to the contribution of that bank to the credit resources of the district would inevitably result in some other bank having to be content with less than its share.

There is always a seasonal discussion about whether crops are going to be successfully planted, followed by a further discussion as to whether they can be moved or not, but all such discussions are proven by experience to be academic, because the crops are always planted, always gathered, and always marketed, even if attended by some difficulties or restrictions. We have not only made the largest possible advances to our member banks out of our own resources, to assist them in financing agriculture and commerce, but we have borrowed \$25,000,000 from other Federal reserve banks to increase the volume of credits extended them.

It is possible, as well as proper, for a Federal reserve bank to make the necessary advances for crop-moving purposes, while it would be neither proper nor possible for it to furnish all the funds that might be necessary to withhold crops from the market, in order to force prices higher than might be considered natural. That is to say, higher than the prices which would obtain if the crops were marketed in a normal and natural manner and neither unduly held nor precipitately sold. It is a specific requirement of the Federal reserve act that in making loans or advances to any particular member bank, for whatever purpose, a Federal reserve bank must take into consideration the needs and requirements of all other member banks. The volume of credits extended to individual banks must therefore be governed by the law and the circumstances in each case.

We have always felt that farmers, in the long run, would best serve their own interests by marketing with reasonable promptness sufficient of their crops to liquidate the agricultural advances obtained for raising them. Such a policy of liquidation would enable the banks to furnish new credits for crop moving, until the products can be distributed to consumers and ultimate liquidation be secured. The early and gradual liquidation of the large volume of credits already extended by us to member banks and through them to farmers will therefore place the banks in a position to furnish new credits for moving the crops to market.

If the farmers, instead of carrying home cash from proceeds of sale, will deposit such proceeds in their banks and draw checks for necessary disbursements, it will materially increase the resources of the banks, facilitate the movement of the crops, and thereby promote the best interests of the farmers themselves.

Gov. HARDING. Now, I want to show you the result of all this. Maybe I will come to the resolutions later. On September 8, 1920, Mr. Wannamaker wrote to me the following letter [reading]:

Gov. W. P. G. HARDING,
Federal Reserve Board, Washington, D. C.

MY DEAR GOV. HARDING: Referring to my letter of yesterday with reference to the special conference outlined in the resolution adopted at Montgomery to be held in Washington on September 15 with the Federal Reserve Board, I consider it of the utmost importance that you arrange to have at this conference each member of the Federal Reserve Board located in Washington, including Mr. Houston, Secretary of

the Treasury, Mr. John Skelton Williams, Comptroller of the Currency, and the other Washington members; also I sincerely hope that you can arrange to have at this conference each member of your Federal advisory council from each of the Federal reserve districts. I would also urge in the strongest terms that you arrange to have at this conference the governors of each of the following districts: 1, Richmond; 2, Atlanta; 3, Dallas; 4, St. Louis.

I certainly trust that you will be able to advise me at an early date that you have been able to arrange for all of these parties to attend the conference on the 15th.

Assuring you of highest personal regards, I am,

Sincerely, yours,

J. S. WANNAMAKER, *President.*

In reply to that I wrote him on September 10, 1920, as follows [reading]:

DEAR MR. WANNAMAKER: Replying to your letter of the 8th instant, I would state that all members of the Federal Reserve Board have been advised that the committee of cotton growers and bankers named at the recent convention of your association will be here for a conference on September 15. It will not be practicable for members of the Federal advisory council to attend this conference, and if it is your desire that the governors of the Federal reserve banks of Richmond, Dallas, Atlanta, and St. Louis attend, the Federal Reserve Board has no objections to your extending to them an invitation to do so. I doubt very much, however, that it would be practicable for any of them to be away from the Federal reserve banks at this time.

Very truly, yours,

W. P. G. HARDING

I did not want to telegraph them to be there, and take them away from their business. If I had telegraphed them, they might have thought it was a summons. They did not have any occasion to be away from their places of business on the 15th of September; they were busy on the job.

Now, here is a report made just before that conference was held, that Mr. Wannamaker sent to me. It reached me on the 13th of September, 1920. He wrote me as follows [Reading]:

Gov. W. P. G. HARDING,

Federal Reserve Board, Washington, D. C.

DEAR GOV. HARDING: Our committee will reach Washington on the afternoon of the 14th for the conference on the morning of the 15th at 10.30 a. m.

I can not express to you in words my appreciation for the great service you have rendered and for your kindness in arranging for this conference. I am fully convinced that out of this will come beneficial results.

I will leave Columbia Monday afternoon at 6 o'clock and should reach Washington Tuesday morning around 9 o'clock. I will stop at the New Willard Hotel, and I would consider it a personal favor if you can arrange to give me a personal conference either Tuesday morning or Tuesday afternoon, as I am extremely anxious to discuss these matters with you before the general conference on Wednesday and to receive the benefit of your judgment and advice.

I have been working in a sick condition for the last several months and it is only due to the fact that this is a crucial period in the agricultural and commercial life of the South, and that I feel convinced that in your judgment this conference will bring a better and fuller understanding of conditions and will result in benefits, that I have disregarded all other pressing duties for the purpose of arranging for the conference.

For your information, I am inclosing you herewith a copy of the report of the committee on price recommendation which was adopted at Montgomery last week.

Assuring you of highest personal regards, and trusting that I may have the pleasure of a personal conference with you on Tuesday, I am,

Very sincerely,

J. S. WANNAMAKER,
President.

The CHAIRMAN. What is the date of that letter?

Gov. HARDING. September 11, 1920. There was a delegation, as I recall, of 15 or 20 very fine men. I say that seriously. They were some of the South's best citizens. They were earnest men, and wanted to do the very best they could. But they seemed to be unable

to get it out of their heads that they ought to get in some way or other, and by some action here the cost of production, which at that time was stated to be above 30 cents a pound, and then get a reasonable profit on that. Later on I will present the statement they brought with them and another which Mr. Wannamaker sent me in his letter of September 11. I suggested to them that we have an executive session. I said I did not think it was best to have a public discussion. Now, they wanted a public discussion; they wanted the newspaper men to be present. The board did not take a stenographic report of the meeting. Here are some of the newspaper reports. This letter from Mr. Wannamaker said I had performed a great service, and that the meeting would be of great benefit to all concerned. I told him I was glad of it. I told him I believed in the orderly marketing of crops, and would do everything I could that was feasible, but that we should look the facts in the face. Mr. Wannamaker expressed himself as very well pleased. My recollection is that all the board members were present except Secretary Houston and that no member took exception to what was said.

The press representatives were there, and one thing that was said would impress one man, and another would impress another man, and some of the press dispatches that went out, I imagine, were disappointing. All that was their affair; if they had kept the matter in executive conference, as I suggested, we could have dictated a statement that would have gone out as a uniform statement; but instead of that, they got the press in and they heard the entire conversation, and the various views that were presented. The board yielded to them on that point and they had it the way they wanted it.

Here is the report Mr. Wannamaker sent me [reading]:

The committee on acreage and price recommendation of the American Cotton Association respectfully submit the following report:

After a careful examination of detailed reports prepared and submitted by experts, these reports covering the various sections of the cotton belt and being probably the most complete reports on the cost of production ever submitted, we find that the growing crop is the most costly ever produced in America, this being due to the high cost of all commodities necessary to the production of the crop, the high cost of labor and its scarcity and adverse weather conditions, this cost being based upon the indicated yield as shown by the Government crop report on September 1, 1920. Your committee, however, finds that the growing crop is from three to four weeks late; that the August deterioration will really show in September. A carefully detailed supplemental report, covering the entire cotton belt, showing the condition of the crop since the date of the Government crop report of August 25, up to September 1, reveals a startling deterioration of the growing crop and proves conclusively that this crop will show an enormous decrease in production from that indicated by the last Government report, when the final Government report comes in, this being due to recent adverse weather conditions and record-breaking insect damage. This reduction of the indicated yield would of course add to the cost of production were it taken into consideration.

Based upon the fundamental principle that every legitimate business is entitled to a reasonable profit, and based upon the price for which the manufactured product is selling and the laws of supply and demand and the present high cost of necessities to the farmer, we would be forced to recommend, in order to bring a reasonable profit to the farmer, a price in excess of the prices named.

However, recognizing the restrictions of markets, restrictions of credits, and the demands of the world for a reduction of the high cost of living, we are recommending a minimum price which does not mean a just and fair compensation to the producer, but only compensation for his labor without profit, as is conclusively proven by the figures on cost of production as shown by the Agricultural Department of the United States Government for the year 1918, of 28½ cents per pound, bulk line; the Govern-

ment stating at the time that 1919 would show at least one-third increase in the cost of production and it being conceded by the leading economists that the 1920 crop would show a still higher cost of production.

We, therefore, based upon the above conditions, recommend a minimum price of 40 cents per pound, basis middling, for cotton, with an increase of 1 cent per month per pound, commencing November 1, 1920.

For cotton seed we recommend a minimum price of \$60 per ton or the exchange of one ton of 7 per cent meal.

Furthermore, the cotton farmer faces a condition of uncertainty in markets for 1921 more difficult than any ever faced before. Food production is being curtailed elsewhere to increase prices, making the problem of the living still more hazardous. To continue to grow as large an acreage in cotton as this year, with the continued impossibility of marketing a large portion in central Europe would be folly unspeakable. We therefore strongly urge a safe system of farming for 1921, including every possible means of making the South fully independent of the world for the meat and bread grains.

To this end we urge a great increase in the acreage of fall-seeded small grains and that one-third of all land planted to cotton in 1920 be devoted to food and feed crops in 1921, for the South can not afford to risk buying its food with a cotton crop for which there is an uncertain market.

Respectfully submitted.

The CHAIRMAN. Did that convention make any suggestion as to the machinery that should be set up for the marketing of that crop?

Gov. HARDING. We made very few suggestions. We heard what they had to say. I did not make any suggestions on that point. I talked a good deal without saying much. There wasn't anything to say in the circumstances.

The CHAIRMAN. Did the convention itself come to any conclusion?

Gov. HARDING. This was a conference with a committee sent by the convention which met in Montgomery on the 2d of September, which I was asked to attend, but I did not go. The committee came here, and really wanted a statement assuring producers that the Federal reserve banks would finance loans on cotton in warehouse until there was a legitimate demand from the manufacturer at a price sufficiently above the cost of production to bring the producer a reasonable profit. This cost of production was shown to be around 32 cents a pound.

Middling cotton was quoted in New York at that time at about 31 cents, and a few days afterwards at 28 cents, then 25 cents on October 1, and then went down every month until it hit bottom.

Of course—I was sympathetic—I never was so sorry for people in my life; I am always sorry for people who can not see conditions as they are.

I guess I talked for about 20 minutes, or more. I had a speech on hand that I was going to make in Cleveland the next day, so I read some of that speech, which I have put in the record here to-day. And nearly everyone talked and made suggestions, and we had a nice sociable time, just as southerners usually have when they get together.

In the course of the conference there was presented by the chairman of the special committee of the American Cotton Association the following statement, to which I have already referred:

STATEMENT TO BE PRESENTED TO THE FEDERAL RESERVE BOARD BY A SPECIAL COMMITTEE OF THE AMERICAN COTTON ASSOCIATION, SEPTEMBER 15, 1920.

Whereas there being doubt and uncertainty among the member banks in the Richmond, Atlanta, Dallas, and St. Louis districts of the Federal reserve system, arising out of the apparent difference in the position of these four districts as reflected in their official bulletins released from time to time as to the attitude of the Federal reserve bank with regard to the movement of and financing of the cotton crop so as to provide for its gradual and orderly marketing, and

Whereas it is imperative that a definite understanding be had on these points to restore confidence and enable an intelligent and sound procedure on the part of the banks in these districts in handling the credit situation involved by reason of unprecedented conditions existing caused by (1) the lateness of the present crop; (2) the lack of the demand from the domestic cotton merchants and manufacturers; (3) the heavy reduction in the foreign demand on account of the complicated foreign situation and the inability of the foreign countries to buy and pay for raw cotton: Therefore be it

Resolved, That it is the opinion of the delegation of the American Cotton Association that the situation will be materially relieved if the following suggestions are adopted, namely:

That such necessary renewals be granted on loans based on agricultural paper now held under rediscount from member banks in the districts mentioned to enable a gradual and orderly marketing of the crop on which the credits are based, either by the renewal of the agricultural paper, the substitution therefor of commodity-secured paper where expedient, or granting credits on cotton secured by proper warehouse receipts under section 13, Federal Reserve Act.

Be it further resolved, That the board be assured that these suggestions are made not for the purpose of hoarding or providing credit or speculating in spot cotton, but for the sole purpose as aforesaid of providing for gradual and orderly marketing under the adverse conditions as they exist, and thereby providing a sure liquidation.

Members of the conference were told that in some cases renewal of paper might be arranged and in others it could not and that the entire question was one to be determined primarily by the member banks themselves and then by the Federal reserve banks to which the notes might be offered for rediscount. For reasons explained to the special committee, and which I have already stated to this commission, the board did not deem it advisable to issue a statement in the form requested by the committee, but it did issue, and gave to the press at the close of the conference, the following statement:

Gov. Harding this morning stated to a committee of the American Cotton Association that the Federal reserve system is prepared for such credit expansion as may be necessary to move the crops and called attention to the desirability of the formation of an export corporation by southern cotton interests.

Now, there is one other letter I want to read which I received from Mr. Wannamaker. [Reading:]

SEPTEMBER 6, 1920.

Gov. W. P. G. HARDING,
Federal Reserve Board, Washington.

MY DEAR GOVERNOR: At the Montgomery convention I received a number of telegrams urging that every effort possible be made to have the War Finance Corporation resume operations. Among these telegrams was one from United States Senator N. B. Dial, his telegram being attached hereto. He urges that we request you to use your influence to have the War Finance Corporation resume operations. I will appreciate very much your efforts in this direction.

Assuring you of my highest personal regards, I beg to remain,

Sincerely,

J. S. WANNAMAKER,
President American Cotton Association.

I acknowledged that letter on September 10, as follows [reading]:

SEPTEMBER 10, 1920.

DEAR MR. WANNAMAKER: I acknowledge receipt of your letter of the 6th instant, inclosing telegram received by you from Senator Dial, of South Carolina, which I return herewith for your files. Senator Dial has been to see me recently and discussed the subject of his telegram to you. I told Senator Dial, and he agrees with me, that the matter is one which should be taken up direct with the Secretary of the Treasury in his capacity as chairman of the board of directors of the War Finance Corporation.

Very truly, yours,

Mr. J. S. WANNAMAKER,
President American Cotton Association, St. Matthews, S. C.

The Federal Reserve Board occupies space in the Treasury Building as the guests of the Treasury, and has since its organization. We are very particular never to intrude our advice on the Secretary of the Treasury on matters pertaining to the administration of his office. If he wants our advice, he can ask for it, but the Federal Reserve Board is in no wise, shape, or form related to the formation of Treasury policy; has nothing more to do with it than if we were many miles away from the Treasury. And we never act as intermediaries in taking things up with the Secretary of the Treasury about purely Treasury matters.

I will read one more letter, from the governor of the Federal reserve bank of Atlanta, dated June 25, 1921. On June 24, 1921, a bank in Alabama wrote to the governor of the Federal reserve bank at Atlanta, as follows [reading]:

JUNE 24, 1921.

Mr. M. B. WELLBORN,
Governor Federal Reserve Bank, Atlanta, Ga.

DEAR SIR: On June 15 we notified all customers who owed us notes secured by warehouse receipts for cotton that we would expect them to sell cotton and pay their notes July 1. Since that time cotton has declined, and they are teeming in to see us, begging more time.

We are at a loss to know what to say to them until we learn how you feel about what we owe you.

We realize and appreciate the fact that you have been exceedingly nice and good to us, and we do not feel warranted in giving our customers, who are holding cotton, further extensions unless it is perfectly satisfactory with you to give us extensions.

They all think, as they have been thinking since last fall, that cotton will go up and that it will not be fair and just to force them to sell on this down market.

We have enough paper secured by cotton to pay you all we owe you on rediscounts. Please advise us your wishes in the matter and your opinion about cotton.

Yours, very truly,

—————, *Cashier.*

To that Gov. Wellborn of the Federal reserve bank of Atlanta, replied, under date of June 25, 1921, as follows [reading]:

JUNE 25, 1921.

MY DEAR MR. ———: I am in receipt of your letter of June 24, and note that you have notified your customers, who are borrowing on cotton, to sell some and pay their notes by July 1.

Of course, you understand, this is a matter with which we have nothing to do. From our correspondence with your bank, we have made no such demands, for it is not our policy to demand of member banks that any particular class of paper be liquidated and the proceeds paid to us. It is a fact that some member banks are borrowing very heavily from us, and, when their borrowings reach such a great amount that we feel they should be more conservative and do banking in a safer way, then we call their attention to the fact that we do not wish to extend further accommodation. It is then a matter between the member bank and their customers and there are ways of obtaining liquidation of their paper other than forcing their customers to sell their cotton.

We assume that a great many of your loans are made to customers where there is no cotton hypothecated as collateral. Probably the bulk of your loans are in that shape, and, while we are not insisting that your bank pay off your borrowings in total, or any amount of it, we are merely admonishing you not to go to any greater length on your borrowings, which are already so high, being more than two times greater than your capital and surplus and more than six times greater than your basic discount line. We will continue to carry for you your large line of rediscounts until business conditions in your locality bring about a proper liquidation without forcing your customers to sell their cotton to liquidate.

Yours, very truly,

M. B. WELLBORN, *Governor.*

Mr. ———,
Cashier, the First National Bank, ———, Ala.

Representative SUMNERS. Governor, do you know of any one of the districts serving cotton territory where the reserve banks have sent out letters to their member banks which could properly be construed into a suggestion or demand that they call their cotton loans?

Gov. HARDING. No, sir; I do not.

I want to file in the record now one other matter that does not relate to cotton so much, but relates to general credit conditions. This is a letter dated April 30, 1921, addressed to W. F. Ramsey, chairman Federal reserve bank, Dallas, Tex. I got a letter from the chairman of the board of directors of the Federal reserve bank of Dallas saying that he contemplated sending out a circular letter to banks which were carrying Liberty bonds with the idea of making them pay something on them. Here is the letter I wrote him on April 30, and he wrote me that the suggestions I made had been adopted. [Reading:]

DEAR JUDGE RAMSEY: I acknowledge receipt of your letter of the 26th instant, giving your views regarding the continued holding by member banks of Government bonds in cases where they are obliged to borrow from you continuously in order to carry them.

The board does not question at all the soundness of your position, but at the same time it must be remembered that the matter is rather a delicate one and that when the situation is considered as a whole nothing is gained if a sale of bonds merely results in the transfer of a loan from one bank to another. There is, and can be, no objection to a discussion of this matter with each individual member bank concerned, but the board does not believe it wise to handle a question of this sort by means of general circular letters. Again, there can be no objection to your suggesting to any bank that it should sell its Liberty bonds, but there is considerable difference between suggesting, urging, and insisting. If you will refer to my letter of the 22d instant, you will find that I stated that "the board feels that it would not be good policy for the Federal reserve banks to insist that the United States Government securities owned by their member banks be sold * * * in order merely to reduce the member banks' borrowings from the Federal reserve banks." I should think the better plan would be, if the suggestion was made and it was found that the bank addressed did not regard the proposition with favor but rather with extreme repugnance, that the matter be dropped for the time being and taken up again in a tactful way later on. I am returning the correspondence inclosed with your letter as requested.

Very truly, yours,

W. P. G. HARDING, *Governor.*

MR. W. E. RAMSEY,
*Chairman Federal Reserve Bank,
Dallas, Tex.*

In every public address I have made, and I have made a good many since the 1st of January, I have stated explicitly that in view of the improved basic position of the Federal reserve banks there was no occasion for depressing things or forcing liquidation, but that the situation should be eased along, and that it should be met with patience and forbearance, and our statement of June 6 says, "make additional loans," and so on.

The CHAIRMAN. Suppose you state right there, when you are talking about reserve ratios, just what bearing the reserve ratio has in determining the interest rates charged on discounts.

Gov. HARDING. Well, it has an indirect bearing. There has not been any consistent relationship. We have never been able to get our interest rates adjusted in the Federal reserve bank on a scientific basis, such as the Bank of England. The memorandum which I filed some time ago contained quite an elaborate discussion on that point. And the Bank of England discounts only bills, and for a great many

years the Bank of England rate has consistently been higher than the market rate, the idea being that there should be no profit in the rediscounting transaction. That the facility is there whenever a joint-stock bank needed the accommodation, but the bank would not make any profit but would really pay a little for the accommodation.

The system we had to engage in during the war to offer a premium for bank borrowings in order to float the Liberty bonds has been responsible, I think, for the idea that it is proper and normal for a member bank to carry continually a large volume of rediscounts. Those are matters, though, which can better be taken up later on. There is no occasion at the present time to try to force any situation. The best way to deal with present conditions is to go along with them and let the situation ease itself out. I think the signs are unmistakable that the basic situation has greatly improved, and that we are going to find as soon as cold weather comes on that there will be a better feeling all over the country. Business is going to revive.

The reserve percentages of the Federal reserve bank, as at close of business August 3, 1921, we report in two ways: The actual position and the adjusted position—the position after rediscounting.

The Boston bank had a reserve of 79.2 per cent. Without counting rediscounts for other banks it had 82.8 per cent.

New York had 69.2 per cent, and 72.1 per cent without counting rediscounts for other banks.

Philadelphia had 63.6 per cent.

Cleveland had 66.8 per cent, or 69 per cent without counting rediscounts for other banks.

Richmond had 45.6 per cent, and without rediscounts from other banks it would have had only 30.7 per cent.

Atlanta had 40.5 per cent, and without counting rediscounts it would have had 39.6 per cent.

Chicago had 65.2 per cent.

St. Louis, 55.8 per cent.

Minneapolis had 38.6 per cent, or without counting rediscount it would have had 25.5 per cent.

Kansas City had 57.4 per cent.

Dallas had 40.6 per cent, and without counting rediscounts it would have had 17.5 per cent.

San Francisco, 61.6 per cent.

The interbank rediscounts at close of business on August 3, 1921:

Richmond was rediscounting with New York, \$24,950,000.

Atlanta was rediscounting with Boston, \$1,751,000.

Minneapolis was rediscounting with New York, \$12,935,000.

Dallas was rediscounting with Boston, \$10,895,000.

Dallas was rediscounting with Cleveland, \$8,326,000.

Total interbank rediscounts was \$58,857,000.

I will place this table in the record.

(The table presented by Gov. Harding is here printed in full as follows:)

Reserve percentages of the Federal reserve banks as at close of business Aug. 3, 1921.

Federal reserve bank.	Actual.	Ad-justed. ¹	Federal reserve bank.	Actual.	Ad-justed. ¹
Boston.....	79.2	82.8	St. Louis.....	55.8	.....
New York.....	69.2	72.1	Minneapolis.....	38.6	28.6
Philadelphia.....	63.6	.....	Kansas City.....	57.4	.....
Cleveland.....	66.4	69.0	Dallas.....	40.6	17.5
Richmond.....	45.6	30.7	San Francisco.....	61.6	.....
Atlanta.....	40.5	39.6	System.....	63.7	.....
Chicago.....	65.2	.....		

¹ Adjusted reserve percentages are calculated after increasing or reducing reserves held by the amount of accommodation extended to or received from other Federal reserve banks.

Bills under rediscount between Federal reserve banks as of Aug. 3, 1921.

[In thousands of dollars.]

Discounting or lending bank.	Rediscounts of Federal reserve bank of—				Total.
	Richmond.	Atlanta.	Minneapolis.	Dallas.	
Boston.....		1,751		10,895	12,646
New York.....	24,950		12,935		37,885
Cleveland.....				8,326	8,326
Total.....	24,950	1,751	12,935	19,221	58,857

Gov. HARDING. Now, gentlemen of the commission, I am very much obliged to you for the attention with which you have listened to me, and in closing, I wish to make a few remarks.

The CHAIRMAN. Before you close, Gov. Harding, I wish you would discuss the claims that have been made with respect to the requirement of excessive collateral on loans.

Gov. HARDING. That is a matter over which the board has not taken any jurisdiction. The board feels that under the law the details of loan operations are entirely in the hands of the directors and officers of the Federal reserve banks, but in discussing it sometimes in conference we have inquired about it. I am unable at the moment to say just how many banks adopt that policy. I know it is done in the Dallas bank, and I know it is done in the Richmond bank. I also think it is done in the Chicago bank. But as those are matters over which the board feels it has no jurisdiction, I have never inquired particularly about it, because the Federal reserve bank has clearly the right and the duty under section 4 of the Federal reserve act, to decline to take any paper which it feels it can not safely take. The word "safely" is in that section.

If the member bank presents eligible paper, and the reserve bank is not satisfied with it, and says, "We want you to give us a personal guarantee of your officers and directors to secure us on this loan" it seems to me that they are clearly within their rights in doing so. Those are banking practices which have prevailed for many years. It is a general banking practice among commercial banks.

There were some cases before the Federal reserve system was established, where one bank was rediscounting for another bank or making loans to another bank. The country bank, we will say, or the smaller

bank, might offer five or six notes aggregating twenty-five thousand or thirty thousand dollars to the larger bank. The larger bank would look up the ratings, or get the information about the makers of the notes, it would have the borrowing bank indorse them, and would be satisfied to rediscount them. Of course, the bank's security in each case would be the goodness of the note plus the bank's indorsement.

Now, wherever a rediscount transaction is made by one commercial bank for another on a 100 per cent basis in that way it is realized, of course, that if the borrowing bank is unable to protect its indorsement, that the amount has got to be collected from the maker of the note.

It is a frequent occurrence in banks all over the country, and has been since my knowledge of banking began, that one bank will borrow money direct on its note from another bank under the classification of bills payable. We do not have this under the Federal reserve system, except in the case of member banks' collateral 15-day notes, but it is quite a common practice for one bank to get authority from its board of directors to execute its note and to borrow money from another bank located in a reserve city, to a certain extent. We will say that the bank wants to borrow \$25,000, and it will put up its security, execute a regular collateral form note: "We promise to pay \$25,000 on _____ day, having pledged as security therefor the following described notes, to wit:" and then describe a list of notes, and you will find frequently \$40,000 or \$45,000 worth of notes as security for the bank's note for \$25,000, and the protection that the lending bank gets out of that is, of course, greater than if it merely discounted \$25,000 of paper with the borrowing bank's indorsement.

The CHAIRMAN. Have any complaints been made to the board by member banks of excessive collateral being required?

Gov. HARDING. Yes; the First National Bank of Hearne, Tex., which is insolvent, and is now in the hands of a receiver, is a bank to which the Federal reserve bank of Dallas made very large advances in an effort to save it. I received a telegram concerning that yesterday from the Dallas bank. That telegram is already in the record.

In this particular case the Federal reserve bank of Dallas advanced \$406,000. They took some additional collateral, I don't know how much. They have a loss in the transaction on account of the character of the security. They found out that some paper is not good, and they wrote me that they have a loss of perhaps \$100,000 on the transaction, in spite of the excess collateral they took. The receiver of the Hearne bank has been making a claim for the return of the excess collateral. I don't know what the Federal reserve bank of Dallas is going to do about it, whether they will decide to return the collateral and take their chances as a common creditor, or whether they will hold on to it, or whether, if they hold on to it, it will be with the idea that they will save more of the amount that way than if they took the chance as a common creditor, or whether if they regard the collateral as valueless they will simply hold on to it in order to establish the legality of the practice.

The CHAIRMAN. Do you know whether the Federal reserve banks in any of the districts adopted the general policy of requiring collateral in excess of 100 per cent?

Gov. HARDING. I don't think it exists as a general policy. When the governor of the Federal reserve bank of New York goes on the stand he can tell you about that. He has attended a great many of the conferences of governors of the Federal reserve banks, all through the sessions. When we have these conferences I do not attend them all through the session; I merely attend the opening part of the conference and the closing; but they discuss all these routine matters of operation, and he would be a much more satisfactory witness on this point than I am.

It is a matter, though, that I will say the Federal Reserve Board feels that it has no jurisdiction over, because it is clearly concerned with a credit matter which is in the hands of the directors of the bank under the provisions of section 4, for if they were to say that "we do not feel that we can safely make this loan," they would not make it. Now, if the applying bank says, "We want this loan; what can we do to make it safe?" and the reserve bank should say, "Well, if you do so and so we would regard it safe," and the paper they put up is technically eligible; then they can go ahead and discount it.

The CHAIRMAN. You certainly do not mean to say that if the Federal reserve banks adopted a general rule the effect of which was to require excessive collateral, consequently it would diminish the borrowing powers of the member banks, their ability to finance their customers, that the Federal Reserve Board would take no action in such case, do you?

Gov. HARDING. There has been no complaint made to the board about it. Of course if complaint was made we would look into it and take such action as might be proper. But as far as I know there is no general rule in that respect, although I do know that in some cases where the Federal reserve banks are advancing large amounts and feel that they are in danger of loss, they do require a personal guarantee or some extra collateral, and that is done as a matter of business, as a business precaution. It is done by member banks. The Federal reserve banks have no money to lend anybody that does not belong to somebody else.

The CHAIRMAN. Well, that is true of all banks.

Gov. HARDING. And they have got to use ordinary banking prudence in making their loans.

But we have never received any formal complaint, except in this one particular case, of a failed bank in Texas, and that matter is in litigation, and I presume when the court decides it we will have some definite rule of law to guide us.

Representative SUMNERS. Governor, in this particular district, the Dallas district, you have not heard anything to indicate a custom on the part of the governors of that district to require excessive collateral on the loans generally extended, have you?

Gov. HARDING. No; I don't know how far that requirement goes.

Representative SUMNERS. But, I say, you heard no complaint with regard to any general policy?

Gov. HARDING. But the Federal Reserve Board would object if the directors of a Federal reserve bank admitted a lot of paper to discount which was not safe and uncollectible. There are two sides to that complaint.

Representative SUMNERS. Governor, you seem to receive my inquiry as a statement. I was not making, myself, a statement. I was just asking the plain question as to whether or not you had heard anything to indicate that there was a general policy requiring excessive collateral?

Gov. HARDING. The Federal Reserve Board feels that it is its policy to keep, as far as possible—

Representative SUMNERS. Governor, if there is anything offensive about the question, or anything difficult about the answer, I will withdraw it.

Gov. HARDING. No, no; I am glad to answer any question.

Representative SUMNERS. Well, sir, then I would like to take a chance on asking it the third time.

Gov. HARDING. Yes.

Representative SUMNERS. I do not think you understood me. I wanted to know, in view of the statements that that requirement had been in this particular case, whether or not you had heard of any complaint with reference to any general policy on the part of the Dallas bank?

Gov. HARDING. I have not.

Representative SUMNERS. That is what I wanted to ascertain.

Gov. HARDING. I have not.

Representative SUMNERS. Yes, thank you.

Gov. HARDING. The only complaint I have ever heard about the matter at all is with reference to this particular bank.

Representative SUMNERS. Yes, and with regard to this particular bank, so far as you know there is nothing to indicate that what they have charged as excessive collateral requirement may not have been required after the rather unfortunate situation of the bank had been discovered, and new loans were required, and the Federal reserve bank was trying to keep the bank from busting, but did not think they could take a chance on making a new advance unless they got a little more collateral.

Gov. HARDING. In other words, the bank had already been accommodated up to the very limit, and they needed a little more money to prevent a failure, and the bank took a chance and advanced them this on additional collateral.

Representative SUMNERS. Governor, there is another point that I do not think you have touched upon, and that is with reference to the activities of your organization with reference to cotton. I recall that you had a conference of the governors of the five banks serving the cotton territory.

Gov. HARDING. Yes, sir.

Representative SUMNERS. And the Federal Reserve Board, perhaps, or at least these governors, issued a general statement.

Gov. HARDING. Yes; we issued a general statement, and we did not issue a general statement like that last year. I have told you what the conditions were last year, and I am glad you brought this up, because I want to tell you what I think conditions are this year.

The report of the United States Department of Agriculture, which was issued on August 1, 1921, is as follows [reading]:

The crop reporting board of the Bureau of Markets and Crop Estimates of the United States Department of Agriculture estimates, from the reports of the correspondents and agents of the bureau, that the condition of the cotton crop on July 25, was 64.7 per cent of a normal, as compared with 69.2 on June 25, 1921.

That is a falling off, you see, of nearly five points in the month—74.1 on July 25, 1920, 67.1 on July 25, 1919, and 75.4 the average on July 25 of the past 10 years.

You see that is over 10 points less than the 10-year average. [Continuing reading:]

A condition of 64.7 on July 25 forecasts a yield per acre of about 148 pounds and a total production of about 8,203,000 bales of 500 pounds gross. That is, the final out-turn will probably be larger or smaller than this amount according as conditions hereafter are better or worse than average conditions. Last year the production was 13,365,754 bales, two years ago 11,420,763, three years ago 12,040,532, and four years ago 11,302,375, and five years ago 11,449,930 bales.

Now we all know, who know anything about cotton, that it is only in very rare instances, exceptional years, when the crop shows an improvement in the month of August. August is a month of natural deterioration. It is a month when the cotton plant has passed its prime and vigor and it is attacked by all sorts of conditions, insect damage, and too much drought is bad, too much rain is bad, and you take these reports year in and year out and you will find that nine times out of ten the greatest deterioration occurs in the month of August.

Now if this year follows the average rule you will find that the next report will indicate a still further deterioration. The department bases its estimates upon the acreage and the condition of the crops. So assuming that the growing crop will turn about 8,000,000 bales of cotton, and assuming that the holdover from all previous crops is about 7,000,000 bales—I believe that is the estimate—or a little more than that, but certainly not over 7,000,000 bales of spinnable cotton and a lot of this low-grade stuff that is only fit for mattresses and does not have much effect on the higher grades, we find this position, that instead of having a supply of American cotton in sight or prospect as we did this time a year ago, of 13,000,000 bales, which was last year's crop plus the holdover then of 5,000,000 bales, we have a prospective supply of American cotton now, counting the holdover cotton and the new crop, of about 15,000,000 bales, or 14,000,000 spinnable, let us say. Now that makes a very big difference.

In the next place the price is low. I will not quote prices, because I might hit on the wrong grade, but we all know that the prices are in line with prewar figures. In other words, the prices are lower than they were in 1913 or less than they were in 1912.

We also know that economies have been in operation in the past year owing to the hard times. We know that the export trade is already beginning to pick up; that there is a better outlook in the textile trade; that whereas a year ago all the prospects in sight were depressing, now the situation is better, with a much lower price, with a much smaller supply, and with a prospect of improved conditions instead of worse conditions, the cotton outlook is very different from last year, and in the opinion of those who were at the recent conference, they were fully warranted in issuing the statement that they did.

Representative SUMNERS. There is also an added fact, Governor, which you have in mind, I am sure, and that is that during the years of the war and the time that has followed, that there has been a more or less wearing out of the cotton wardrobe of the world.

Gov. HARDING. Of what?

Representative SUMNERS. There has been during the years of the war and the years that have followed it, when the people had to choose between buying food and buying clothes, they have of necessity given preference to the purchase of food.

Gov. HARDING. Yes.

Representative SUMNERS. And there has been a considerable wearing out of the cotton wardrobe of the world during the years of the war and the years that have followed it.

Gov. HARDING. Yes, there has been. I will have to buy a new shirt myself this fall.

Representative SUMNERS. Yes. Now, Governor, I do not know whether that statement which was issued by your board, by those five governors, has been put into the record or not. If it has not been put into the record I would like to have it go in.

Gov. HARDING. It has been put in the record.

Representative SUMNERS. I have before me a copy of the statement given out by the Richmond bank and also a copy of the statement given out by the Atlanta bank. Now I am making these statements on my own responsibility. There has been some considerable criticism of the statement given out by the Richmond bank, and it has occurred to me that possibly a good deal of that criticism has arisen over what may be a typographical error in the statement. I do not know whether that is possible or not.

Gov. HARDING. Either that or a misapprehension of the meaning of it. As soon as my attention was called to that circular on Monday I telephoned to the Richmond bank and asked them what their policy was, and they said they are carrying loans on old crop cotton, and I have not heard any complaint of it further. I referred the complainants to the bank.

Representative SUMNERS. Yes.

Gov. HARDING. And I think it is an excellent thing to do, when people in one reserve bank district have routine complaints to make, that they make their complaints to the bank first.

Representative SUMNERS. Yes.

Gov. HARDING. Because it saves a lot of time. If they complain to their Congressman or complain to the Federal Reserve Board, it has got to be referred back to the bank in any event, and it is treating the bank with greater respect to go to the bank directly and thrash out. They get a better understanding of it. And then if anyone thinks the bank is unreasonable about it, of course he can bring the complaint up here. But I have not heard any further complaint about this circular since Monday. I referred the man who wrote me a letter about it to the Federal reserve bank of Richmond, and telephoned the bank, and they said they thought they could satisfy him as to its position, and I have heard nothing more about it.

Representative SUMNERS. I want to put into the record at this time, if there is no objection, a very brief statement made by Gov. Wellborn of the Atlanta bank which I think is very complimentary to him. He said [reading]:

I wish to call your attention to the following announcement, which was made at a conference held with the Federal Reserve Board in Washington on July 19, 1921. The policy of the Federal reserve system, herein announced, gives renewed assurance to our member banks that the credit situation will be dealt with very liberally by the Federal reserve bank of Atlanta in making loans on cotton. We will, as heretofore,

advance 80 per cent of the market value on cotton and other commodities when stored and insured according to our regulations. Discount lines, which apply to other classes of paper, will be disregarded in considering commodity secured notes.

Gov. HARDING. May I finish my statement now?

Representative SUMNERS. Yes.

Gov. HARDING. I would like to put in the record a statement which has been compiled by the division of statistics of the board showing the earning assets held by the Federal reserve banks at the end of each month since January, 1920, up to and including June, 1921, distributed by classes, customers' paper secured by Government obligations, member bank collateral notes, commercial paper not elsewhere included, agricultural paper, live-stock paper, acceptances purchased in open market, and United States securities.

Also a detailed statement by Federal reserve banks of agricultural paper held by each Federal reserve bank at the end of each month since January, 1920, in thousands of dollars.

Also live-stock paper held by each Federal reserve bank at the end of each month since January, 1920, up to June, 1921.

(The tables presented by Gov. Harding are here printed in full, as follows:)

Earning assets held by the Federal reserve banks at the end of each month since January, 1920, distributed by classes.

[In thousands of dollars.]

	Totalearning assets.	Paper discounted for member banks.							Acceptances purchased in open market.	United States securities.	
		Total.	Customers' paper secured by Government obligations.	Member bank col-lateral notes.		Commercial paper not elsewhere included.	Agricultural paper.	Live-stock paper.			Acceptances.
				Secured by Government obligations.	All other.						
1920—January	3,039,191	2,174,357	317,688	1,140,204	6,427	608,283	23,212	33,663	44,850	561,313	303,521
February	3,279,232	2,453,511	353,504	1,219,476	3,744	752,008	30,125	37,070	37,586	531,307	294,354
March	3,191,031	2,449,230	359,106	1,061,909	6,248	855,600	29,321	45,344	71,702	461,877	289,222
April	3,235,832	2,535,071	351,845	1,113,475	4,130	897,051	44,389	61,983	72,188	407,247	293,514
May	3,244,425	2,519,431	326,473	1,121,489	3,154	863,804	63,557	77,154	63,820	418,600	305,394
June	3,183,275	2,431,791	315,835	962,145	2,923	837,645	83,193	84,845	45,208	399,185	352,286
July	3,182,315	2,491,630	281,766	859,251	3,166	1,015,599	105,611	95,909	29,328	345,305	325,280
August	3,298,672	2,667,127	297,442	1,017,388	3,819	1,103,711	117,050	99,228	28,489	321,965	300,580
September	3,308,588	2,704,464	295,373	925,050	8,577	1,220,588	129,968	103,426	30,152	307,624	297,500
October	3,396,043	2,801,297	282,733	921,172	3,299	1,318,400	131,528	109,121	34,694	298,375	295,371
November	3,303,717	2,735,400	278,946	913,479	7,907	1,260,328	135,315	105,246	33,799	247,703	280,614
December	3,263,027	2,719,134	271,528	869,510	14,320	1,274,608	145,145	103,795	38,645	255,702	285,191
1921—January	2,907,968	2,457,116	230,188	810,177	17,907	1,143,438	140,815	83,233	36,935	163,700	287,150
February	2,841,738	2,389,510	224,607	773,361	13,031	1,127,795	136,879	83,654	30,383	160,421	282,807
March	2,628,376	2,233,104	204,707	766,592	15,789	994,984	140,987	81,663	28,572	119,340	276,932
April	2,453,427	2,076,569	211,106	726,546	12,137	869,733	140,223	81,187	26,637	100,763	267,095
May	2,249,851	1,907,913	159,563	627,681	12,006	855,608	152,748	76,719	23,588	75,457	266,481
June	2,050,757	1,751,350	98,306	539,284	15,226	842,002	157,875	76,258	22,309	40,223	259,184

NOTE.—Figures are as of the last Friday in each month during 1920 and as of the last day of each month during 1921.

Agricultural paper held by each Federal reserve bank at the end of each month since January, 1920.

[In thousands of dollars.]

	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlantia.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
1920—January.....	46	287	173	111	362	608	11,603	52	1,563	5,826	987	1,594	23,212
February.....	29	274	151	94	529	548	12,010	131	1,868	5,606	1,349	7,536	30,125
March.....	36	302	184	81	653	914	15,069	274	2,360	4,562	1,825	3,061	29,321
April.....	3	396	189	125	1,279	1,567	21,582	672	3,981	5,484	3,776	5,355	44,389
May.....	13	514	247	142	2,562	3,151	25,840	1,232	7,411	6,386	6,813	9,239	63,537
June.....	6	624	278	140	4,439	5,412	27,706	2,297	9,663	7,454	11,236	13,931	83,193
July.....	1	459	328	341	7,738	10,927	25,812	3,676	12,199	8,786	16,175	20,164	106,611
August.....	1	224	265	578	9,143	15,044	21,908	4,155	15,079	8,646	18,662	23,345	117,050
September.....		140	256	598	9,984	15,549	21,060	4,585	16,912	9,661	20,249	22,004	120,998
October.....		76	262	715	9,187	17,051	33,768	4,496	16,375	13,365	15,772	20,461	131,628
November.....		103	292	621	8,369	17,844	41,430	3,250	18,657	13,364	13,931	18,454	136,315
December.....		257	388	735	9,164	15,497	52,695	3,259	14,527	14,285	14,632	17,706	143,145
1921—January.....	298	296	417	717	9,317	12,967	52,454	4,869	14,460	12,736	15,822	16,462	140,815
February.....	193	354	363	599	8,898	12,879	49,973	6,003	17,816	11,074	16,210	12,317	136,679
March.....	169	492	400	480	8,838	11,902	53,375	7,033	19,761	9,914	16,221	12,402	140,987
April.....	210	645	566	673	9,726	11,319	58,103	7,560	20,724	8,797	16,674	14,226	149,223
May.....	441	724	606	630	10,084	10,828	56,576	8,279	21,796	7,761	17,699	17,324	152,748
June.....	907	821	641	763	11,109	12,238	53,867	9,271	22,823	7,550	19,263	18,622	157,875

NOTE.—Figures are as of the last Friday in each month during 1920 and as of the last day of each month during 1921.

Live-stock paper held by each Federal reserve bank at the end of each month since January, 1920.

[In thousands of dollars.]

	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolia.	Kansas City.	Dallas.	San Fran- cisco.	Total.
1920—January.....			4	79	7	85		243	7,940	16,052	3,650	5,633	33,693
February.....			4	68	4	119		258	10,459	20,485	3,484	2,189	37,070
March.....			6	105	36	257		402	8,378	23,184	4,340	8,636	45,344
April.....			7	184	38	560		1,887	11,303	29,914	7,811	10,289	61,993
May.....			5	287	84	1,239		2,152	18,937	32,010	9,429	13,011	77,154
June.....			3	269	142	1,718		1,958	20,707	35,243	10,862	13,943	84,845
July.....	1 5,085			247	149	2,392		2,142	30,935	27,567	12,377	15,015	95,909
August.....	1 2,239			187	130	3,007		1,583	40,736	25,373	10,840	15,133	99,228
September.....			5	208	107	2,916		2,033	44,560	28,197	11,462	13,938	103,426
October.....			10	147	205	2,182		3,567	44,661	32,671	14,559	11,119	109,121
November.....	119		5	156	112	1,126		2,615	45,137	30,593	14,715	10,668	105,246
December.....				158	87	1,335		1,637	39,370	32,555	16,619	12,034	103,795
1921—January.....	27			244	36	1,535		946	23,823	29,876	18,229	13,517	88,233
February.....	55			211	29	1,618		463	22,182	26,724	18,277	14,095	83,654
March.....	9		5	199	25	1,678		607	15,361	29,190	18,936	15,683	81,693
April.....	8		5	255	75	2,075		778	16,961	26,725	18,717	15,588	81,187
May.....	4		5	341	99	2,330		871	16,820	24,336	17,054	14,859	76,719
June.....	8			347	117	2,688		1,184	17,746	22,832	16,703	14,633	76,258

¹ Represents paper rediscounted for other Federal reserve banks.

NOTE.—Figures are as of the last Friday in each month during 1920 and as of the last day in each month during 1921.

• Earning assets of the Federal reserve banks at the end of each month since January, 1920, distributed by classes.

[In thousands of dollars. Figures are as of the last Friday in each month during 1920, and as of the last day of each month during 1921.]

	Total earning assets on hand.	Holdings of discounted paper.							Holdings of acceptances purchased in open market.	United States securities.	Paper discounted for (+) or rediscounted with (-) other Federal reserve banks.	Acceptances purchased from (+) or sold to (-) other Federal reserve banks (net).		
		Total.	Customers' paper secured by Government obligations.	Member bank collateral notes.		Commercial paper not elsewhere included.	Agricultural paper.	Live-stock paper.					Acceptances.	
				Secured by Government obligations.	All other.									
BOSTON.														
1920—January.....	234,964	161,018	63,065	49,888	.....	40,768	40	.....	7,271	51,511	22,435	.....	-	1,021
February.....	218,642	180,424	57,642	46,828	.....	64,029	29	.....	11,896	16,079	22,139	.....	-	11,928
March.....	235,795	195,865	48,469	65,676	100	69,408	36	.....	12,176	17,789	22,141	.....	+	23,399
April.....	207,798	157,085	33,353	55,527	.....	63,597	3	.....	4,604	28,583	22,130	.....	+	22,126
May.....	226,690	169,830	38,436	69,322	.....	58,755	.....	.....	3,317	34,746	22,114	.....	+	20,366
June.....	201,896	146,210	30,880	55,316	.....	58,880	13	.....	1,127	33,183	22,497	.....	+	12,128
July.....	205,701	149,581	25,862	63,959	.....	54,300	6	1 5,085	369	28,901	22,219	.....	+	44,923
August.....	227,731	185,546	23,257	93,523	.....	66,338	1	1 2,239	188	20,116	22,069	.....	+	66,911
September.....	236,470	183,331	21,879	92,124	.....	69,147	.....	.....	181	30,780	22,359	.....	+	60,655
October.....	245,182	191,117	18,084	77,022	.....	95,836	.....	.....	175	31,985	22,080	.....	+	81,199
November.....	220,098	172,165	21,264	57,024	.....	93,545	.....	.....	213	23,055	24,878	.....	+	27,217
December.....	220,324	178,543	23,996	54,745	.....	99,620	.....	.....	182	19,532	22,249	.....	+	16,575
1921—January.....	172,094	127,917	17,309	36,597	.....	73,484	.....	.....	298	22,132	22,045	.....	+	5,015
February.....	178,810	140,414	21,103	38,308	.....	80,668	.....	.....	193	55	22,036	.....	+	1,082
March.....	180,196	149,334	22,306	42,548	.....	83,953	.....	.....	169	9	22,036	.....	.....	.....
April.....	133,288	104,369	14,330	30,325	.....	59,349	.....	.....	210	8	21,116	.....	.....	.....
May.....	145,039	112,951	11,699	32,964	.....	67,665	.....	.....	441	4	20,715	.....	.....	.....
June.....	125,731	97,348	11,414	28,742	.....	55,890	.....	.....	907	8	19,735	.....	.....	.....
NEW YORK.														
1920—January.....	1,024,089	762,127	122,207	473,288	.....	148,143	.....	.....	18,202	191,215	70,747	.....	-	50,000
February.....	1,148,056	852,966	152,671	477,610	.....	207,232	.....	.....	15,179	231,257	63,833	.....	-	47,950
March.....	1,075,777	815,634	164,701	388,070	301	241,542	.....	.....	20,718	196,484	63,659	.....	-	32,015
April.....	1,084,103	856,776	171,689	463,092	.....	195,971	.....	.....	396	25,628	66,806	.....	+	84,996
May.....	1,063,429	804,638	144,077	425,194	.....	212,033	.....	.....	514	179,372	79,419	.....	+	84,425
June.....	1,089,659	781,562	140,043	378,460	.....	246,173	.....	.....	624	189,342	118,755	.....	+	61,961
July.....	1,046,525	828,321	127,872	392,331	.....	302,071	.....	.....	459	5,588	83,009	.....	+	39,025

1 Represents paper discounted for other Federal reserve banks.

Earning assets of the Federal reserve banks at the end of each month since January, 1920, distributed by classes—Continued.

	Total earning assets on hand.	Holdings of discounted paper.							Holdings of acceptances purchased in open market.	United States securities.	Paper discounted for (+) or rediscounted with (-) other Federal reserve banks.	Acceptances purchased from (+) or sold to (-) other Federal reserve banks (net).	
		Total.	Customers' paper secured by Government obligations.	Member bank collateral notes.		Commercial paper not elsewhere included.	Agricultural paper.	Live-stock paper.					Acceptances.
				Secured by Government obligations.	All other.								
NEW YORK—continued.													
1920—January	1,091,479	920,043	143,861	410,131	74	359,644	224		6,109	100,523	70,913		40,923
September	1,010,749	847,059	145,158	347,052		347,083	140		7,626	94,783	68,907		13,404
October	1,095,528	937,223	140,349	375,598		410,934	76		10,266	88,546	69,769	48,000	13,362
November	1,052,000	901,787	133,651	331,376		425,986	103		10,671	77,990	72,223	10,150	14,352
December	1,075,351	904,239	123,662	322,264		444,845	257		13,211	109,902	61,210		6,917
1921—January	1,002,471	914,817	98,397	313,618		490,524	296		11,982	27,109	60,545		31,827
February	994,462	890,264	102,630	283,442		490,002	354		13,836	33,662	60,536		22,654
March	741,930	642,011	86,219	268,440	20	276,713	492		10,127	40,303	59,616		513
April	726,187	613,263	101,982	272,553		228,596	645		9,497	55,686	57,238	16,925	25
May	617,834	523,628	60,648	201,899		252,085	821		8,272	33,934	60,272	27,020	
June	467,312	390,793	22,527	145,657		214,156	724		7,632	15,549	60,970	38,024	
PHILADELPHIA.													
1920—January	235,611	195,140	81,336	77,936		34,873	173		818	7,825	32,606	32,790	
February	250,625	211,468	80,702	84,324		43,987	151	4	2,300	6,752	32,405	38,925	
March	244,232	206,700	72,653	90,540	14	40,200	184	6	3,103	5,565	31,967	35,555	
April	244,183	209,196	63,581	118,241		25,765	189	7	1,413	2,842	32,125	20,709	
May	248,353	213,976	63,917	123,530		24,955	247	5	1,322	2,070	32,307		
June	229,910	190,421	62,871	98,363		27,719	278	3	1,187	2,012	37,477		
July	232,756	180,608	49,148	93,830		36,289	328		1,013	11,405	40,743		10,014
August	229,015	174,416	48,406	88,950		36,261	285		534	19,904	34,695	30,617	11,812
September	233,032	187,315	45,662	85,935	30	55,014	256	5	413	12,122	33,566	30,817	5,195
October	227,071	175,689	38,532	76,934		59,404	262	10	547	19,252	32,130	27,129	10,072
November	234,900	171,621	38,423	83,190		49,290	292	5	421	17,560	45,719	14,780	6,998
December	218,637	173,563	39,597	76,080	50	57,069	398		379	12,803	32,181	17,109	
1921—January	192,490	150,218	36,834	71,231		41,552	417		184	10,323	31,949	4,554	
February	200,631	148,706	35,887	70,762		41,466	363		228	19,664	32,261		3,896
March	200,916	156,357	35,660	72,871		47,208	400	5	213	13,867	30,692		
April	190,370	148,202	35,004	74,853	35	37,513	566	5	226	11,750	30,418		
May	196,946	156,491	34,086	82,066	40	39,441	606	5	217	11,030	29,425		
June	174,401	140,595	18,102	76,434		45,166	641		252	4,465	20,341		

CLEVELAND.

1920	January	241,264	143,495	10,811	80,129	150	43,453	111	79	2,762	73,355	24,414	+	8,900	++	18,621
	February	270,382	175,984	13,371	112,459	40	48,410	94	68	1,542	70,110	24,370	+	9,855	++	5,726
	March	267,444	181,219	15,271	117,029	450	46,196	81	105	2,067	61,980	24,236	+	37,891	+++	413
	April	256,233	175,709	17,902	93,179	505	58,361	125	184	5,453	56,312	24,212	+	42,526	+++	5,749
	May	250,789	168,490	17,817	95,315	250	51,195	142	287	3,474	58,110	24,199	+	40,193	+++	3,885
	June	252,100	173,410	17,077	102,500	151	51,291	140	269	1,982	53,822	24,806	+	50,898	+++	1,210
	July	237,855	154,130	14,949	62,185	36	74,113	341	247	2,366	57,551	24,165	+	36,165	+++	10,001
	August	287,772	196,714	13,759	66,247	142	113,240	578	187	2,561	66,892	24,160	+	98,620	+++	10,000
	September	286,146	221,667	12,905	39,674	36	145,611	598	208	2,635	50,266	24,181	+	135,620	+++	10,000
	October	285,282	221,183	11,283	51,815	77	154,337	715	147	2,799	39,956	24,143	+	138,750	+++	10,000
	November	283,215	207,872	9,216	86,351	131	109,206	621	156	2,192	31,201	24,142	+	112,106	+++	10,000
	December	250,557	190,333	8,094	87,330	242	87,744	735	158	5,030	26,581	24,643	+	81,573	+++	10,000
1921	January	191,307	138,909	12,285	57,807	87	65,782	717	244	1,896	43,178	24,644	+	28,969	+++	25,093
	February	191,307	126,793	8,561	59,442	59	61,407	717	211	1,946	39,871	24,643	+	12,898	+++	10,432
	March	181,118	134,536	5,549	58,442	100	71,085	480	199	3,681	21,909	24,673	+	14,700	+++	522
	April	180,058	142,174	7,744	49,273	112	81,313	473	255	2,804	13,221	24,663	+	4,000	+++	522
	May	163,730	134,976	7,519	42,261	95	82,177	630	341	1,953	6,077	22,677	+	22,677	+++	522
	June	176,940	151,856	8,651	46,124	115	93,691	763	347	2,195	2,336	22,728	+	22,728	+++	522

RICHMOND.

1920	January	124,003	99,760	11,605	64,700	770	20,354	362	7	1,962	10,748	13,495	-	5,000	.....	.....
	February	128,374	104,452	11,547	68,236	415	22,285	529	4	1,456	10,427	13,495	-	.....	.....	.....
	March	125,935	101,813	11,532	52,846	45	35,059	653	36	1,642	10,627	13,495	-	15,000	.....	.....
	April	119,865	94,862	10,553	45,431	358	35,921	1,279	38	1,282	11,506	13,495	-	24,850	.....	.....
	May	122,899	99,456	9,670	50,167	514	35,192	2,562	84	1,267	9,948	13,495	-	25,000	.....	.....
	June	120,731	99,067	8,991	39,311	768	43,910	4,439	142	1,506	8,171	13,493	-	24,904	.....	.....
	July	123,589	104,508	6,644	35,785	701	51,989	7,738	149	1,502	5,588	13,493	-	23,133	.....	.....
	August	121,401	100,762	5,939	30,776	1,221	52,170	9,143	130	1,383	7,146	13,493	-	25,000	.....	.....
	September	131,815	111,162	5,911	31,696	1,023	60,791	9,984	107	1,650	7,158	13,495	-	24,620	.....	.....
	October	131,693	112,535	6,663	33,693	909	60,070	9,187	205	1,808	5,663	13,495	-	14,275	.....	.....
	November	134,673	115,499	6,158	44,884	645	53,441	8,369	112	1,890	5,679	13,495	-	10,000	.....	.....
	December	131,633	112,886	5,414	37,874	935	57,350	9,164	87	2,062	5,262	13,495	-	10,000	.....	.....
1921	January	130,279	111,932	5,061	45,733	.....	50,022	9,317	36	1,763	4,852	13,495	-	.....	.....	.....
	February	126,190	109,450	4,674	46,069	.....	47,993	8,898	29	1,796	3,236	13,495	-	.....	.....	.....
	March	130,637	114,364	5,282	45,267	383	52,744	8,838	25	1,825	2,777	13,496	-	.....	.....	.....
	April	124,827	109,599	4,700	31,938	335	60,872	9,726	75	1,953	1,734	13,494	-	14,925	.....	.....
	May	118,213	105,768	4,226	32,556	322	56,994	10,984	99	1,487	1,951	10,494	-	15,000	.....	.....
	June	109,768	99,138	3,536	21,909	1,358	59,653	11,109	117	1,456	2,137	8,493	-	24,849	.....	.....

ATLANTA.

1920	January	125,575	98,433	3,583	60,166	125	32,611	608	85	1,255	11,098	16,044	+	15,000	.....	.....
	February	135,156	102,633	3,638	59,200	95	38,307	548	119	1,572	16,741	15,782	+	11,100	.....	5,067
	March	123,099	98,176	4,851	50,957	140	38,456	914	257	2,601	9,141	15,782	+	2,650	.....	701
	April	137,320	114,207	6,187	54,405	110	46,170	1,567	560	5,208	7,330	15,783	+	.....	.....	.....
	May	137,984	116,322	7,122	48,403	110	51,693	3,151	1,239	4,604	5,890	15,782	-	8,500	.....	.....
	June	134,462	114,058	7,695	41,289	165	53,761	5,412	1,718	4,018	4,621	15,783	-	7,960	.....	.....
	July	133,445	114,127	8,430	46,209	112	44,169	10,927	2,392	1,868	3,536	15,782	-	21,607	.....	.....
	August	136,862	118,892	10,510	53,809	206	34,470	15,044	3,007	1,846	2,188	15,782	-	31,973	.....	.....
	September	140,155	122,949	13,204	50,475	255	39,246	15,549	2,916	1,304	1,423	15,783	-	45,833	.....	.....

Earning assets of the Federal reserve banks at the end of each month since January, 1920, distributed by classes—Continued.

	Total earning assets on hand.	Holdings of discounted paper.								Holdings of acceptances purchased in open market.	United States securities.	Paper discounted for (+) or rediscounted with (-) other Federal reserve banks.	Acceptances purchased for (+) or sold to (-) other Federal reserve banks (net).	
		Total.	Customers' paper secured by Government obligations.	Member bank collateral notes.		Commercial paper not elsewhere included.	Agricultural paper.	Live-stock paper.	Acceptances.					
				Secured by Government obligations.	All other.									
ATLANTA—continued.														
1920	October	158,708	140,673	13,559	55,402	133	50,680	17,051	2,182	1,666	2,258	15,782	-36,122	
	November	155,219	137,026	14,163	55,332	191	46,011	17,841	1,126	2,326	2,409	15,784	+40,216	
	December	154,430	134,149	13,714	48,258	291	52,567	15,497	1,335	2,481	3,492	16,789	-33,659	
1921	January	147,516	127,615	12,305	45,001	357	53,344	12,967	1,535	2,106	3,119	16,782	-17,318	
	February	146,220	128,010	12,547	46,962	297	52,083	12,879	1,618	1,624	1,428	16,782		
	March	140,381	122,890	11,104	45,777	372	50,657	11,902	1,678	1,400	711	16,780		
	April	132,935	115,590	9,924	42,357	283	48,266	11,319	2,075	1,336	1,157	16,188		
	May	126,191	102,034	7,955	31,465	180	47,637	10,828	2,330	1,639	1,009	23,148		
	June	125,697	99,990	5,635	30,644	255	47,201	12,238	2,688	1,319	977	24,740		
CHICAGO.														
1920	January	430,698	314,914	7,641	146,001	4	147,953	11,603		1,712	70,807	44,977	+48,940	+2,978
	February	486,597	372,832	13,077	164,122		169,290	12,010		14,333	69,518	44,247	+33,410	
	March	511,018	404,150	14,426	145,303	151	211,130	15,069		18,071	62,761	44,107	+7,605	
	April	523,161	424,897	15,887	121,604	410	249,237	21,562		16,197	54,150	44,114	-38,471	
	May	527,041	427,540	12,642	146,740	333	230,385	25,840		11,600	55,392	44,109	18,995	
	June	525,711	426,955	18,413	112,334	272	261,769	27,706		6,461	54,648	44,108	24,950	
	July	528,271	444,643	17,981	138,496	459	256,559	25,812		5,336	39,482	44,146	-10,001	
	August	524,010	438,764	21,858	140,770	347	247,974	21,908		5,907	41,099	44,147	-8,001	
	September	556,738	473,908	19,471	133,930	5,333	288,709	33,768		5,405	38,658	44,172	-19,800	-10,000
	October	552,166	463,837	19,812	125,138	389	279,918	41,430		4,812	44,221	44,108	-7,060	
	November	550,687	478,457	21,265	128,216	355	281,200	41,768		5,791	28,091	44,139		
	December	545,932	475,869	24,998	117,625	4,704	270,377	52,685		5,470	25,961	44,102		
1921	January	441,265	385,542	23,795	112,462	653	192,269	52,454		3,909	11,596	44,157		
	February	426,085	368,617	20,932	104,770	899	188,477	49,973		3,666	10,364	44,104	-1,000	
	March	481,832	427,569	21,632	107,036	3,941	238,510	53,375		3,075	11,114	43,149	-1,000	
	April	413,286	364,596	19,741	101,422	635	181,350	58,103		3,345	7,501	41,189		
	May	359,221	313,710	17,070	95,081	523	141,681	56,576		2,779	4,821	40,690		
	June	366,146	321,934	15,289	89,512	2,034	158,304	53,867		2,958	3,500	40,712		

ST. LOUIS.

1920-January	122,935	93,362	6,967	41,333	436	39,992	52	243	4,337	10,860	18,713	.....	+1,663
February	135,163	105,995	8,290	42,869	592	49,898	131	258	3,963	10,524	18,644	.....	-11,826
March	137,395	107,857	12,999	31,852	539	58,757	274	402	3,184	11,130	18,408	.....	-5,686
April	132,140	111,068	13,961	43,928	694	47,907	672	1,887	2,014	2,695	18,382	.....	-5,749
May	131,948	110,344	15,365	43,064	318	46,290	1,232	2,152	1,893	3,232	18,372	.....	-3,558
June	128,805	106,679	14,772	39,829	147	45,546	2,297	1,958	2,130	3,657	18,486	.....	-1,210
July	128,712	107,186	13,079	25,413	94	60,680	3,676	2,142	2,493	3,232	18,386	.....	-30,607
August	133,207	112,230	11,464	24,306	63	68,353	4,155	1,583	2,207	2,315	18,662	.....	-32,484
September	136,652	116,483	10,621	29,150	18	67,826	4,585	2,033	2,250	1,595	18,574	.....	-36,996
October	140,511	120,854	10,883	33,245	81	65,606	4,496	3,567	2,976	1,488	18,369	.....	-37,305
November	140,234	120,169	10,102	39,723	145	62,128	3,250	2,615	2,206	1,365	18,700	.....	-12,793
December	132,599	114,218	7,517	37,190	45	62,166	4,259	1,637	2,401	1,146	17,235	.....	-17,038
1921-January	115,374	97,426	6,394	32,643	5	50,623	4,869	946	1,946	910	17,038	.....	-1,939
February	107,495	90,439	5,449	29,755	10	47,266	6,003	463	1,853	1,939	14,724	.....	+1,000
March	105,752	89,021	5,648	30,214	114	43,630	7,033	607	1,575	2,225	14,506	.....	+1,000
April	96,227	81,237	5,297	30,504	209	35,621	7,560	778	1,168	799	14,221	.....	-1,168
May	95,279	81,538	3,817	28,204	5	38,606	8,279	871	2,056	218	13,223	.....	-1,168
June	100,082	86,793	3,052	29,734	.....	42,327	9,371	1,184	1,225	219	13,020	.....	-1,168

MINNEAPOLIS.

1920-January	79,403	65,116	4,279	19,604	355	31,230	1,563	7,940	145	5,691	8,596	.....	+4,000
February	81,462	68,756	5,006	23,246	377	27,730	1,968	10,459	70	4,110	8,596	.....	+10,029
March	79,593	65,382	6,005	25,875	347	22,292	2,360	8,378	125	5,615	8,596	.....	-11,111
April	90,207	75,359	6,922	8,836	363	43,749	3,961	11,303	206	6,237	8,611	.....	-19,132
May	88,781	75,837	6,679	3,447	555	39,285	7,411	18,937	523	4,341	8,602	.....	-23,672
June	84,932	72,125	2,491	2,605	732	35,507	9,663	20,707	420	4,205	8,597	.....	-13,738
July	90,280	78,524	3,964	4,841	940	25,122	12,199	30,935	523	3,159	8,597	.....	-20,347
August	87,741	78,209	4,413	2,314	1,035	14,219	15,079	40,736	413	935	8,597	.....	-21,349
September	94,236	84,251	3,936	2,743	930	14,995	16,912	44,560	175	1,388	8,597	.....	-25,980
October	94,665	84,670	5,006	3,657	1,159	13,364	16,375	44,661	448	1,398	8,597	.....	-14,801
November	90,664	80,562	5,657	6,055	4,132	721	18,657	45,137	203	1,490	8,595	.....	-2,775
December	91,678	81,669	5,709	12,297	8,272	1,277	14,527	39,370	217	1,413	8,596	.....	-2,775
1921-January	87,157	78,541	3,613	15,633	8,929	11,888	14,460	23,823	195	21	8,595	.....	-2,775
February	81,696	73,100	1,642	13,415	5,920	11,767	17,816	22,182	358	.....	8,596	.....	-2,000
March	79,363	70,768	1,297	11,988	4,897	16,815	19,761	15,361	649	.....	8,595	.....	-12,020
April	80,288	71,681	993	11,667	3,496	17,161	20,724	16,961	699	.....	8,607	.....	-12,020
May	75,079	66,483	1,196	5,293	835	20,147	21,796	16,820	686	.....	8,596	.....	-13,175
June	76,940	71,329	623	4,985	921	23,926	22,823	17,746	305	.....	5,611	.....	-13,175

KANSAS CITY.

1920-January	120,048	87,947	3,589	29,217	4,163	28,553	5,826	16,052	547	7,910	24,191	.....	+5,000
February	130,261	98,569	4,590	33,172	1,650	32,288	5,606	20,495	578	6,837	24,855	.....	+1,871
March	128,945	104,542	4,897	29,122	3,976	38,399	4,562	23,184	402	2,651	21,732	.....	-15,871
April	133,073	110,625	6,179	20,357	1,060	46,661	5,484	29,914	970	461	21,987	.....	-13,865
May	135,139	111,970	6,016	26,867	60	39,532	6,386	32,010	1,099	1,309	21,860	.....	-22,902
June	134,186	110,138	7,234	26,053	227	32,942	7,454	35,243	965	2,102	21,946	.....	-22,247
July	133,966	109,199	6,928	39,069	196	25,446	8,786	27,567	1,205	3,016	21,751	.....	-22,247
August	135,381	108,704	7,451	39,727	222	27,425	8,646	25,373	860	3,984	21,693	.....	-41,175
September	135,000	108,785	8,376	26,633	553	34,424	9,661	28,197	1,941	3,521	21,694	.....	-41,175

Earning assets of the Federal reserve banks at the end of each month since January, 1920, distributed by classes—Continued.

	Total earning assets on hand.	Holdings of discounted paper.							Holdings of acceptances purchased in open market.	United States securities.	Paper discounted for (+) or rediscounted with (-) other Federal reserve banks.	Acceptances purchased for (+) or sold to (-) other Federal reserve banks (net).	
		Total.	Customers' paper secured by Government obligations.	Member bank collateral notes.		Commercial paper not elsewhere included.	Agricultural paper.	Live-stock paper.					Acceptances.
				Secured by Government obligations.	All other.								
KANSAS CITY—continued.													
1920--October.....	139,786	115,777	9,587	24,238	305	33,713	13,365	32,671	1,898	2,313	21,696	-44,895	
November.....	137,171	113,664	10,180	16,389	67	41,271	13,364	30,563	1,600	1,818	21,689	-25,464	
December.....	134,799	111,094	7,908	22,204	749	31,355	14,285	32,555	2,138	2,017	21,688	-29,086	
1921--January.....	131,142	108,184	5,111	31,413	.....	27,803	12,736	29,876	1,245	1,270	21,688	.....
February.....	118,093	98,372	4,632	32,360	205	22,209	11,074	26,724	1,168	533	19,188	.....
March.....	119,471	100,096	4,320	30,690	5	24,774	9,814	29,190	1,203	188	19,190	.....
April.....	114,972	95,759	4,221	28,456	5	26,299	8,797	26,725	1,256	25	19,188	.....
May.....	100,175	81,669	4,183	19,997	57	24,972	7,761	24,336	563	25	18,261	.....
June.....	95,811	78,602	3,066	22,141	.....	22,525	7,550	22,832	486	20	17,189	.....
DALLAS.													
1920--January.....	75,814	62,511	193	45,283	316	12,082	987	3,650	.....	1,037	12,266	+14,950
February.....	85,864	71,846	174	53,730	65	13,046	1,349	3,454	.....	1,750	12,266	+23,500
March.....	69,400	56,014	329	38,817	35	10,868	1,825	4,340	.....	1,120	12,266	+7,825
April.....	87,786	73,552	1,358	40,326	440	18,927	3,776	7,811	914	1,968	12,266	+3,000	
May.....	87,312	73,652	1,748	34,967	430	19,725	6,813	9,429	533	1,304	12,266	-13,000	
June.....	86,341	73,075	2,122	27,106	269	20,953	11,236	10,862	924	405	12,461	-5,000	
July.....	84,999	72,475	2,774	13,226	489	26,037	16,175	12,377	967	658	12,266	-20,718	
August.....	86,469	73,648	2,528	18,036	372	22,289	13,662	10,840	921	555	12,266	-34,540	
September.....	89,427	76,398	3,074	18,136	330	22,235	20,249	11,462	712	763	12,266	-37,419	
October.....	90,987	77,638	3,080	17,130	341	25,900	15,772	14,559	856	1,070	12,279	-32,328	
November.....	89,634	77,140	2,938	18,028	739	26,106	13,631	14,715	663	215	12,279	-26,600	
December.....	81,411	68,885	3,029	12,008	764	21,506	16,632	16,619	327	247	12,279	-27,711	
1921--January.....	82,805	70,429	2,478	13,055	1,470	18,529	14,822	18,229	846	37	12,279	-19,445	
February.....	81,278	68,060	1,150	12,358	1,582	18,766	16,210	18,277	617	39	12,279	-12,898	
March.....	75,978	63,578	1,058	11,534	1,600	13,508	16,221	18,936	721	21	12,279	-14,709	
April.....	72,791	64,387	1,167	8,783	1,439	16,699	16,674	18,717	908	25	8,379	-8,992	
May.....	71,586	64,030	1,107	7,315	3,146	16,816	17,699	17,054	899	171	7,379	-5,500	
June.....	68,090	62,167	1,022	7,194	3,439	13,349	19,263	16,703	907	150	6,379	-9,405	

SAN FRANCISCO.

1920	January	224,787	90,834	2,412	46,679	106	28,271	1,594	5,633	5,639	119,256	14,907	.....	+ 3,408
	February	208,650	107,584	2,796	53,686	310	35,624	7,536	2,189	5,543	87,263	13,813	.....	+ 3,408
	March	192,368	111,878	3,073	46,022	150	43,283	3,081	5,636	7,643	67,007	13,513	+ 8,000	+ 2,081
	April	219,988	131,740	4,373	48,548	190	54,785	5,358	10,299	8,300	74,730	13,513	.....	+ 7,687
	May	226,790	147,086	3,964	54,243	575	54,666	9,239	13,011	11,368	62,806	13,968	.....	+ 2,371
	June	194,542	137,688	3,246	38,979	192	59,191	13,931	12,943	8,206	43,017	13,637	.....	+ 392
	July	216,216	145,319	4,235	43,907	137	58,796	20,164	15,015	6,006	54,074	13,623	.....	+ 19,092
	August	228,604	158,199	3,996	48,800	137	61,328	23,345	15,133	5,400	56,308	14,067	.....	+ 15,672
	September	249,168	170,186	5,176	47,502	169	75,507	22,004	13,938	5,890	65,135	13,877	.....	+ 8,209
	October	234,464	160,301	6,085	47,300	255	68,638	20,461	11,119	6,443	60,230	13,933	.....	+ 63
	November	235,222	159,438	5,908	46,911	694	71,389	18,454	10,668	5,413	56,890	18,954	.....	+ 6,917
	December	225,676	164,636	7,968	41,635	1,852	78,727	17,706	12,094	4,744	47,266	13,724	.....	+ 6,917
1921	January	198,742	145,636	6,906	34,984	2,829	67,617	16,462	13,517	3,671	36,133	13,933	.....	+ 16,083
	February	202,471	145,968	5,400	41,141	4,068	65,683	12,317	14,085	3,274	42,325	14,163	.....	+ 7,318
	March	191,801	162,890	4,432	46,585	4,357	75,367	12,402	15,968	3,754	16,544	12,677	.....	9
	April	188,197	165,712	5,903	44,415	5,598	76,674	14,226	15,588	3,308	10,092	12,393	.....	25
	May	180,537	164,120	6,057	48,550	6,903	67,387	17,325	14,868	3,149	4,848	11,580	.....	.....
	June	163,283	150,815	5,419	35,918	7,104	65,934	18,622	14,653	3,185	2,202	10,266	.....	.....

AGRICULTURAL INQUIRY.

Gov. HARDING. I want to state in this connection that the board's statistician has called my attention to a statement which I made before the House Committee on Banking and Currency on June 1, 1921, and I may say that I made practically the same statement a few days later before a subcommittee of the Senate Committee on Banking and Currency. I made the statement in good faith, but from memory, and the statement is rather confused. I referred to the amount of agricultural and live-stock paper carried by the Federal reserve banks, and stated that this must be so because it was maturing after 90 days, between 90 days and 6 months.

I find that I made an error in making that statement. The actual amount of paper maturing over 90 days at each Federal reserve bank is published each month in the Federal Reserve Bulletin. All such paper, of course, maturing beyond 90 days must necessarily be agricultural and live-stock paper, because otherwise the Federal reserve bank could not take it. But for 18 months past the Federal reserve banks have been classifying separately, without regard to maturity, all paper which they know is agricultural or live-stock paper, and these reports are forwarded once a month to the board's statistician. Now, before I made that statement to the House committee I sent to the statistician and asked him to give me a memorandum regarding agricultural and live-stock paper. He gave me his memorandum, giving me the figures as he had received them from the Federal reserve banks. He did not tell me that some of these maturities were within 90 days, and I inadvertently stated that these maturities were beyond 90 days, when, as a matter of fact, the paper which is beyond 90 days, which is all agricultural and live stock, but only a part of the total which the Federal reserve banks have on hand, is referred to in the tables shown in the Federal Reserve Bulletin.

The significant part of it is this, however, that those tables show the increase in agricultural and live-stock paper. The absolute amount is not of so much importance, because it is admittedly a comparatively small amount in proportion to the total borrowings of the country, and there must be very many more loans made to the agricultural and live-stock interests than either set of these figures show, but the interesting part is that those tables, one showing the maturities beyond 90 days up to 6 months, and the other showing the paper which the Federal reserve banks can identify at the time it is taken as being agricultural and live-stock paper, show about the same percentage of increase.

Now, I want to put into the record, in conclusion, the statement that the total earning assets of the Federal reserve banks, which included loans to member banks and any investment they had, amounted at the end of January, 1920, to \$3,039,191,000.

At the end of October, 1920, they amounted to \$3,396,043,000.

At the end of November, 1920, they amounted to \$3,303,717,000.

At the end of December, 1920, they amounted to \$3,263,027,000.

At the end of January, 1921, they amounted to \$2,907,966,000.

At the end of February, 1921, they amounted to \$2,841,738,000.

At the end of March, 1921, they amounted to \$2,629,376,000.

At the end of April, 1921, they amounted to \$2,453,427,000.

At the end of May, 1921, they amounted to \$2,249,851,000.

At the end of June, 1921, they amounted to \$2,050,757,000.

Of course if you want a comparison down to a more recent date you will find from the last statement that they are down to about \$1,900,000,000.

While there has been a reduction from the 1st of January, 1920, to the end of June of approximately \$1,000,000,000 in the total loans and investments of Federal reserve banks, there has been an increase in agricultural paper and an increase in live-stock paper.

For instance, the amount of agricultural paper reported by all Federal reserve banks at the end of January, 1920, was \$23,212,000.

At the end of June, 1921, the amount of agricultural paper was \$157,875,000.

The live-stock paper at the end of January, 1920, was \$33,693,000.

At the end of June, 1921, the live-stock paper was \$76,258,000.

A total of agricultural paper and live-stock paper of \$234,133,000.

The reduction which has been made in loans during that time has not been in commercial paper.

At the end of January, 1920, commercial paper not elsewhere included was \$608,283,000.

At the end of June, 1921, it was \$842,092,000.

Of course during the fall months of 1920 commercial paper went up. At the end of October the amount was \$1,318,400,000.

Representative SUMNERS. Did you say a decrease had not been made in commercial paper or had been made?

Gov. HARDING. No; I will state it in another way. The commercial paper, is, paper which is not secured by Government obligations, and which is not included in the acceptances listed, but is as a rule the plain notes that a bank discounts for merchants and manufacturers. I have already shown the tremendous increase in the amount of agricultural and live-stock notes that the banks held. Now the commercial paper at the end of January, 1920, was \$608,283,000.

Commercial paper at the end of May, 1920, was \$863,804,000.

At the end of June, 1920, the commercial paper was \$937,645,000.

At the end of July, 1920, the commercial paper was \$1,015,599,000.

At the end of August, 1920, the commercial paper was \$1,103,711,000.

At the end of September, 1920, the commercial paper was \$1,220,588,000.

At the end of October, 1920, the commercial paper was \$1,318,400,000.

At the end of November, 1920, the commercial paper was \$1,260,326,000.

At the end of December, 1920, the commercial paper was \$1,274,606,000.

At the end of January, 1921, the commercial paper was \$1,143,438,000.

At the end of February, 1921, the commercial paper was \$1,127,795,000.

At the end of March, 1921, the commercial paper was \$994,964,000.

At the end of April, 1921, the commercial paper was \$869,733,000.

At the end of May, 1921, the commercial paper was \$855,608,000.

At the end of June, 1921, the commercial paper was \$842,092,000.

So that while we have come down from the peak in rediscounting commercial paper, which was reached in last October, when it went to over twice as much as it started off with at the end of January,

1920—and that covers a period, by the way, when some people said we were calling in loans and curtailing—the commercial loans of the Federal Reserve Banks doubled between the end of January, 1920, and the end of October, 1920, and the agricultural loans between the end of January, 1920, and the end of October, 1920, increased nearly six times in volume.

They are very interesting figures if you study them. The reduction was in paper secured by Government obligations, and member banks' collateral notes secured by Government obligations, and in acceptances purchased in the open market.

For instance, at the end of January, 1920, the Federal Reserve banks held \$561,313,000 of acceptances.

At the end of June, 1921, they held only \$40,223,000 of acceptances, and my recollection is that they are holding now between nineteen and twenty million dollars. This statement shows this by banks in detail.

Representative SUMNERS. Governor, the decrease in those acceptances indicates what in regard to trade conditions or economic conditions?

Gov. HARDING. Well, of course with the lower level of prices the amount of acceptances would be less. I presume the volume of acceptances is less also. But there is one factor which must be considered, and that is that a good bank's acceptance now is in great demand. There has been a good market built up for it. Banks and trust companies and savings banks and investors all want bank acceptances, and the problem of taking care of the acceptance market is one now which has nearly solved itself. Eighteen months ago the Federal reserve banks had to look after the acceptance market.

Representative SUMNERS. Are they taking care of the banks—

Gov. HARDING. I suggest that you save that question, Congressman, if you will, for Gov. Strong. You can get more direct information from him, because his bank buys acceptances and handles them every day. He can talk much more intelligently about that than I can.

Representative SUMNERS. Very well.

Gov. HARDING. Now, if you want the changes of some of the banks on agricultural paper, I will give them.

Representative SUMNERS. As far as I am concerned, Governor, I am just as satisfied to have that go into the record as it is.

Gov. HARDING. I would like to call your attention to some particularly large increases.

At the end of January, 1920, the Richmond bank had \$362,000 of agricultural paper.

At the end of June, 1921, the Richmond bank had \$11,109,000 of agricultural paper.

The Federal reserve bank of Atlanta at the end of January, 1920, had \$608,000 of agricultural paper.

At the end of November, 1920, the Atlanta bank had \$17,844,000 of agricultural paper.

At the end of June this year the Atlanta bank had \$12,238,000 of agricultural paper.

The Federal reserve bank of St. Louis started out at the end of January, 1920, with \$52,000 of agricultural paper.

At the end of June, this year, it had \$9,271,000 of agricultural paper.

The Federal reserve bank of Minneapolis on the 30th of January, 1920, had \$1,563,000 of agricultural paper.

At the end of June, this year, the Minneapolis bank had \$22,823,000 of agricultural paper.

The Federal reserve bank of Dallas had \$987,000 of agricultural paper at the end of January, 1920.

At the end of June, this year, it had \$19,263,000 of agricultural paper.

The Federal reserve bank of San Francisco had \$1,594,000 of agricultural paper on the 30th of January, 1920.

The 30th of June, this year, it had \$18,622,000 of agricultural paper.

Representative SUMNERS. Governor, does that show to you that agricultural borrowings have increased in the proportion indicated by those figures, or that possibly, whereas country banks have been using the notes of merchants' Liberty bonds, etc., for rediscount basis, they have gotten rid of those and are now using the agricultural paper for rediscount?

Gov. HARDING. I beg your pardon, Mr. Sumners, I did not get the question.

Representative SUMNERS. It is not a very important question, but I was interested to know this: Do those figures which you have just read indicate proportionate increase in borrowings of farmers, or does it indicate that the banks are now sending on their agricultural paper which formerly they may have held in their own vaults?

Gov. HARDING. I should say probably both.

Mr. Chairman, before I close, there was introduced the other day in the record an editorial from an industrial publication. I don't know whether that is anything that you want me to discuss or not. I am not familiar with it.

If there is anything in the record that I ought to discuss further I will ask the opportunity of appearing before the commission later. I am about to close my remarks now. I would like to have it understood, please, that after I have had time to look over the records of these proceedings, that if there is anything else that it seems to me I should discuss before this commission, I may have an opportunity of doing so.

The CHAIRMAN. There will be no difficulty about that. Of course the commission will go on with its proceedings in this matter and other matters, but there will be no difficulty about your being given every opportunity, Governor, to present your views for the record.

Gov. HARDING. I said when I began my testimony that I would take the liberty of offering something that I hoped might be in the way of a constructive suggestion.

Representative SUMNERS. I am very much interested in that, Governor.

Gov. HARDING. I want to put into the record here a letter which I have just received. I do not know the party who wrote the letter. It is not a matter that would appeal to the average banker, and yet somehow or other the thing has an appealing look to me, and I can not help but feel that if I were in the banking business in that locality I would send for the man who wrote this letter and take a look at him and see if I could help him out. It is not a matter that the Federal reserve bank can do anything about, for the simple reason that it requires the intervention of a member bank. And it is not a matter that would appeal offhand to the average banker, unless you look into

it a little deeper. It is a question of character very largely, which will have to be determined. But I am reading this letter to you because it illustrates a need which is felt all over this country, and a need which ought to be supplied in some way, and it gives me an opportunity of saying just what additional facilities should be furnished for agricultural and live stock interests.

The letter is as follows [reading]:

JULY 29, 1921.

W. P. G. HARDING,
Governor of the Federal Reserve Board.

DEAR SIR: Will the Federal reserve banks assist a man to go into the stock business and take security on the stock the loan money would buy?

I have the use of 320 acres of splendid hay and pasture land here in the hills good for that and nothing else. Here interest is too high, at the prices of cattle, to get a loan here, but if I could get a loan from the board direct, without having the loan go through so many hands before it reaches me, at 5½ per cent, and buy good stock, just enough that I can attend to without hiring help, and care for them well, as I am very particular. I can make a good living.

I don't want a big loan, but want enough to buy good cattle and that I, myself, can care for, with my wife's assistance, then we know they are well cared for right. I want the Roan shorthorn breed.

Answer immediately.

Respectfully,

And then he gives his name.

The CHAIRMAN. That states the problem.

Gov. HARDING. Now, if I were in the banking business down in Alabama and got a letter like that, I would ask that man to come and see me, and I would go over his proposition and see what the terms of his leasehold were, and if they were all right I would take a chance on that man, if he was of good character, and see that he could start up in that line.

The great trouble is right here, and that is the whole trouble. There is no use of talking about what a beautiful system the Federal reserve system is, and how perfect the law is, and all that. We have got to meet these propositions as they come in. We can not amend the Federal reserve act to fit that condition, and yet here is a real need, as illustrated by this case. We find all over this country that the agricultural and the live-stock elements feel that they ought to have some facilities which would make them, to a degree at least, independent of the banks.

Now, with the best intentions in the world the banks can not, all of them, take care of these situations. And the trouble is that a case like that of the man whose letter I read, while it might appeal to some banker in a good-sized town or a city, it would be impracticable for this man to go to the city, and the city banker is busy; it is not his line of business anyhow. But there are certain credit facilities that people engaged in other lines of business have, that by the very nature of the thing the farmer does not possess. The farmer's credit horizon is limited. He has to depend upon local facilities as a rule.

Well, now, if you have an ideal bank, under ideal management, that keeps itself in good, strong, clean, liquid position, so that it has money coming in at the very time the agricultural needs are developing, the situation is taken care of. If, on the other hand, while it has a temporary swelling of its deposits, a bank invests in long-time mortgage paper or something of that sort, and then its deposits go down, then with the best intentions in the world it finds itself unable to take care of some of its agricultural customers.

And then again, a great many farmers have no money to deposit in the bank. Now it is a pretty well established practice with commercial banks, and they could not very well carry on their business profitably without it, that a loan and deposit go together. A merchant who makes deposits every day or two, or a manufacturer who carries an average balance, have loan accommodations at the bank, and there is a sort of reciprocity there, in addition to the interest that is paid. The bank makes a loan, and the bank gets a deposit.

Now the farmer comes in to the bank. He has no deposit to make, unless it is for a little while in the fall of the year. If you talk to the average farmer about what kind of a balance he is going to keep with you he will say, "No, I am not going to keep any balance with you. If I had any money I would not be borrowing from you. What I want is \$500, and I want the full amount." Some of them might have a little balance at the end of the year. Of course, the farmer who has gotten himself into a good condition will have a balance at the bank, but I am talking about the fellow who is just getting a start.

I do not believe it would be wise, and have so expressed myself, to amend the Federal reserve act with a view of trying to make the Federal reserve system do all sorts of things. The Federal reserve banks have definite functions to perform. They are the sole reserve agency for commercial banks. These commercial banks have demand deposits, and the rest of their deposits are payable on short time. The loans made by Federal reserve banks plus a gold reserve are back of the Federal reserve notes, the currency now most in use. And I think it is generally conceded that the Federal reserve banks must conduct their business with the view of having liquid assets. Of course when emergencies arise there is some relaxation and accommodations are given which ordinarily would not be granted. But they should work back in the long run to a more liquid position, so that they can respond to any future emergency that may arise or any seasonal needs, the idea being that paper held by banks should be theoretically at least of a self-liquidating character representing loans for productive purposes and for purposes of distribution; and loans for capital account ought not to come into the Federal reserve banks. In fact, the act itself provides, in section 13, that loans made for the purpose of carrying merely investments, are not eligible.

For instance, if a man who is not engaged in farming, or not engaged in manufacturing, wanted to buy 10,000 bushels of wheat, or 100 bales of cotton, merely for the sake of holding it with the idea that it would advance, that would be classed as for investment or speculative purposes—no prejudice in the word "speculative" there—and that it would be an ineligible loan because it is for an investment. Of course, if a cotton mill buys cotton that would be one of the stages of production, and the mill's note would be eligible. But a loan made to an individual who is not in business, who buys with the idea of holding commodities and making an investment is not eligible under section 13 of the Federal reserve act.

As I said a while ago, it would be unfortunate, I think, to amend the Federal reserve act by extending the present time limits, which relate to the maturity of paper eligible for rediscount at the Federal reserve banks. These institutions carry the entire legal reserves of the member banks, which are commercial banking insti-

tutions and whose deposits are either payable on demand or upon short notice. Any steps, therefore, which would impair the liquidity of the Federal reserve banks might jeopardize the entire structure of commercial banking in this country.

We can take loans now up to as long as six months, and there is nothing in the law against a renewal, although as a matter of Federal reserve practice it is preferable not to have to make renewals, but they are made sometimes without any agreement in advance. There is no law prohibiting it.

But I don't think there is any doubt that longer time credits than those provided for in the Federal reserve act are necessary in the live-stock industry and in the orderly marketing of staple crops, and, perhaps, in some cases in the production of these crops. And there ought to be some means of offering individuals who have no banking connections or can not make them in the existing circumstances, if they have something back of them that is worth while, to organize associations and to have a source of accommodation that is independent of ordinary banking channels.

There are needed credits which run from 6 to 12 months or longer. In other lines, the mercantile business and the manufacturing business, there are frequent turnovers, but the farmer has only one turnover a year, and the cattle man has to wait before he has any turnover at all on the increase from his breeding cattle. We should get this business established.

I hardly know just what suggestion to make. It is not a field, I imagine, that is going to attract private capital at the present time. The bill which has passed the Senate this morning or yesterday, authorizing the War Finance Corporation to extend its powers, I presume will help the situation, but as I understand that bill the War Finance Corporation is to make these advances only upon the indorsement of a bank. What many farmers need is some means where they can get an accommodation through some channel that does not require the money to go through so many hands; as outlined by this North Dakota man, without being obliged to go to a bank and have so many people handling the loan.

I am reluctant to make a suggestion which would involve any legislation in which the Federal reserve system is not directly interested. But I hope there is no impropriety in my making the suggestion to the commission that it might be well for it to look into these various agencies, bearing in mind that the War Finance Corporation, under the terms of the act creating it, is a temporary organization, its life being limited, I think, to 10 years from the time it began operation, and I think its lending power has some relation to a certain length of time after the close of the war; and, therefore, I would suggest that the commission consider the farm loan system.

It is argued that the Government ought to keep out of business. There is much to say in support of that argument. But the farm loan system has run the gauntlet of the Supreme Court, and the farm loan banks make mortgage loans to landowners on long time, and the payments are amortized over a period of years.

Would it not be possible to enlarge the powers of the farm loan banks so that they might have an additional department through which they could make these intermediate loans, loans running for, say, up to 12 months on agricultural commodities in-warehouse, or loans running for a year or two, or maybe longer, on live stock,

or loans running for a couple of years for farm improvements, in cases where a farmer builds a silo or wants to do some ditching, or wishes to buy a tractor or something of that sort?

One advantage, as I see it, in having such credits available through a governmental agency would be that if a private corporation is organized for that sort of business it must look around and do business all the time, and there might come a time when the private corporation would be loaned up like the banks and would not be able to go ahead and make further loans at the very time when loans are most needed. But if these facilities could be provided through some existing governmental agency, at times when the farmers do not need these credits, and the demand for their products is good, or they can get accommodations readily at banks, then these public funds can be turned back to the Treasury or employed in the purchase of Treasury certificates. I think that the farmers of this country would be very much better satisfied if the farm loan banks would be brought a little closer in touch with the shorter time farm requirements.

I am making this suggestion with some hesitation because I am not a member of the Farm Loan Board, and it is not the business of the Federal Reserve Board. I have not talked with the Farm Loan Board about it, and I don't know how they would regard the suggestion. But this commission certainly has a right to make any recommendation it sees fit, and I am merely offering a suggestion to the commission that they look into the feasibility of enlarging the powers of the farm loan banks so that they may be provided with funds which they can employ in making intermediate loans for a comparatively short time, running, say, for six months up to three years. And those are loans which are, in a sense, capital loans.

Every commercial bank likes to have a loan maturing within 90 days. That is their preference. And sometimes four months. They do not prefer ordinarily to take a six months' loan.

Then the farm loan banks could appeal to the investment market. If they had all their funds available for short-term loans, loaned out on live stock or agricultural products, properly warehoused, and they needed more money to go on and engage in further operations, they might sell their own notes or obligations, say, to the extent of 50 per cent of the face amount of the loans they had on hand. Now, we realize the difficulty of governmental banks dealing with individuals, or of any bank in a large city dealing with individuals, but the plan might be worked out by means of cooperative associations or something of that sort. Judging from correspondence that I have had in the last two or three years, of which this letter is a type, there does seem to me to be a demand on the part of people in agricultural sections of the country for some means of getting credit facilities for a longer time than the ordinary commercial bank would care to make a loan, and for having them independent of the usual banking requirements of a balance, or a question of how much balance the borrower is to carry.

The CHAIRMAN. Have you ever considered the feasibility or possibility of separating time and demand deposits, and making time deposits the basis for longer term credits for agriculture?

Gov. HARDING. In a general way I have. I doubt, though, whether that would work well in ordinary cases. You see the machinery of the banking business is rather delicate and complex. People who have deposits in banks like to know just how the bank's funds are

lent, and they like to feel that the bank is strong, and that its assets are quickly available, and so on.

Representative SUMNERS. You sometimes have to use your time deposits, anyhow, to take care of your checking accounts.

Gov. HARDING. The trouble about time deposits is this: Under the board's definition of the law as laid down in the reserve act any deposit is a time deposit which is payable after 30 days. Some banks have certificates of deposit payable in six months, some payable in a year, but very often a bank's time deposits, on which it usually pays a pretty fair rate of interest, are the very deposits which give the most concern. They have a way sometimes of maturing at a very inconvenient time. And if a bank had four or five hundred thousand dollars of time deposits, running for, say, one year, and had money loaned on live stock, after all, it would be using depositors' money, and it might be that it would have an undue proportion of its deposits loaned in that way, with the breeding-cattle man not prepared to sell any stock until the increase is ready for the market.

I haven't any very clearly defined ideas on this subject, except it does seem to me there ought to be some way to supplement the needs of the agricultural community through the investment market rather than to depend so much upon the commercial banks, which have other obligations and commitments. It should be realized that as a rule there is good security in agricultural loans.

Take the cattleman. As a rule, the character back of his loan is worth a great deal. And take farm loans in general. I have had some experience in making loans to farmers indirectly—and directly, too. And the percentage of loss during my experience in Birmingham on agricultural loans was infinitesimal. It was far less than the loss sustained on any other character of loans we had.

Representative SUMNERS. The situation that we have now perhaps accentuates a necessity which is constant, in trying to suggest something that might be done for the individual farmer living away out in the country.

Gov. HARDING. That is the idea that I suggested. I do not claim it is original with me. One of the Senators has talked with me about a proposition of this kind. I don't know what he is going to do about it, although I understand he has received a good many favorable comments on it.

Representative SUMNERS. We must have something like that.

Gov. HARDING. I have been wondering if he is going to introduce a bill to that effect.

Representative SUMNERS. The difficulty in a crisis of this sort is that we must have relief for the farmer living in a community where there are small banks greatly extended, the merchants strained, and there is no avenue of approach by which the farmer can be reached by the relief which may be provided.

Gov. HARDING. And then we have 30,000 independent banks, some of them are family affairs; some of them controlled perhaps by directors who believe in helping each other and who do not care much about the outsider, and while a good many banks have pursued an open, liberal policy, and gone the limit, there are others that keep themselves self-contained, and say, "We do not do that kind of business, and we do not care for this kind of loans or that kind of loans," don't you see.

It seems to me that cattle raising and agriculture in this country is of sufficient importance to justify Congress to pay some attention to working out a practical permanent plan which will always afford a medium to which those interests can resort, not interfering with the ordinary banking business of course, but not making the banker the absolute master of the situation.

Take a man in ordinary business, a man in a town of say 50,000 people, who has built up a successful business, if his credit demands are greater than his local banks can supply, he does not find any difficulty in going to a larger city and making some independent connections there, thus extending his banking accounts and connections and facilities. But you take the average farmer, he is absolutely limited to the local institution.

And, further than that, consider the tenant farmer. I don't know whether you have many tenant farmers in the East or the Northwest, but Congressman Sumners and I know there are many in the South. We have many farmers who absolutely can not get any credit from anybody at all except on the guarantee of the landlord. The landlord owns the land, and the tenants are on his land, and his tenants do not know what a bank is. He does not have any standing in a bank. The average tenant farmer gets his advances either from the landlord direct or through some country merchant who furnishes him his supplies on the guarantee of the landlord. Isn't that the situation in your country, Congressman?

Representative SUMNERS. Yes; not to the same degree as in yours; but it is.

Gov. HARDING. Yes.

Representative TEN EYCK. That is partially due to the fact that the farmer does not know how to make a statement of what he actually owns. There are some tenant farmers that are pretty well off who feel that it is better to be a tenant farmer than to be an owner; at least there are in my State, and they own a considerable amount of stock and have machinery, and some of them have money in the bank—a few farmers do.

Gov. HARDING. I had a little experience of this sort when I was 21 years old. I spent three months in a country store in one of the agricultural counties of Alabama. I arrived there about the 1st of December, and I left in March, and I got a pretty good insight into how the tenant farming business is conducted. The merchant who employed me had been advancing to these men all during the year, and their cotton was coming in. Some of them were white men, and some of them were Negroes, and they would come into the store at about 5 o'clock in the afternoon to have their accounts read out. Well, I was the bookkeeper, and an old Negro came in, whose name was Jim Hill—I recollect his name—and wanted his account read out to him. I started out in January and read out to him where he had bought a jug of molasses, or where he had bought a sack of flour, and in February he had bought some meal, and in March he had bought a plow, and so on. And then I would read the list of his dry goods and groceries all during the year—this was a general store—and it all footed up to two or three hundred dollars, and he had some cotton which the merchant would buy at the market price, and we figured up what that came to. I recollect that it was then just a short time before Christmas, and after figuring it all out old Uncle Jim had \$5.60 coming to him as the result of his year's work.

Representative TEN EYCK. Can you tell us what the profit was that that store made on that tenant farmer by extending him that credit for the entire year?

Gov. HARDING. Well, I should say that it was about 40 per cent.

Representative TEN EYCK. The profit that the store made was 40 per cent. Now that is just it. What we have got to do in this country is to teach the farmer how to go to the bank and borrow at a reasonable rate of interest, and pay cash, and save that 40 per cent. And the fact is, and I think you will agree with me, Governor, and I am going to ask you the question whether you do or do not believe that our national banks in some shape or form have got to adopt a policy to give those tenant farmers credit provided they can produce a fair statement of what they have as regards machinery and cattle and live stock, and give them credit in accordance with what they own, so that they can save that 40 per cent, and then you will do something toward putting the farmers on their feet.

Gov. HARDING. Now the great trouble in some States, though, is the law, the landlord's lien.

Representative SUMNERS. Then you have to have a 12 months' proposition.

Representative TEN EYCK. Yes; that is what they have got to have, between a 9 and a 12 months' credit. What is the use of dodging the question? It is up to the bank to give it to them, and work out a policy, and also see that the paper can be rediscounted properly by the reserve banks as well as in other banks. The manufacturer—is he a tenant manufacturer if he does not own his own building? What percentage of the manufacturers own the buildings that they are in? A great many of them rent the buildings that they use. They are the same as the tenant farmers. All they have is the machinery that they have in there, and their good name, to make money, and they are not any more liable to make money than the farmer, if the farmer is given the same credit as is the manufacturer who is a tenant manufacturer.

Gov. HARDING. Well now, what would you do in a case of this sort. Suppose a man is a tenant farmer. He hasn't got anything but a wife and two or three children, a bed and a rocking chair and a stove, and maybe he has a cow. And he rents, say, 40 acres of land which he and his wife and oldest boy cultivate. Everything that he produces on that land, under the laws of some States, is subject to the landlord's prior lien. There is not a merchant, there is not a bank, there isn't anybody who would give him credit unless to use the common phrase, he gets the landlord to "stand for him." In other words, he gets the landlord's guaranty. Well now, the landlord's lien is very sweeping, unless the laws have been changed since I left the banking business. I know some States where the landlord's lien is so sweeping that if a bale of cotton is brought to a town and put in the warehouse, and a receipt is issued, and the tenant farmer who has produced that bale of cotton borrows money on that cotton, and the landlord hears about it and says, "Hold on, that fellow has not paid me my rent yet. That is my cotton"; he can enforce his superior lien, and even if the merchant has bought it in good faith he can follow it up, for each bale of cotton stands out by itself; it is of a certain grade, and it is marked, and it does not lose its identity.

Representative TEN EYCK. In other words, the landlords in some States have a lien on the production of the soil the same as the mechanic's lien.

Gov. HARDING. Yes.

Representative TEN EYCK. Well, there is a question that should be looked into if we are going to do something for the tenant farmer, to see whether some of these laws should not be modified.

Gov. HARDING. I think it would be very well for the commission to look into the law regarding landlords' liens in various States, and see in just what way they can be modified.

Representative TEN EYCK. I think that is a very good suggestion. I think it is the duty of this commission at this time to look into all of those side things, to ascertain why it is that the producer of food products is not given the same opportunity to borrow, and save thereby on his purchases, the same as any other business man in the country. He ought to have the same opportunity, because his is the basic industry.

Gov. HARDING. It seems to me that a way can be found to protect the landlord and his rights, and at the same time protect the public too. The landlord ought not to sleep on his rights. It seems to me that after the cotton, or whatever the commodity is—cotton particularly—is produced, that after a reasonable time, if this cotton has been in the warehouse, the landlord's right to enforce his lien ought to lapse if he sleeps on his rights. But I have known of a good many complications that have come up where people have bought cotton in good faith, and had to return it, the landlord would come in and assert his claim.

Representative TEN EYCK. I agree with you that we ought to look into it. But do you not think that it is possible in some way or other to take the present financial institutions that we have now. Our farm loan bank should take care of the mortgages, and our national banks and State banks should be educated to give them the short-time credit, if they can give proper security and provide that the national banks be given a proper discount on it later through the reserve banks?

Gov. HARDING. I don't know. It is a long process to educate banks. There is nothing like competition in this matter.

Representative TEN EYCK. Now you have it.

Gov. HARDING. Now if there was an independent agency such as farm loan banks, that could make these loans, I think they would shape their policies so that they could keep themselves in a position where they could make the loans themselves. It is the moral effect of competition.

Representative TEN EYCK. Let me ask you a question. My idea is this: Can we bring to the attention of the national banks this necessity, this condition, which they can meet, and which in turn will help them out in a great many ways by means of the improvement of business, by making the farming industry successful? The only loss they will make, to my mind, is this, that in discounting short-term paper over and over and over, there is a little more profit in it than if the paper runs a year, and the banks have also been educated to believe that the velocity of the movement of the paper is essential for good banking.

Gov. HARDING. Yes.

Representative TEN EYCK. But at the same time, if they can create industrial prosperity they will be compensated in other ways: by helping the farmer out they will help the prosperity of the country and in that way help themselves.

Gov. HARDING. Well, I think that the best way to get the banks to so adjust their affairs that they can cater more to individual farmers would be to provide the individual farmer with some independent means, with proper safeguards, to which he could have recourse if necessary. If such a means was opened to him I think the bankers would respond.

Representative TEN EYCK. I know of a real country bank the valuation of whose stock is way above par, and its entire business is done with the farmer, and it is very successful. Its percentage of loss is infinitesimal. And I asked why that was so, and they said, "Well" the president knows every farmer from here to the other end of the county, and he knows what he is worth, and he knows all about him."

Gov. HARDING. This is the principal objection that I have to any amendment of the Federal reserve act in order to meet these particular needs. I wish to say that I think things are fast getting straightened out. I look to see times much better soon. And you will find that the banks generally will be able to function more effectively than they have been able to function during the last year. The strain is going to relieve itself automatically.

One great trouble in amending an act like the Federal reserve act to meet an emergency which has practically passed, is that you merely increase the appetite of other people who are interested in other things for further amendments to suit their particular cases, and you might open the way through one amendment to other amendments. Should you amend the act for the benefit of agriculture, then you would be asked to amend it to help the housing situation, and then to help the railroads, and after a while you would have the Federal reserve act so water-logged that it might not be good for anything. It is rather a serious matter to amend an act which has certainly stood up pretty well, because even some of the very severe critics of the administration of the act are pronounced in their praise of the act itself, and it would be rather dangerous business amending the act, it seems to me, just to meet an emergency which is passing rapidly.

Representative TEN EYCK. Well, it would be surprising to me if anyone could pass an act which will meet all of the conditions right off the bat. I think there are amendments that will have to be made, and adjustments and rulings, and so on, that will continue until you meet the conditions.

Gov. HARDING. I thank the members of the commission very much for the attention they have given me, and the patience they have displayed. I do not think I have anything further to say, unless you have something to ask me.

The CHAIRMAN. We are very much obliged to you, Mr. Harding. It may be that the commission may want you to come back later on on some phases of this matter.

Gov. HARDING. I will be very glad to do so.

The CHAIRMAN. If the commission does, I will let you know.

The commission will take a recess until 10 o'clock Monday morning. (Thereupon, at 5.30 o'clock p. m., Friday, August 5, 1921, an adjournment was taken until 10 o'clock a. m., Monday, August 8, 1921.)

AGRICULTURAL INQUIRY.

MONDAY, AUGUST 8, 1921.

CONGRESS OF THE UNITED STATES,
JOINT COMMISSION OF AGRICULTURAL INQUIRY,
Washington, D. C.

The joint commission met, pursuant to adjournment taken on Friday last, at 10 o'clock a. m., in room 70, Capitol Building, Representative Sydney Anderson (chairman) presiding.

The CHAIRMAN. The commission will come to order. The commission this morning will hear Gov. Benjamin Strong, of the Federal reserve bank of New York.

Gov. Strong, you may develop your statement in your own way. You are familiar with what the commission is trying to get at, I think, and with the testimony that the commission has heretofore had, and we will be very glad to have you make your statement in your own way.

STATEMENT OF HON. BENJAMIN STRONG, GOVERNOR OF THE FEDERAL RESERVE BANK OF NEW YORK.

Gov. STRONG. Mr. Chairman and gentlemen of the commission, I understand that the objects of the hearings which are now being held by the commission are stated in the concurrent resolution under which the commission was appointed, in this language:

Said commission shall investigate and report to the Congress * * * upon the banking and financial resources and credits of the country, especially as affecting agricultural credits.

Of course, it is that paragraph of the resolution in which the Federal reserve bank of New York is especially interested.

Permit me to say, Mr. Chairman, that the directors and officers of the Federal reserve bank of New York desire to facilitate the objects sought by the commission by every means in their power, and I would like to read into the record, if I may, a resolution which was adopted by the directors of the bank, with a minute in connection with it, at the regular meeting of the directors held on August 3, 1921. [Reading:]

Mr. Case submitted to the meeting a full statement respecting the bank's relation to the pending investigation by the joint commission of Congress appointed pursuant to Senate concurrent resolution No. 4 and designated the joint commission of Agricultural Inquiry. Mr. Case explained that the subject had not been proposed for consideration or action at last Wednesday's meeting, July 27, because of the impossibility of making an adequate report on the subject before the day following that meeting.

After full discussion and consideration of the statement, upon motion duly made and seconded the following resolution was unanimously adopted:

Whereas the board of directors of the Federal reserve bank of New York has heard and considered a statement respecting the bank's relation to the investigation by

the joint commission of Congress appointed pursuant to Senate concurrent resolution No. 4 and designated the Joint Commission of Agricultural Inquiry; and Whereas it appears from that statement that the commission will probably inquire into the policies and administration of the Federal Reserve Board and the Federal reserve bank of New York: Now, therefore, be it

Resolved, That the board of directors of the Federal reserve bank of New York sanctions and approves the action which Gov. Strong has taken in having data prepared for submission at the hearings of the Joint Commission of Agricultural Inquiry;

That Gov. Strong be directed to advise the commission that this bank desires to submit to the commission all information at its disposal regarding the bank's transactions and policies which may be required by the commission or which may be helpful to it in the execution of the functions and duties delegated to it by Congress, including such data as may be of assistance to it in its investigation of any charges which have been or may be made affecting the Federal reserve bank of New York; that Gov. Strong be further directed to advise the commission that for the purposes of its investigation the services of the staff of the bank are at the commission's disposal.

And be it further resolved, That Gov. Strong be directed to transmit a copy of this resolution to the chairman of the Joint Commission of Agricultural Inquiry.

The acting chairman directed the secretary to record that, while the directors present and voting in favor of the foregoing resolution, namely, Messrs. Alexander, Palmer, Saunders, and Smith, did not constitute a quorum, assent to and approval of the resolution had been given by Messrs. Peabody and Stone, to whom copies of the resolution had been sent in advance of the meeting. Messrs. Jay, Treman, and Williams had not been communicated with, in view of their absence in Europe.

Now, Mr. Chairman and gentlemen, there has been introduced into the hearings, under the agricultural commission resolution as originally contemplated, a series of charges and allegations by Mr. John Skelton Williams, the former Comptroller of the Currency. I wish to state the position of the Federal reserve bank of New York in regard to those charges. It is our desire to take up this challenge, as I have heard it called by Mr. Williams, upon his own grounds, and if the commission will permit us to do so, we intend to pursue the matter to a definite and final conclusion, if it takes until next January, when I understand you propose to file your final report with the Congress.

The record of statements made before the commission on Tuesday and Wednesday of last week is voluminous; it contains a mass of material which is more or less repetition, and refers to many statistics. It contains assertions by Mr. Williams, supported by his own previous statements, and from our point of view, I think, as to part of his statements the rule that the law takes no account of trifles might be considered. But they are of consequence to the Federal Reserve Board and the Federal reserve bank, and for that reason we wish to pursue them, as I say, to a definite and final conclusion.

I would like to state to the commission my reasons for feeling as I do on that subject. In the first place, it is obviously a matter of justice to the Federal Reserve System and to the men who are responsible for the transactions, and especially for the policies of the system, that those charges should be thoroughly investigated and the results of the investigations laid before the commission.

But there is another important reason. I have found, since my connection with the Federal reserve bank of New York, which dates from its organization, that in seeking information which we regard as important to enable us to perform our duties, we frequently resort to the records of inquiries conducted by committees of Congress, for reliable information on those matters. I have found in having occasion, as I have now and then, to deliver lectures before students in some of our universities who are pursuing courses

in economics, that they are constantly referring to the records of inquiries conducted by such commissions as the so-called Aldrich monetary commission, and to the records of the committee hearings which have been held by committees of Congress recently and also to those prior to the enactment of the Federal reserve act. We do not want, and do not intend, that the records which these men consult in their future studies shall remain so misleading and so unreliable as this record would be, if the charges of Mr. Williams were not answered in detail.

And the third reason, which may involve a question of pride, perhaps, is that some of those statements have had wide circulation and publicity.

Unfortunately, during the entire life of the Federal reserve system we have been subject to many limitations because we have had to conduct most important transactions for the United States Government, and we have been unable to organize fast enough or to expand the organizations rapidly enough, by reason of the heavy responsibilities thrown upon us by the war, to educate the people—not only the bankers, but the people—as to what the system means. And we do not want this information, so given out, to mislead the people.

Those are the three principal reasons why I shall ask the commission, if they will be good enough, to let me go into those statements and to go into those charges and to dispose of them finally and conclusively at this hearing, and at a later time, and possibly in connection with Gov. Harding's reappearance at a later time, when he expects to do the same thing.

With this preliminary statement, if the commission is willing to have me do so, I would like to go directly to the more important purposes of the commission's inquiry, as stated in the paragraph of the resolution which I have quoted.

Now, on this feature of the commission's work, it seems that Mr. Williams has taken his text for a variety of charges, principally bearing upon his allegation that during the period covered, funds or money or credit—I am not sure that he accurately distinguishes between them—were lured to New York by artificial interest rates, to the detriment of other sections of the country, and there diverted to speculative purposes. Much of what he has stated on that subject I hope will be answered by the statement which I hope subsequently to make in regard to the New York money market and the movement of funds and credit.

But, in order to understand just what that all means, I shall ask the commission to bear with me while I make a preliminary review of what has transpired, without questions, if they are willing to do so, because I do not think that my subsequent statements can be understood, unless this preliminary statement is a consecutive and a complete one.

In order to understand the policies of the Federal reserve bank let me divide the period from the organization of the Federal reserve bank down to the present time into five subdivisions. They are the natural subdivisions relating to this matter of the expansion and flow of credit.

The first division is from the outbreak of the war, or from the organization of the Federal reserve system subsequent to the outbreak of the war down to the time of the declaration of war by the United States in April, 1917. As I shall not refer to that period later, I would like to discuss its outstanding characteristics.

During this period we were called upon to increase our production immensely, and our export trade increased by leaps and bounds. We had a great accession to our gold stock, drawn here in response to our increased export trade, and as a consequence of unrestrained competitive buying in our markets and gold imports we had a period of rising prices. There was no system then organized by law to deal with this situation. And I shall refer to the policy of the Federal reserve bank in only one matter where we did make an effort to prevent an unwholesome expansion of credit and consequent price increase that might result from it.

As I recall, the Federal reserve bank of New York purchased some hundreds of millions of gold which was imported from Europe after the gold movement became active, but before that time, as early as December, 1914, we deliberately embarked upon the policy of gathering in the monetary gold that was in circulation in the United States and issuing Federal reserve notes against it. The reason for doing that was obvious. Federal reserve notes do not count as reserve in the vaults of a member bank.

Representative TEN Eyck. When you say "we" you mean the Federal reserve bank of New York?

Gov. STRONG. First the reserve bank of New York, and subsequently all of them. If the gold, which could be counted as reserve only when in the vaults of the member banks, was in the vault of the reserve bank at a time of expanding credit, it would not serve as the base for further expansion; and we felt fully justified, as a measure of possibly unusual precaution against the event of our becoming involved in the war, and as a preparation, in part, against the expansion of this credit, in doing that.

Let me point out a significant thing in regard to that matter. I came to Washington shortly after the 1st of January, 1915, when this policy of the Federal reserve bank first became obvious, and was drawn to the attention of the Federal Reserve Board. I attended a meeting of the Federal Reserve Board, where the first complaint was made by Mr. Williams that we were inflating the currency. I refer to it because of his evident lack of knowledge of what inflating the currency is.

Now, as to the second period. That is the war period, from the declaration of war by the United States down, not to the armistice, but to August, 1918. In that period the policies of the Federal reserve bank of New York were necessarily governed by the necessities of the war and the unprecedented demands for credit to meet the Government's war requirements. It was a period which I describe as one of unavoidable and necessary expansion.

The third period was from August, 1918, until the summer of 1920, which I shall describe as the period of postwar expansion, speculation, and extravagance.

The fourth period is from the summer of 1920 until about December, 1920—we can not fix an exact date for the change from one period to another, but say in the early winter of 1920; and this period

should be referred to as the period of declining prices and liquidation.

The fifth period is from December, 1920, until the present time, and I shall describe that period as the period of readjustment and recovery.

Now, in explanation of these periods in greater detail, let me say that my purpose in dividing these seven years, approximately, into five periods is to enable me to describe the outstanding characteristics of each period, and at the end of that description to give you a brief review of the policies which characterized the management of the Federal reserve bank of New York as applied to the characteristics of these various periods. Subsequent to completing the statement, I have a considerable mass of data to submit to the commission—not all to be printed, but such to be printed as the commission desires.

Ignoring the first period, it will be found by examination of the records of the Federal reserve bank that in the second period, from the entry of the United States into the war, in April, 1917, to August, 1918, our policy reflected what was actually taking place—briefly, that the Government of the United States was borrowing approximately \$18,000,000,000 a year in order to prosecute the war. At one time, as shown by the records of the Treasury Department, the rate of actual expenditures which had to be met ran as high as \$2,000,000,000 a month.

Economists have made various and greatly differing estimates as to the saving power of the people of the United States, and those estimates have, as I say, varied considerably. For the purposes of this statement, I will roughly state that the high estimates would average around \$6,000,000,000 a year prior to the war, or in the early days of the war. And of this \$6,000,000,000 a year, approximately one-half is what is described by economists as the reinvestment fund—that is, the amount which is required for reinvestment in existing plants and enterprises, leaving, say, \$3,000,000,000, or, at the outside, \$4,000,000,000 for investment in the securities market or investment in like fashion. I want to refer the commission to a statement made on this subject by Mr. Wilford I. King, who has made a special study of the matter. The figures which I have quoted are slightly above his figures.

Now, obviously to raise revenue at the rate of \$18,000,000,000 a year, when the saving power of the people of the Nation had formerly been less than a quarter of that amount, necessitated an expansion of credit—that is, an expansion of credit obviously was necessary.

Opinions differ widely as to what it was necessary to have done to have avoided expansion to the extent that it occurred. My personal view, which it is my belief represents the consensus of the views at the Federal reserve bank of New York, was that expansion was required and was unavoidable to the extent that the people of the United States did not economize in the employment of labor and in the consumption of goods. If you will accept that as a statement of the situation, we will find ourselves in agreement as to the conditions prevailing during this period.

Let me illustrate by an example: If, for the purpose of conducting the war—that is, for the services of the Army and the services of the

industries which were diverted to the manufacture of war materials and materials for the consumption of the Army and of the military and naval organizations—there was absorbed 20 per cent of all the normal labor of the people of the country, and the goods consumed for war purposes were equal to 20 per cent of the normal peace-time consumption of goods (the percentages, of course, are assumed), the only way by which the Government could have obtained those services and goods, without manufacturing credit, would have been to have had all the people so economize in their ordinary demands upon labor and in their usual consumption of goods so that that amount of labor and that amount of goods would have been released for war purposes.

At the risk of pursuing that point too far, let me remind you of what happened in the early feudal days. When the king had to conduct a war, he had no banks to go to to manufacture credit for him; there were no credit institutions in existence in those days, so he sent for his barons, and his barons responded to a levy for so many knights, so many men at arms, so many head of horses, so many cattle, and so much food and grain, and the king, with his army and supplies, left for war, and left the civil population at home to produce the goods necessary to take care of the people that were left at home. They did not have expansion of credits in those days, and I doubt if they had expansion of prices, although I do not doubt that the people left at home were sometimes ill cared for.

Now, all sorts of schemes, such as issues of fiat money, forced loans, price fixing either at a high level in order to stimulate production or at a low level in order to reduce the costs of war goods, restrictions of security issues, restrictions of imports and exports, gasless Sundays, rationing, and so forth, were discussed, and some of them were tried, but they were not wholly successful, as we all know. And I believe that the principle which I have stated, that expansion is unavoidable unless economy releases sufficient services and goods for the conduct of war, is a fundamental and sound one. No system of economics has yet developed that is capable of so organizing society that this great system of rationing and economy can be made instantly and effectively possible when a war starts. In fact, war unfortunately necessitates a choice of evils in policies, and does not permit of the adoption of an ideal policy of 100 per cent perfection. And that is the problem which confronted the Treasury and confronted the Federal reserve system when we came to deal with these matters.

In fact, it is my personal belief that the greater part, if not all, of the expansion that was suffered during this period of the war was inevitable, unescapable, and necessary, and was, in my opinion, defensible.

During that period the people were encouraged to buy Government loans and to borrow money to do so. The Government encouraged the banks to buy short certificates of indebtedness issued by the Treasury, and to borrow from us to enable them to do so. These were the great instruments of expansion.

But, admitting that the people were not sufficiently economizing to release the required percentage of goods and services, it became necessary as a corollary to raising these funds for the Treasury, to conduct a campaign to educate the people as to the necessity for economy in goods and services, to increase production and reduce consumption, and to cut off extravagance and waste and to borrow

from the member banks only for purposes essential to the prosecution of the war and the maintenance of the health and morale of the people. These efforts toward education were manifested, as you all know, in a great variety of organizations throughout the United States. I shall not enumerate them all. Many of them were exercised under the powers granted to the President by the Congress. I think the gasless Sunday was the most notable of these in striking and picturesque effect. Nevertheless, after all the efforts to educate the people of the country, there was the inevitable higher price level which resulted in the expansion to which I have referred.

Now, I have some charts to present at a later time which I think will show to the commission just what transpired during that period. (See pp. 499, 764, and 765.)

The charge is frequently made that the cause of expansion—the cause of the elevation in price levels—was the increase in the circulating medium. I referred to that heretofore. There were indeed increases in our bank loans and deposits, as well as accessions to our gold. I do not believe, however, that that statement is justified by our knowledge of what occurred. During the period of the war—in the earlier stages of the war, before we entered the war, we had practically all of the allied governments in our markets buying goods. Their purchases were not coordinated; they were largely competitive. And they were competitive upon the most dangerous basis as respects the price level, because they were required, for military purposes, for instant delivery regardless of price. Then the United States entered the war, and we came into the market competing, at first, not only with these foreign governments, but with our own citizens, and before the war organization was perfected, I do not think it unjust to those good people who were struggling with these problems to say that the different departments of the war organization were competing with each other. Now, how could prices be affected otherwise than to be elevated all along the line? Not only prices of materials, but of labor? There was the same competition for labor as there was for materials. And that, to my mind, was the outstanding feature in this period, a condition which called for future control.

Representative MILLS. But you would not deny that deposits of credit and money had not begun to cause prices to rise?

Gov. STRONG. They had, indeed, Congressman. At this point let me introduce the suggestion that it is claimed by some, and I think especially by economists who comment upon the policies of this war period, that expansion could have been controlled by the interest rate, and especially the discount rate of the Federal reserve system. Now, let me ask you to examine that. Do you suppose for a minute that the United States Government, the Treasury, would permit a loan to fail, in the face of the military necessity of getting the money, because of an interest rate? I believe personally that had we endeavored to force economy—economy of credit and economy in consumption of goods—upon the people of the United States by discount rates, we would have been inviting disaster. There is no limit to the level to which rates would have gone.

Representative SUMNERS. Would not the Government have been compelled to have placed an interest-bearing rate on its securities which would have met approximately the interest which the institutions charged, and who were carrying those securities for which the people had not yet paid the minimum? In other words, you could

not float a Government loan at 4½ per cent if the rediscount rates in the banks had been 8 or 10 per cent?

Gov. STRONG. No, sir; there was an interdependence between the policies of the Treasury and the policies of the Federal reserve system from the very beginning. Now, in either fixing the responsibility or assigning the credit for the performance of the Treasury and the Federal reserve system during the war—I think the latter is the point of view to take—you are really endeavoring to fix responsibility—to use this as an illustration—upon one of two persons for breaking a string when they are both pulling on it. As it appears to me, the policies of those two factors were interdependent to such an extent that they must merge into a common policy upon which both can work toward success. But, of course, in the last analysis, I want to point out to the commission that the responsibility for the success of war finances rested upon the Secretary of the Treasury under the limitations imposed upon him by the various acts of Congress authorizing him to borrow money and to raise taxes. So long as that was true, in the last analysis, when those policies had to be determined, necessarily weight had to be given to the fact as to where the final responsibility did rest. Who was it that was carrying out the policies of Congress as to the finances of the war? It rested with the Secretary of the Treasury.

I did not intend to refer at this point to this matter at great length, but I would like to introduce into the record, or at least have submitted to the commission, three documents which I think will throw as much light on this subject that we are now discussing as any others. One consists of two addresses made by former Assistant Secretary of the Treasury R. C. Leffingwell, in which he explains at some length the policies of the Treasury during that period, and which, if you please, might be said to give the Treasury's point of view.

I would also like to submit to the commission a long and comprehensive review of that subject which was recently prepared by Mr. Miller of the Federal Reserve Board, and published in the American Economic Review, which will state somewhat the Federal reserve bank point of view.

And then, as representing rather a judicial examination of the subject from the standpoint of an economist, who was not directly concerned in these matters, I suggest for the information of the commission a copy of an article which was prepared, or an address which was delivered at Atlantic City by Prof. O. M. W. Sprague, in which he made a very fair and I thought a very judicial review of these matters.

The CHAIRMAN. Without objection, the documents referred to will be received.

(The addresses and papers referred to are here printed in full, as follows:)

THE TREASURY'S WAR PROBLEM—TREASURY METHODS OF FINANCING THE WAR IN RELATION TO INFLATION.

[An address by Hon. R. C. Leffingwell, Assistant Secretary of the Treasury, before the Academy of Political Science at New York, April 30, 1920.]

I. FINANCING THE WAR.

The Treasury's war problem was to meet the financial requirements of the Government of the United States and the Allies promptly and without stint, and to meet them so far as possible from the saved incomes of the people, avoiding avoidable inflation. These objectives must be pursued in such ways as would not interfere with,

but on the contrary facilitate, the mobilization of the Nation for war purposes and the production and transportation of munitions and supplies. It was necessary that the Treasury should reach its determinations without the possibility of knowing the duration of the war or, consequently, the magnitude of the ultimate financial effort which the country would be called upon to make. The Allies had about reached the end of their tether because of their dependence upon imports for an important part of their munitions and supplies. They had nearly reached the limit of their ability to finance these through private channels in America and the neutral world. The Central Empires, more self-contained in fact and aided by the blockades maintained by the Allies, appeared to be less subject to the risk of economic breakdown. The United States, the last great Nation to enter the war, was also the last great reservoir of available wealth which could be tapped in the allied cause. If America failed to meet the financial and economic demands upon her, the war was lost.

For about a year after our declaration of war our loans to the Allies were our principal effective contribution to winning the war which they were fighting. During the first six months the loans we made to Russia and the knowledge of our willingness to make further loans kept Russia in the war and held the eastern front for six months. It was the loan we made to Italy in the fall of 1917, when the great offensive broke on Italy, that gave the Italian people courage and enabled Italy to replace the lost munitions and supplies. In the spring of 1918 our silver helped hold India effective for the Allies. In the summer of 1918 American credits sustained the French when Paris itself was under gunfire.

As our military effort grew, the demands of our own Army and Navy in large measure displaced those of the Allies in respect to American production and transportation, and the burden which the Treasury had to bear came increasingly to represent the expenditures of our own Government and decreasingly those of the Governments of the Allies. The rapidity with which our financial and economic resources were mobilized made possible the termination of the war a year sooner than had been hoped by the most optimistic. Our military and economic effort was, I believe, planned to reach the peak in the spring or summer of 1919. Though hostilities ceased on November 11, 1918, the Treasury was called upon to meet expenditures to the average amount of about \$2,000,000,000 a month in November and December, 1918, and January, 1919—the full amount of the first Liberty loan each month. The peak of the war debt was not reached until August 31, 1919 (when the floating debt amounted to about \$4,000,000,000, and the total gross debt amounted in round figures to \$26,596,000,000), and it was not until January, 1920, that the Treasury was able to reduce the floating debt to manageable amount and maturities.

In the period, lacking six days of three years, from the declaration of war to March 31, 1920, on the basis of Treasury daily statements, excluding transactions in the principal of the public debt, the Government's current expenditures amounted in round figures to \$37,455,000,000 and its current receipts to \$14,198,000,000, the difference being covered by a net increase in the public debt of \$23,257,000,000. On March 31, 1920, the gross debt had been decreased by about \$1,900,000,000 to \$24,698,000,000 from taxes and salvage, including in the latter item the reduction of the net balance in the general fund made possible by the reduced ordinary and public debt disbursements. Though the current months of April and May will show an important increase in the public debt, in large measure due to the heavy burdens thrown upon the Treasury in connection with the return of the railroads to private control, the Treasury is hopeful that the ground lost in the first two months of this last quarter of the fiscal year will be regained in June when another installment of income and profits taxes is payable, and that the end of the fiscal year on June 30, 1920, will show a reduction in the gross debt of somewhere near \$1,750,000,000 from the peak in August, 1919, and that the operations of the whole fiscal year will show a decrease in the gross debt of some \$600,000,000, which is more than accounted for, however, by the decreased balance in the general fund. This means that for the fiscal year beginning seven months after the cessation of hostilities, three days after the signing of a peace treaty which is still unratified by America, and two months before the peak of the war debt was reached, the United States should balance its budget within a couple of hundred million dollars—current receipts against current expenditures.

The total disbursements of \$37,455,000,000 include expenditures for loans to the Allies and obligations taken from the Allies and other Governments upon the sale of goods on credit in the aggregate amount of, say, \$10,000,000,000, and in addition several billion dollars' worth of more or less salvageable investments. To what extent and with what degree of expedition those investments may be liquidated depends upon questions of public policy as well as practical finance.

The most rigid economy in governmental expenditure should be enforced, adequate revenue from taxes should be provided, and rigorous salvage methods adopted with a

view to the rapid retirement of the floating debt and of a portion of the Victory loan before maturity. If due progress is thus made in reducing the floating debt, Victory notes should be accepted at par in payment of the five income and profits-tax installments falling due in the calendar year 1922 and the first quarter of the calendar year 1923; or, if the notes are then selling at or above par, a portion of them should be called for redemption in June and December, 1922. This would raise the level of all other Government securities and make possible the refunding of the reduced balance of the Victory loan upon terms advantageous to the Government.

These measures are feasible and necessary. If, however, we reduce taxes, increase expenditures, and delay salvage operations, the Government's financial predicament will be grave for the debt outstanding and maturing within three years amounts to \$8,000,000,000.

The maturities and redemption dates of the Liberty bonds and Victory notes were arranged conveniently for the retirement of the public debt. The sinking fund will retire the entire funded war debt (over and above the amount of obligations of foreign Governments held by the United States) within less than 25 years if, say, \$1,250,000,000 a year is provided for the service of the debt, including interest and sinking fund.

II. THE TREASURY'S METHODS.

The methods pursued for accomplishing these results were intended to and did hold the inevitable war inflation in this country down to a minimum. There are three ways of financing Government expenditures—taxes, loans, and paper money. The last and worst of these methods was resorted to, to a greater or less extent, by all the European belligerents, and to a disastrous extent by some. It was avoided in the United States as a means of meeting the Government's war expenditures. The Government did not issue paper money; nor did it borrow directly from the banks of issue except (a) temporary borrowings for a day or a few days at a time which were promptly repaid by withdrawals from depository banks or out of tax receipts, and (b) certificates sold to Federal reserve banks under the Pittman Act as a basis for the issue of Federal reserve bank notes to replace silver withdrawn from circulation and sold to the British Government for India. There have been a few instances of purchases of Treasury certificates of public issues by one or more of the Federal reserve banks, but these have been in such small amounts and of such brief duration as to be negligible.

Taxation.—The Treasury persistently and, on the whole, successfully insisted that one-third of the current war expenditures should be met from current taxes. The effort to go further would probably have defeated itself and made the speeding up of production for the winning of the war impossible. When tax rates are low, the inequalities, injustices, and economic injuries from errors in the incidence of taxation are slight enough but as rates go higher their consequences become graver. The income of the business man in a period when the demand is for increased production ought to be turned back into his business. The income of the rentier ought to be taken up to the point where the most rigid economy in personal expenditures would be enforced. As a practical matter the distinction can not be made so we impose taxes as high as we dare upon both and seek to take the surplus income of the rentier by loans.

The first war-revenue act became law on October 3, 1917, about six months after the declaration of war. Six months later it became apparent to the Treasury that war expenditures were mounting very rapidly, and immediately after the third Liberty loan the Treasury took steps to obtain additional revenue from taxation, demanding \$8,000,000,000 in taxes against a rough estimate of \$24,000,000,000 of expenditures. The proposal was resisted bitterly by leaders of both parties in Congress, who were anxious to adjourn for the summer and were looking forward to a general election in the fall. The issue was laid before the President, who, after careful consideration, sustained the Treasury, and on May 27, 1918, delivered a special message to Congress demanding an increase of taxes. After months of delay the House passed a bill estimated to produce \$8,000,000,000 of taxes, but this bill was still before the Senate Finance Committee when the armistice was signed. The Treasury, three days after the armistice, reduced its estimates of expenditures for the fiscal year from \$24,000,000,000 to \$18,000,000,000 (a figure which proved to be correct within a few hundred millions of dollars) and advised the reduction of the taxes to be carried by the pending bill from \$8,000,000,000 to \$6,000,000,000 for the current year and \$4,000,000,000 for subsequent years. These recommendations were ultimately adopted in the second war-revenue act, which did not, however, become law until February 24, 1919.

The Treasury's tax policy measurably limited the inflation inevitably incident to the war. But we must not assume that to the full extent that Government expendi-

tures are met from taxes inflation is avoided. There are good and bad taxes. Congress gave effect to the demands of the Treasury as to the amount of revenue required, but the House of Representatives and the Ways and Means Committee of that House are very jealous of the right and duty which they believe to be theirs to initiate revenue measures. The Treasury was consulted and given the most courteous consideration and the fullest opportunity to express its views, but the tax bills were written in committee and the Treasury's views were overruled in many important instances:

The Treasury, though favoring and indeed urging the war-profits tax as a tax upon profits roughly attributable to the war, strongly opposed the excess-profits tax as a tax upon profits in excess of a given return upon invested capital. Experiences has shown what the Treasury always asserted, that the excess-profits tax discourages initiative and enterprise, rewards overcapitalization, and discourages conservatism in capitalization, confirms great corporations in their monopolies, encourages extravagance and wasteful management, and adds to the cost of living.

Similarly, the Treasury advised against excessive rates of surtax and urged heavier rates of normal tax. Excessive surtaxes do not produce revenue but drive capital into the billions of exempt securities; and the manufacture of additional amounts of exempt securities is stimulated by the very existence of these high surtax rates. This encourages wasteful or defensible expenditure by States and municipalities at a time when the world-wide shortage of capital makes it urgently necessary that our capital resources be conserved for productive business. Graduated surtaxes are necessary and desirable socially, but, particularly where there exist billions of dollars of securities carrying exemption from these taxes, excessive surtax rates defeat their own ends and, in the last analysis, the burden is shifted to the community as a whole because of the consequent shortage of capital for useful and necessary purposes.

The departure from the Treasury's views concerning surtaxes and normal taxes has seriously impaired the market value of Liberty bonds, which are exempt from the normal taxes but, within certain limitations, subject to surtaxes. It is within the power of Congress, by reducing surtaxes and increasing normal taxes, to lift Liberty bonds to practically any market level it chooses.

In the last analysis, taxes can only be paid out of income, and the best tax is a properly graduated income tax. When a tax is imposed upon something else, or measured in some other way, the taxpayer who has not current income available must shift the burden to some one else. If possible, he will shift it to the ultimate consumer. Capital taxes, including retroactive war-profits taxes and excessive surtaxes, excess-profits taxes and sales taxes—all these must be shifted sooner or later—after much economic disorder in some cases—if possible to the consumer. Because the whole income of the poor man is spent on things he consumes, and the greater part of the income of the man of modest means but a negligible part of the income of the rich man, taxes of this sort are unjust and unnecessarily burdensome.

There is an even greater evil in these indirect taxes, and that lies in the fact that Congress is perpetually urged to make expenditures out of the public purse for the benefit of some class or group in the community. A system of indirect taxation makes it possible to conceal from the great mass of the voters upon whom the burdens fall the fact that they are being mulcted in order to confer special benefits upon a part of the community. The notion that in some mysterious way the other fellow will pay, the profiteer or the plutocrat—or perhaps the general public without knowing it—leads to wasteful expenditure.

Thus the beneficent effects of the Treasury's policy to pay as we go one-third of the war expenditures from taxes were limited by the character of the taxes imposed. Inflation was avoided to an important extent because the spending power of the individual was curtailed and transferred to the Government without the issue by the Government of credit instruments. The full value, however, of these measures was not obtained because certain of the taxes imposed tended to dissipate or penalize capital and inflate prices.

Liberty loans.—When the war began the investment bankers of the country had, it is said, sold bonds of all kinds to some 400,000 persons. The Treasury grappled with the problem of loans boldly, relying upon the patriotism and capacity for self-sacrifice of the American people; it devised a sound plan of decentralized organization for mobilizing the financial resources of the country; and it promptly drew into its headquarters staff experts from the business and financial world, who, under the Secretary, gave to the fine old Treasury organization the necessary leadership for solving the problems of the war.

The Sixty-fifth Congress convened on the 2d of April, 1917, war was declared on the 6th, and the first Liberty loan act was approved on the 24th. It was the third act

passed by the Sixty-fifth Congress, being preceded only by two deficiency appropriation bills. Bankers differed in their opinions as to the amount of bonds which could be sold, some believing that the amount might run as high as \$1,500,000,000, others that it must not exceed \$500,000,000. The Treasury asked \$2,000,000,000 and the loan was oversubscribed 50 per cent. The Treasury avoided all conventional methods of bond selling, paid no commissions, employed the Federal reserve banks as fiscal agents, and called upon the leaders in the banking and business world in every community to form Liberty loan committees and lead the movement. In organization it pursued a policy of decentralization, vesting leadership in the governors of the 12 Federal reserve banks and in committees appointed by them.

The first Liberty loan not only filled the Treasury for the moment, but it prepared the American people for the draft and made them realize the war. It taught millions of them what a bond is and how to save and pay for one.

From May, 1917, to May, 1919, the country was thrown by the Treasury every six months into the throes of a Liberty loan campaign—five loan campaigns in two years. It is estimated that 20,000,000 people or more subscribed for some or all of the loans, and that 2,000,000 people took part as workers in one or all of the campaigns. During these two years, covering the whole period of our participation in the war and six months after the fighting stopped, no one in America was ever allowed to forget that there was a war, that he had a part in it, that that part included buying Liberty bonds or Victory notes, and that to do so he must save money. In the history of finance no device was ever evolved so effective for procuring saving as the Liberty loan campaigns. Everyone was always buying a Liberty bond or Victory note, or trying to pay for one, or getting ready to buy bonds or notes of the next issue. The first, second, third, fourth, and Victory loan campaigns stand out in my mind as the most magnificent economic achievement of any people. For conception, direction, and detail, the Treasury is entitled to credit and must assume responsibility, but for the actual achievement of 100,000,000 united people inspired by the finest and purest patriotism, no man or group of men could be so foolish as to imagine themselves responsible. Those Liberty loans were the principal instrument in raising cash and getting the people to save for the war.

In fixing the terms of the loans the Treasury had always one major consideration in mind, and it perhaps accounts for some divergence of opinion between the Treasury and some of the bankers. It was not from a willful desire to make the sale of bonds hard, but from a determination to finance the war so that it should never be lost for financial reasons, that the Treasury sold long bonds, and sold bonds at low rates of interest. There must never come an end of the war in defeat because of lack of foresight, lack of courage to take the first steps in a careful, thoughtful way, looking to the possibility of a long war. In addition to the effect of high rates of interest and short maturities in depreciating other securities and in causing apprehension as to the future, must be kept in mind the psychological effect at home and abroad.

As to maturity, the experience of the Governments of the Allies showed conclusively the grave embarrassment which must confront any Government in the course of a long war which failed to place long-time bonds. The theory that short bonds would keep themselves at par has not been sustained in practice. Very much the highest interest bases have been established by the short bonds and notes of this and other Governments. The explanation is simple. When bonds are sold, to the accompaniment of patriotic appeal, to an amount in excess of the normal investment demand, subscribers who have overbought sell first the bonds which they can sell with the least loss of principal. They do not bother much about the interest basis. And permanent investors, who do not expect to follow closely market fluctuations, in buying Government securities prefer a good return for a long period to a higher return for a short period.

Given the necessity of selling bonds of long maturity, it was undesirable to burden the country with a high interest rate for a long period of time with the moral certainty that very high interest rates would drive the bonds to a premium long before maturity. But above all, the Treasury must give ground slowly, remembering that the limit of the task was not in sight and that the credit of the Government of the United States was the last financial resource of the Allies. We were engaged in war, not conducting a commercial operation. Indeed, there was no rate of interest which would float several billion dollars of Liberty bonds or notes as a commercial operation.

But the bankers differed as much with each other as with the Treasury, and I do not recall any instance when there was any considerable opinion in favor of a rate in respect to any Liberty issue more than one-quarter of 1 per cent higher than the rate actually adopted by the Treasury. A comparison of the present opinions of some financiers and publicists with those expressed during the war, and of record in the Treasury, would furnish amusing reading.

When the Treasury fixed the terms of the Victory loan I was told by a banker, who is second to none as an expert in the distribution of securities, that they were unnecessarily attractive. A leading newspaper criticized the issue bitterly on the same ground. The attractiveness of the issue was proclaimed by the financiers of the country with such unanimity that serious apprehension was aroused lest the people at large should get the impression that the Victory notes were so attractive that they might leave them safely to the bankers and business men and that no subscriptions involving self-denial on their part were necessary to assure the success of the loan. The head of the publicity bureau of the Liberty loan organization, after a tour of the country, told me that the Treasury had jeopardized the success of the loan and destroyed the patriotic appeal by offering notes upon such attractive terms. Federal reserve authorities became very apprehensive lest the banking institutions of the country should subscribe heavily for their own account, and the Treasury and the governors of the Federal reserve banks were hard put to it to prevent their doing so. Recently the 4½ per cent Victory notes have sold on an interest basis as high as 6½ per cent.

The rates of interest determined upon by the Treasury were at the time fair rates for the Government to pay, having regard to the exemptions from taxation which the bonds and notes carry and their maturity. No one could foresee the probable course of the market for the bonds and notes in the immediate future with any degree of confidence. A year ago it was freely predicted by financial authorities that Victory notes would shortly go to a premium and that Liberty bonds would be selling at or near par within a year or two.

Everyone knows why these sanguine expectations have not been realized. With the armistice, and still more after the Victory loan, our people underwent a great reaction. Those who had bought Liberty bonds as a matter of patriotism, but not as investors, began to treat their bonds as so much spending money. Those who had obeyed the injunction to borrow and buy Liberty bonds ignored the complementary injunction to save and pay for them. A \$50 bond in the hands of a patriot turned spendthrift was to him a \$50 bill to be spent Saturday night, or, to her, a new hat, and if the \$50 bill turned out to be a \$45 bill, small matter. This was the first and most immediate cause of the depreciation of Liberty bonds, affecting them particularly. I shall mention later other conditions affecting the general situation and them incidentally.

I doubt whether higher rates of interest on Liberty bonds, which would have meant more taxes for the taxpayer and more spending money for the bondholder, would have had any other effect than to increase the inflation which has been rampant since the Victory loan.¹

Some critics say that the Treasury should have foreseen the after-the-war reaction, and, in order to protect bondholders from the consequences of their own acts, issued the bonds and notes at rates of interest which would insure a market price for them at or near par even in the period of reaction.² These were counsels of despair, inflationist doctrine, and futile. The bonds and notes were never meant to be treated as spending money. The Civil War gave us our fill of interest-bearing currency. Depreciation in market price serves as a check upon those who wish to spend their bonds.

There was no plan of financing the war or of financing the period of readjustment which would protect the holders of the Government's securities or the Government's credit against subsequent folly and waste.

War savings.—The Liberty loan campaigns were supplemented by the work of the War savings organization, which disseminated sound economic doctrine, and produced about a billion dollars.

¹ So no people argue that a low rate of interest makes people save more because it is necessary for them to save more in order to acquire independence. Others maintain that a high rate of interest induces people to save because they can see the direct advantage of doing so. Both these arguments are probably true in some cases. But as a rule people who have the instinct of saving will save, within certain limits, whatever the rate of interest may be. When the rate of interest is low they will certainly not reduce their saving, because each hundred pounds that they put away brings them in comparatively little, and when the rate of interest is high the attraction of the high rate will also deter them from diminishing the amount that they put aside. (*War-time Financial Problems*, Hartley Withers, p. 7.)

² If there is a great reaction and everybody's one desire is to throw this nightmare of war off their chests and go back to the times as they were before it happened, then all that the war has taught us about the production of capital will have been wasted. But I rather doubt whether this will be so. Saving merely means the diversion of a certain proportion of the output of industry into the further equipment of industry. The war taught us lessons which, if we use them aright, will help us to increase enormously the output of industry. * * * There is a further point, that the war has taught a great many people who never saved at all to save a good deal. * * * The war has shown us how we can, if we like, increase production, reduce consumption, and so have a larger margin than ever before to be put into providing capital for industry. Whether we really have learned these lessons and will apply them remains to be seen. (*Id.*, pp. 9-10.)

Treasury certificates.—By selling Treasury certificates in anticipation of each Liberty loan and of income and profits tax installments the Treasury provided current funds to meet outgo, made provision against the money strain which would have been involved if Liberty loan and tax installments had been paid on one or several days without anticipatory borrowing, and, more important in economic effect, tapped the credit resources of the banks and trust companies of the United States and mobilized them for the uses of the Government, thus limiting commercial inflation during the period when the Government was the principal buyer and needed to have the credit resources of the country placed at its disposal.

The Treasury issued as great and as frequent long loans as the market could absorb—in fact, greater and more frequent than the market could absorb. The point of saturation for long Government loans had been reached—and passed—with the fourth Liberty loan. Investors require diversification of their investments. In a little over two years we created \$25,300,000,000 of debt (at the maximum). It was bad enough to ask the people to absorb that amount of the obligations of one Government. It would have been intolerable to insist upon their buying only bonds of one character; that is, long-time bonds. After armistice the only way to get additional investment money into Government securities was to offer some diversification of terms, and this was done by issuing Victory notes and thereafter by revolving Treasury certificates.

The result of forcing out more long loans would have been the perpetuation of the war debt. There is no greater influence toward economy of expenditure and maintenance of adequate revenue than the existence of short-dated debt. No administration could have resisted the pressure for reduction of taxes and increase of expenditures of the war debt at its maximum of \$25,300,000,000 had been funded, and it had subsequently appeared that taxes and salvage would more than meet current expenditure. The time to pay down war debt is immediately after the war.

During the war Treasury certificates were sold largely to banks in anticipation of loans and to taxpayers in anticipation of taxes. Since the Victory loan campaign efforts to procure distribution of both tax and loan certificates among investors have been increased and marked success has attended them. The banking institutions of the country have been asked to buy the certificates and sell them to their customers, and their fine efforts to that end have been supplemented by the Treasury mailing circulars describing each issue of certificates to a selected list of taxpayers and bondholders of the United States. The success of these efforts is evidenced by the fact that on April 16, 1920, of \$2,693,808,500 loan and tax certificates outstanding only \$462,114,000 were pledged with Federal reserve banks as security for loans and discounts. In view of the fact that the reserve banks were maintaining a preferential rate for paper so secured, it is safe to assume that the remaining \$2,231,000,000 certificates were in the hands of investors, including banks which were not borrowers.

War-loan deposits.—Technically, the Treasury's special depository system is one of the most interesting, as it is one of the most valuable, devices for financing the war. Our problems were different from those of European countries. We had to deal with some 30,000 independent banks and trust companies scattered all over the United States. The device of "payment by credit" was worked out in connection with the first Liberty loan at a Sunday conference in May, 1917, between representatives of the Treasury, of the Federal Reserve Board, and of the New York Liberty loan committee. Unchanged in principle from that day to this, but simplified and perfected in the course of three years, it served to weld together and mobilize for war the banking resources of the United States, including in the Government's depository banking system 10,000 of the 30,000 banking institutions of the country.

"Payment by credit" is a device for permitting the banking institutions which purchase Government securities to defer payment for them until the Government actually needs the money. It was adopted to prevent money stringency. It developed the further advantage that in the difference between the rate borne by the securities and the rate charged on the deposit banks found some compensation for their time, trouble, and the loss of deposits resulting from the sale of securities to investors. If, instead of permitting the banks to make payment by credit, the Treasury had required them to make payment in cash and held the cash, it is apparent that the operation simply could not have been carried out. A very modest increase in the balances in Treasury offices involves money strain. The attempt to make payment into Treasury offices in cash on one day of the proceeds of the smallest war issue of Treasury certificates—not to mention a Liberty loan or tax payment—would have created a panic. Banks and the public have become so accustomed to the ease and smoothness with which Treasury operations are conducted that they take them for granted; yet two years ago the business and banking community was in an uproar because of the fear of money strain in connection with the first great income and profits tax payment—a strain which never occurred because the Treasury's arrangements to deal with the situation were so complete.

“Payment by credit” was well calculated to limit inflation incidental to war borrowing. If, instead of permitting the banks to make payment by credit, the Treasury had required them to make payment in cash and had then redeposited the proceeds, to the extent that it did not require to make immediate use of them, it would have pursued a course more likely to create inflation. If the Government were to draw into the reserve banks and the Treasury offices cash in excess of its current requirements, the first effect would be to make money very tight, and increase money rates, with consequent interference with the Government's financial operations. The second effect would be heavy discounts by the reserve banks to meet the demands so artificially created. Discounts so made would be for periods from 1 to 90 days. Upon the redeposit of the proceeds of certificates depository banks would be put in possession of loanable funds.

It was better to make one bite of the cherry and to avoid the money strain and inflation which would have been inevitable if the money had been first drawn out of the banks and then redeposited with them.

In order to sell Liberty bonds and Victory notes it was necessary to give subscribers the option of making immediate payment in full or of making payment in installments over a period of months. This injected an element of great uncertainty into the Treasury's calculations. It was quite impossible precisely to anticipate receipts under these circumstances. As a matter of fact the privilege of making payment in full on the opening day was largely availed of, and the Government's balances were consequently swollen until certificates of indebtedness issued in anticipation of the loan matured or could be called for earlier redemption. Redemptions were made as promptly as possible, but the operations were on so huge a scale that it was a matter of two weeks after a loan-payment date before the Treasury could obtain really reliable information as to the amount of the payment.

The same principle (payment by credit) was employed in handling the great tax payment in June, 1918 (which was only about half covered by anticipatory borrowing), although not called by that name and modified necessarily in detail. Checks received, drawn on qualified depository banks, were forwarded to them and the amount credited by them in the war loan deposit account. This was done instead of collecting the checks and redepositing the proceeds. Subsequent income and profits tax installments have been covered by anticipatory tax certificates.

A similar problem, though not of such great dimensions, presents itself in connection with the current routine business of the Government under war and armistice conditions. The ideal thing would be to have the Government's receipts precisely equal its expenditures from day to day. That ideal, however, being impossible of attainment, the Treasury has consistently pursued the policy of borrowing sufficiently in advance to meet its requirements, without direct borrowing from the Federal reserve banks. The Treasury plans to sell certificates to an amount sufficient to cover the estimated requirements for some three weeks in advance. This is a small margin of safety in view of the impossibility of estimating closely. It is physically impossible to issue Treasury certificates more frequently than every two weeks, and it takes ordinarily two weeks from the date of the offering of an issue of Treasury certificates to the date of closing the issue for the ascertainment of its results. Sometimes it happens that the Treasury miscalculates its cash requirements and borrows in excess of the amount which turns out to be actually necessary at the time. That happened last September. Sometimes it underestimates its requirements. That happened only last month. Indeed, it is very much more difficult to gauge the current income and outgo now than it was during the period of active warfare. Expenditures increased at the rate of about \$100,000,000 a month pretty regularly during the war. The physical limitations upon production and transportation prevented expenditures increasing by leaps and bounds—imposed a certain sobriety upon them. There has been no similar brake upon the decrease since armistice. In consequence of settlements of contracts and sales of accumulated stores, receipts and expenditures have jumped about in such a way as to make them utterly impossible of calculation. The Treasury has no control over the expenditures or salvage operations of other departments.

A depository bank when it makes a “payment by credit” does not put itself in possession of loanable funds. What actually happens is that the bank becomes possessed of an asset, to wit, Treasury certificates, and is charged with a liability, to wit, an entry in the Government's war loan deposit account. It does not have any money to lend or spend until it sells the certificates or borrows on them. Like most human devices, payment by credit may be subject to abuse, as, for instance, by the application of the proceeds of sale or borrowings on the certificates to other purposes than meeting the Government's calls, but the governors of the Federal reserve banks, under the wise guidance of the Federal Reserve Board, have been alert to prevent such abuse.

The view that bank deposits are potential currency³ is inapplicable to the deposits created in the Government's war loan account. No checks are ever drawn upon or charged against the Government's war loan deposit account with depository banks. Remittances are made by them to reserve banks on receipt of letters or telegrams. The number and amount of United States Government disbursing officers' checks outstanding or in process of collection at any given moment of time is not affected by the amount of the Government's deposits in depository banks. The Treasury has no control over the drawing of these checks, and the credit of the Government of the United States has at all times been sufficient to float them regardless of its bank balances. These checks have involved an important expansion of currency (treating checks as currency). The Treasurer of the United States handled as many as 300,000 checks in one day during the war. He is now handling something like 80,000 checks a day. The Treasury has struggled to keep enough money in the bank to meet these checks as they come in, but the checks have been floated not on the faith of its bank deposits, but on the general credit of the United States Government.

Collateral agencies.—During the war many collateral agencies were created to conserve and mobilize the resources of the country and limit the inflation of prices and the expansion of currency and credit. Some were initiated by, others were quite independent of, though acting in cooperation with, the Treasury. The Capital Issues Committee discouraged issues for nonessential purposes. The subcommittee on money of the New York Liberty Loan Committee fixed the price of call money and rationed credit to the stock market. The Division of Foreign Exchange of the Federal Reserve Board licensed imports and exports of gold, silver, and capital. The War Trade Board licensed imports and exports of commodities. The War Industries Board fixed prices and priorities for commodities. The Shipping Board, the Food and Fuel Administrations, and the Railroad Administration were all parts of a comprehensive plan for mobilizing the resources of the country.

It was impossible to rely upon prices and rates to prevent inflation at a time when the first duty was the winning of the war. When the Government requires the services, the wealth, the productive capacity of all the people for the purposes of a great war it must practically go through a process of condemnation and pay a price determined by properly designated functionaries. The law of supply and demand cannot be allowed to function in war times so as to permit some of the people to extort from all of the people, represented by their Government waging a righteous war, prices, whether for commodities, or credit based upon the fact that the supply is very limited and the demand for all practical purposes unlimited.

When the fighting was over most of these controls were broken down one by one as rapidly as seemed possible, with a view to restoring natural conditions.

III. INFLATION.

Before the war.—Before we entered the war we had what, for lack of a better short description, may be called, though inaccurately, gold inflation.

During the war.—Currency expansion, as distinguished from credit expansion, has been very moderate in this country.⁴ The Treasury has not manufactured currency at all. It has not manufactured credit directly with the banks of issue. It has limited the expansion of credit as far as practicable. The expansion of currency and credit which has taken place has been the result not of Treasury methods of financing the war, but of the unlimited buying power of the Government of the United States when supported by the devotion of the people. Government expenditures and commitments were the cause of price inflation, rather than the methods which the Treasury employed to meet those expenditures. Expenditures and commitments always outran the provision made for them by the Treasury, whether in cash or credit. Government contracts covered future production for months or years ahead, but the Treasury never, during the whole period of the war, had provided money or bank credit sufficient to meet its requirements for more than a few weeks ahead. Prices rose in response to the effective demand of the United States Government, sustained by the general credit which its resources and taxing power and the devotion of 100,000,000 people gave it. They were influenced by two conflicting forces, the desire of the Government to stimulate production and the desire of the Govern-

³ As many people may be puzzled by the assertion that the Government increases the currency by borrowing from banks, it is better to explain the process briefly here, though in another book I have already shown how loans made by banks produce manufactured money by adding to the banks' deposits, which embody the right of their customers to draw the checks which are the chief form of currency that we now use. (Hartley Withers, *Our Money and the State*, p. 61.)

⁴ Letter of Gov. Harling to the chairman of the Banking and Currency Committee, United States Senate, dated Aug. 8, 1919; Federal Reserve Bulletin for August, 1919.

ment to prevent profiteering. The expansion of currency and bank credit, which followed the Government's expenditures and commitments, sustained and distributed the price inflation. In much of the discussion of currency and credit inflation and their relation to price inflation insufficient attention has been given to the practical difference between private operations, on the one hand, and those of a government in war time on the other. A government in war time may to an extent private operations can not upset the balance between the supply and demand for commodities without first obtaining currency or bank credit.

The cost of living here has increased less than in any of the belligerent countries (including Japan⁵ which assumed no appreciable part in the financial burden of the war) or in the neutral countries of Europe.⁶ This was in no small measure due to Treasury methods of financing the war.

Since armistice day.—Since armistice day the world has not only failed to make progress toward the restoration of healthy economic life, but in fact has receded further from a sound position. We have failed to restore peace and peace conditions in Europe, and in America unsound economic ideas have in many instances prevailed and the effort is being made, first here then there, to improve the condition of some of the people at the expense of all of the people.

Inflation here since armistice day is attributable to three principal causes—(a) world inflation and the internationalization of prices; (b) heavy expenditures by our Government and Government interference with business; (c) reaction and waste among our own people.

(a) For five years the world has been consuming more than it produced, living upon its capital, and the governments of the world have been issuing evidences of indebtedness to represent the wealth destroyed. This has caused world inflation of prices.

The inflation which has taken place here since armistice seems attributable in no small degree to the inflation of the continental European currencies operating upon the optimism of the American people.

People have been led to believe that there is a mystery about foreign exchange and that in some way America is at fault for not protecting the European exchanges from depreciation. In war time the measures taken by the belligerent nations in respect to international trade and finance were more or less complete. Embargoes on the export or import of gold were accompanied by embargoes on the export and import of commodities, by domestic price fixing, by fixing the price of money, by control over capital issues, by control over foreign exchange, and by Government loans in foreign countries. These controls probably should not have been removed where the gold embargoes were to be retained; for the gold held in Europe has been made a basis for further inflation there and the ever expanding European currencies have been sold for dollars to be used to purchase here and elsewhere things

⁵ Japan has a bank rate above 8 per cent. (Commercial and Financial Chronicle, Apr. 21, 1920, p. 1699.) Her inflation is a gold inflation.

"The cost of living has advanced threefold more than before the war * * *. The gold holdings of Japan have now reached the unprecedented total of 1,899,000,000 yen, of which 1,061,000,000 yen belongs to the Government and 838,000,000 yen to the Bank of Japan. Of this large sum only 345,000,000 yen is in Japan, 1,354,000,000 yen being invested or deposited in England and the United States." (Economist, Jan. 3, 1920, pp. 19-20.)

"The abnormal inflation of currency not only keeps up prices, but is lending impetus to speculative fever, which now knows no bounds. Investments in new enterprises between January and October this year amounted to no less than 2,839,000,000 yen, or more than for the whole of last year, when investments totaled 2,676,000,000 yen; and the expansion of capital is now such that the authorities can no longer regard the situation as wholesome. Banks have been officially instructed to restrict loans and to preach economy and caution, but speculation continues rife. It is frequently reported that officials are interested in speculation and that that is one reason why no control is exercised over note inflation. The same thing went on after the war with Russia, but it was followed by panic and numerous business failures, leading to prolonged business depression. The effect on industry and society is far-reaching and disaffecting. Many enterprises, such as weaving and shipping, continue to pay enormous dividends, though most of the mushroom enterprises can hardly pay their way. Industry is marked by increasing unrest, with frequent strikes for higher wages and shorter hours. Of late the greater part of this unrest has been in shipyards and mines. At one of the copper mines recently the troops had to be called out to put down violence when 6,000 miners began to take matters into their own hands. This is the first time in the industrial history of Japan that troops have had to be called out to deal with strikes. The cotton mills, which are paying such big dividends, being manned mainly by women, have labor in their own hands, and so far they experience no labor unrest. In most cases millwork, so far as women go, is little less than a form of slavery, as the girls are not free to leave when they wish, and seldom get away until invalidated out. On the other hand, the luxury and extravagance of the profiteers and the newly rich tend to demoralize society and cause revulsion of the poor against the rich. The most prosperous concerns in cities are the restaurants, houses of questionable pleasure, and the dealers in jewelry and expensive ornaments. The wealthy are buying up whole lots of houses, and pulling them down to erect grand mansions with spacious gardens for themselves, to the great resentment of the poor, who can not find dwelling accommodation. A great part of big cities like Tokyo is taken up with these gardens of the privileged and the wealthy, while space for common dwellings is at a premium, the poor being driven into the slums. This leads to social disaffection and encourages Socialism." (Economist, Feb. 7, 1920, p. 263.)

⁶ British White Paper (Cmd.) 434, 1919, Statements of Production, Price Movements, and Currency Expansion in Certain Countries.

not needed as well as those needed. The depreciated price at which European currencies are taken in consequence of these methods means for them a rapidly increasing foreign debt which will make the ultimate resumption of a gold basis more difficult.

Our own prices are being inflated and our own banking and currency position expanded by the feverish speculation in European currencies, credits, and securities, including those of countries with which we are still technically in a state of war.

In the present position of the international balances and of the foreign exchanges and because of gold embargoes Federal reserve bank rates can not function internationally, and operate solely upon the domestic situation.

(b) Government expenditure is at the root of inflation all over the world. Wise methods of meeting it may mitigate the inflation, but they can not prevent it.

The Government of the United States has been slow to realize upon its salvageable war assets and to cut down expenditures growing out of the war.

While Congress deliberated, the Government held control of the railroad systems of the country for a year and a quarter after fighting stopped, and furnished transportation at less than cost. Then Congress ordered the railroads returned to their owners, with a new expenditure of \$1,000,000,000 by the Government for their account and the deferment for years of \$1,000,000,000 the railroads owe the Government.⁷

The interference of Government in railroad affairs, begun many years before we entered the war, has subjected business and industry to the gravest hardships for lack of adequate transportation and has involved a great additional strain upon our credit facilities. You can fix the price of capital, but you can not make it work for that price. You can fix the price of labor, but you can not make it work for that price. By holding down rates for the shipper, the railroads have been kept so poor that neither capital nor labor will work for them. The shipper has cheap rates, but he can not get transportation. The producer has to borrow because he can not have his goods brought to market; the consumer has to pay higher prices because he can not get the goods. Here there is double inflation. Cheap rates increase the demand for transportation and decrease the supply of it. If the railroads had been allowed to charge reasonable rates, the Government would have lost nothing in their operation, and it would not have been obliged to invest so much money in them for, given reasonable rates, they could have obtained capital through private channels.⁸

The United States Shipping Board expended in the fiscal year 1917, \$14,000,000; in the fiscal year 1918, \$771,000,000; in the fiscal year 1919, \$1,820,000,000; and in the fiscal year 1920 (to Mar. 31, 1920), \$433,000,000; a total of \$3,038,680,338.79, to which should be added about \$176,000,000 expended from the proceeds of operation and sale. The actual cash expenditures since armistice day amounted to approximately \$1,600,000,000, while Congress deliberated as to our shipping policy. Notwithstanding the fact that it has been engaged in commercial shipping at a time when it is exceptionally profitable, the Shipping Board has made as yet no net return to the Treasury, its expenditures still exceeding and absorbing its receipts.

Five billion dollars spent or invested in railroads and ships, the larger part of it after the fighting was over. Why are the railroads being run to-day at a loss at the Government's expense? To what end are we moving in our shipping policy?

Instead of telling the people frankly and boldly that prices are high because they are wasting, we fix prices and prosecute profiteers in order that the people may buy more and pay less.

Instead of telling the people that Liberty bonds have depreciated because they are treating their Liberty bonds as spending money, we clamor that the rate of interest upon the bonds is too low and urge a bonus to bondholders disguised as a refunding operation.

Instead of telling the more thoughtless of the young men who were selected to fight the war, and who came back better and stronger and more fit to fight their own battles than they ever were before, to go to work and save their money and look out for themselves as their fellows are doing and as any self-respecting man should, we listen complacently to the organized demands of some of them for a bonus, euphemistically called "adjusted compensation."

⁷ The actual cash expenditures of the Railroad Administration for the six months ending June 30, 1918, were \$120,000,000; for the fiscal year ending June 30, 1919, were \$359,000,000; and from July 1 to Mar. 31, 1920, were \$776,000,000, a total of \$1,255,000,000. The recent legislation and that now pending make specific appropriations to the amount of \$800,000,000 and indefinite appropriations (including a guaranty to shortline railroads which were not taken over by the Government) which will involve expenditures to the estimated amount of \$300,000,000. It is safe to say that the Government's expenditures and losses on account of the railroads and its investments in the railroads will shortly amount to \$2,350,000,000.

⁸ The transportation act of 1920 appears to offer no permanent relief from the grave situation resulting from our insufficient transportation facilities, for it indicates that the railroads are entitled to earn 5½ or 6 per cent when new money is costing those in the highest credit 7 or 7½ per cent.

Penny wise and pound foolish, we leave the executive departments underpaid and undermanned, so far as regards supervisory employees. While Congress struggles to effect economies at the expense of efficient administration of the Government—it takes time to add \$65,000,000 to Civil War pensions.

From November, 1918, to March, 1921, nearly two years and a half, the first two years and a half after fighting stopped, and probably the most critical two years and a half in the world's history, the Government of the United States is deadlocked against itself, a Government by obstruction. It is at least questionable whether the progress of reaction would have been so complete or so disastrous if our institutions had not given this country, during the most critical period of the world's history, a Government divided against itself, and therefore incapable of effective leadership in national or international affairs.

(c) At this most critical moment in the history of Europe, when our own financial and economic stake in Europe's affairs is so great that disaster there could mean only disaster here, many of our own people have turned gamblers and wasters. For plain living and high thinking we have substituted wasting and bickering. We enjoy high living while we grumble at the high cost of living—of silk stockings and shirts for the poor, of motors for men of small means, of palaces for the profiteer and the plutocrat.

Unhealthily stimulated, commercial business appears to prosper and commercial expansion proceeds unchecked. From March, 1919, to March, 1920, though holdings of and loans upon Government war securities of all reporting member banks of the Federal reserve system (about 800 member banks in leading cities believed to control about 40 per cent of the commercial bank deposits of the country) decreased from \$4,000,000,000 to something over \$2,000,000,000, their other loans and investments increased from \$10,000,000,000 to over \$14,000,000,000. For every dollar of credit released by the Government, \$2 were extorted by business. Reporting member banks' loans on miscellaneous stocks and bonds, included in their "other loans and investments," amount to \$3,000,000,000, or one and a half times their investments in and loans upon United States war securities. From May 2, 1919, to March 19, 1920, though the reserve banks reduced their loans and discounts upon Government war securities from \$1,800,000,000 to \$1,400,000,000, they increased their other loans and discounts from \$350,000,000 to \$1,400,000,000.⁹ Evidently a very small proportion of the reserve banks' present loans and discounts are "war paper," though half of them are collaterally secured by United States Government war securities because of the wise policy of maintaining rates differentiated according to the character of the security.

High rates of interest and discount, limitations of currency and credit, these and all other traditional methods should be used courageously; but they will not suffice under the abnormal world conditions now prevailing.

IV. REMEDIES.

We must get together, stop bickering, and face the critical situation which confronts the world as we should a foreign war. We must recognize our responsibility to and our stake in Europe, and in one way or another lend her our moral support and leadership and economic assistance but without Government loans. We must cut Government expenditure to the quick, adjure bonuses, and realize promptly upon all salable war assets, including ships, applying the proceeds to the war debt. We must have a national budget with teeth in it, which means among other things that no appropriation shall be made by Congress without a critical examination and report on ways and means by the Treasury, representing the financial end of the executive branch of the Government, and the Ways and Means Committee of the House and the Finance Committee of the Senate, representing the financial end of the legislative branch. We must promptly revise our tax laws to make them more equitable and less burdensome without reducing the revenue. We must restore the railroads to a self-supporting basis by establishing rates which will insure a return for capital and labor commensurate with the return to be had elsewhere at a time when there is a world-wide shortage of both. And above all, we must work and save. We must produce more, but more important still, we must consume less.

⁹ On the other hand, though Federal reserve banks' loans and discounts secured by Government war obligations rose from about \$250,000,000 at the end of 1917 to a high of over \$1,800,000,000 in May, 1919, their other loans and investments never during the war rose above about \$850,000,000 (in November, 1918) and were down as low as about \$350,000,000 in May, 1919. All reporting member banks' holdings of and loans upon United States war securities increased from a low of about \$1,250,000,000 in December, 1917, to a high of about \$4,000,000,000 in May, 1919. Their other loans and investments increased from about \$9,500,000,000 in December, 1917, to a high, for the war period, of about \$10,750,000,000 in August, 1918, and contracted to less than \$10,000,000,000 in March, 1919. A smaller number of banks (about 630, controlling about 35 per cent of the commercial bank deposits of the country) were reporting in December, 1917.

THE DISCOUNT POLICY OF THE FEDERAL RESERVE BANKS.¹⁰

[By O. M. W. Sprague.]

The Federal reserve banks have now been in operation for a little more than six years, a period much too short, even if it had been of more normal character, for the reserve system to reach the full measure of its development. Modifications in business and banking practice and in public opinion are involved, changes in usage which are not made overnight. But the last six years have been far from normal. Throughout the entire period, the development of the reserve system has been influenced by the presence of unusual conditions and requirements. In some important respects, these abnormal conditions have hastened development—forcing a not altogether healthy growth—while in other directions development has been positively retarded. Experience with operation in normal times is required to provide a basis for definite conclusions regarding the regular activities of the reserve banks and the policies which should be adopted in their management. This experience will not be available until the reserve banks have extricated themselves from the position in which they have been placed by the war and have passed through all the stages of at least one peace-time business cycle.

Addressing an assemblage of economists, it seems appropriate that I should engage directly in an examination of fundamental monetary and banking principles as they are illustrated in the structure and working of the reserve system. I am the more inclined to adopt this method of approach because whatever may be the case in the operation of particular commercial banks, monetary and credit problems of a very general nature are matters of primary and immediate concern in the formulation of the policies of central banks.

In what may be styled its monetary as distinguished from its banking consequences, the effect of the establishment of the reserve system has been more immediate and is more clearly and completely manifest. These monetary changes are notable, not only on account of the rapidity of the changes themselves, but also on account of their extraordinary magnitude. In brief, the available supply of credit was more than doubled as a result of the establishment and operation of the reserve banks and this huge addition to the supply of credit was fully absorbed in the course of less than six years. Moreover, all future additions to the stock of gold in the country will provide the basis for at least twice as great an increment to the volume of credit as was possible in the later years of the national banking system.

Before 1914, in periods of active business and consequent intense demand for credit, the money in the vaults of the national banks, including the notes of other banks, was never less than one-eighth of net deposit liabilities, and always more than a sixth of demand deposits exclusive of those due to other banks. For State banks and trust companies, working under lower legal reserve requirements, cash holdings appear to have been no more than one-tenth of individual demand deposits. Taking both classes of banks together demand deposits of individuals and corporations seem never to have exceeded eight times the total amount of money held by the banks.

With the opening of the reserve banks in November, 1914, reserve requirements for member banks were modified and an even more radical change was made by the important measure amending many provisions of the reserve act which became law in June, 1917. All cash reserve requirements for member banks were abrogated; balances at reserve banks of 7, 10, and 13 per cent of net deposit liabilities of country, reserve city, and central reserve city banks, respectively, together with a 3 per cent balance for all banks against time deposits becoming the sole legal reserve requirement. It is convenient and sufficiently accurate to take a balance of 10 per cent of net deposits or 13 per cent of individual demand deposits as the average requirement for all of the banks. Of course, quite regardless of legal requirements, every bank must have some money on hand for counter payments, but the amount needed for this purpose has been found to be surprisingly small—about 3 per cent of net deposits or 4 per cent of individual demand deposits.

The cash regularly held by the national banks, even in periods of intense demand for credit, 13 per cent of net deposits, it will thus be seen was sufficient to provide an adequate amount of till money and also the required balance at the reserve banks. It is evident, therefore, that the supply of credit has been enlarged by the full amount of the loans which have been made by the reserve banks, and by an amount greatly exceeding those loans, since loans at reserve banks in part serve to increase reserve balances upon which member banks may in turn incur a tenfold liability.

¹⁰ This paper was read at the thirty-third annual meeting of the American Economic Association held in Atlantic City, Dec. 29, 1920.

From reserve deposits by member banks and payments on capital stock account the reserve banks have received something like a billion and a half dollars, almost entirely in gold. These resources would have made possible a very considerable increase in the supply of credit. But the increase would have been comparatively small if the reserve banks, like the Bank of England, had been empowered to issue notes only under restrictions which make the notes virtually gold certificates.

Power to issue Federal reserve notes as credit instruments has increased the supply of credit in two ways. In the first place, it has enabled the reserve banks to acquire large amounts of gold for banking use by substituting reserve notes for gold and gold certificates which were held by the banks for till-money purposes or were in circulation outside the banks in the pockets of people. Between a half and three quarters of a billion of dollars appear to have been acquired by this process of substitution. It was a process which was much facilitated by the elimination of the legal cash reserve requirement for member banks, since only lawful money would meet that requirement, while reserve notes are entirely satisfactory for till-money purposes.

Although the power to extend credit in the form of the Federal reserve note has been of great importance as a means of acquiring gold, it has been of vastly greater importance as a means of retaining it. Every considerable increase in the volume of deposits subject to check is accompanied or speedily followed by increasing requirements for some kind of money that will pass readily from hand to hand. In the absence of additional issues of bank notes or of Government paper money, this demand absorbs gold which would otherwise have been available for banking use. Between June, 1914, and June, 1919, for example, the estimated stock of money in the United States outside the Treasury and the banks, not including subsidiary silver, increased by more than \$1,900,000,000, from \$1,600,000,000 to \$3,500,000,000, or by nearly 120 per cent. During the same years demand individual deposits increased \$12,700,000,000, from \$10,700,000,000 to \$23,400,000,000.

There appears, then, to have been an increase of \$1 in the money in use outside the banks for every \$6 of increase in that portion of the circulating medium which consists of deposits subject to check. I am by no means confident of the validity of this exact proportion, based as it is on the experience of a short and abnormal period, and on figures which in the case of money are in part estimates, and in the case of deposits involve uncertainties of classification. The estimated stock of money for 1914 is probably too high, and the increase to 1919 does not take account of some seepage of reserve notes to near-by foreign territory. On the other hand, the estimate of deposits is doubtless swollen by the inclusion of the entire amount of the unclassified deposits of the various banks. Finally, it may be observed that confidence in the substantial correctness of the ratio is strengthened by the close approximation to a six to one ratio between deposits and money outside the banks in both 1914 and 1919.

We are now in position to compare the power of the banks to expand credit under the Federal reserve system with that under the national banking system. Before 1914 an increase of \$1,000,000 in demand individual deposits would absorb nearly \$300,000—one-eighth of the increase in deposits as a reserve and one-sixth for use outside the banks. In the later years of the national banking system, when the supply of bonds bearing the circulation privilege was exhausted, additional gold was the only means of meeting practically all of this requirement for more money with increasing deposits. Under the reserve system, a similar increase of \$1,000,000 in deposits would involve a similar increase of one-sixth in the money outside the banks, 4 per cent for till-money purposes, and a 13 per cent balance at reserve banks, a total of more than \$330,000, about \$30,000 more than in the preceding calculation. It is important to note that this requirement, though larger, can be entirely satisfied by means of credit extended by the reserve banks—credits which on the basis of a 45 per cent reserve at reserve banks require no more than half the amount of gold and other lawful money which was absorbed under the national banking system. Stated in another way, it may be said that an additional million dollars in gold now provides the basis for about \$7,000,000 in credit, contrasted with less than \$3,500,000 before 1914. Even with a 60 per cent ratio against notes and deposits at the reserve banks, credit can be expanded 50 per cent more than formerly. This increase in the power to extend credit is the most fundamental single change which has followed from the establishment of the Federal reserve system.

The enormous increase in the supply of credit since 1914 is not, however, entirely due to the operations of the reserve banks. More than a billion dollars in gold was imported in 1915, 1916, and the first half of 1917, none of which would presumably have been acquired if there had been no war in those years. On the contrary, the expansion of credit under the reserve system, on the basis of our own stock of gold, would almost certainly under peace-time conditions have so influenced the balance

of international payments as to have occasioned gold exports. An intense demand for American commodities, accompanied by abnormal credit expansion in Europe, both direct consequences of the war, not only removed the restraining influence of gold exports but also provided the basis for much credit in addition to the huge supply which became available through the economy of gold under the reserve system.

But the war did much more than shelter our stock of gold and increase its amount; it also occasioned the far more speedy utilization of our enlarged supply of credit than would have been possible under peace-time trade conditions. An extraordinary supply of credit was absorbed by an equally extraordinary demand. Within five years from the opening of the reserve banks in November, 1914, the volume of outstanding credit was more than doubled. Credit expansion on so colossal a scale could not have occurred during a similarly short period of peaceful business activity. The aggregate demand for credit would not be sufficiently great, to say nothing of the much smaller effective demand, that which meets the credit tests of the banks. During the war, the demand for credit was abnormally great and it was an effective demand because it was largely based, first upon the credit of the Governments of Europe, and later upon that of the Federal Government.

After the armistice, the intense demand for credit continued, gradually shifting, however, from the Government to the business community. The conditions which made possible the continuance of trade activity after the armistice were fundamentally similar to those which are present at the beginning of a period of prosperity, following a period of depression. Although trade had been feverishly active for more than three years, there was still a large supply of credit available at low rates. Moreover, and this is a matter of far greater significance, there was, unlike the situation after some years of prosperity in a peace-time business cycle, an evident widespread scarcity of goods. In these circumstances, an intense demand for credit to be used in the purchase of goods could not fail to develop, since it was reasonable to anticipate that no difficulty would be experienced in marketing them at an advance in price. Finally, toward the close of 1919 the available supply of credit was approaching a condition of complete utilization. A few months more of credit expansion at an undiminished rate would have left no supply of credit in reserve with which to meet an emergency. Even if an ample supply of additional credit had still been available at that time, the opinion may be ventured that another limit on continued credit expansion was not far away—the deterioration in the average quality of the loans of the banks. A period of readjustment and liquidation was inevitable. Liberal credits at low rates in 1920 would have deferred its advent somewhat, but with the certain consequence that the difficulty and losses incident to readjustment would have been materially enhanced.

After this unavoidably long introduction, I am finally ready to take up the subject proper of my paper, the discount policy of the Federal reserve banks. At the outset, it is necessary to reach some conclusion as to the responsibility that rests upon the Reserve Board and the management of the reserve banks for the credit expansion of the last five years. For by far the greater part of that expansion responsibility clearly rests elsewhere. The volume of credit has been subject to conditions and influenced by policies which the management of the reserve system could not control. This is obviously the case as regards the large additional supply of credit which became available as a result of the gold imported before we entered the war. Up to that time, the loans of the reserve banks were of quite insignificant proportions.

After we entered the war, the loans of the reserve banks increased by leaps and bounds; but for the policy of war finance which occasioned these loans and the manifold greater loans of the commercial banks, the reserve board was not responsible. That it is possible to finance without inflation expenditures as great even as those incurred by the United States Government during the recent war, I am firmly convinced. That we could not finance that war without credit inflation, I am equally certain. The primrose path of inflation had the backing of public opinion; the administrative machinery and perhaps the constitutional power for adequate taxation were lacking. A little less waste in expenditure, slightly heavier taxation, and slightly higher interest rates on Government bonds might have characterized our war finance program, with the desirable result that there would have been somewhat less of credit inflation. But I must not allow myself to digress further on this tempting subject. The important point in the present connection is that whatever the financial policy adopted by a Government in time of war may be, it is the imperative duty of the management of a central bank to cooperate loyally in executing that policy. The reserve board and the officials of the reserve banks could offer advice and criticism; they could not decline to do their part in executing the policy of the Treasury.

Presumably there would have been no less use of credit in financing the war if the reserve system had not been established. In that event, the Government would

doubtless have met requirements for additional money for use outside the banks by issues of paper money which would surely have become inconvertible. The economy of gold under the reserve system permitted credit expansion on an unexampled scale without suspension of specie payments. It was none the less inflation.

One of the results of the extensive use of credit in financing the war was to place the banks of the country in a position of extreme dependence on the reserve banks. At the time of the armistice the reserve banks were lending member banks nearly \$1,800,000,000 and in addition held nearly \$400,000,000 of bills bought in the open market. As general liquidation of loans at the reserve banks, unless due to the receipt of new gold, involves much greater contraction of loans by member banks, it is probable that they must continue to rediscount heavily there for many years to come if not indefinitely. No progress whatever in reducing these obligations has been made during the two years since the armistice. On the contrary, borrowing at the reserve banks has increased by nearly 50 per cent, loans standing at \$3,126,000,000 on November 5, 1920.

It is only for this after-the-war increase in the loans of the reserve banks and the more considerable increase in the loans of the other banks thus made possible that the management of the reserve banks can be held to be in some measure but by no means primarily responsible. Government financial policies were the controlling factor in the situation for at least a year after the armistice. The policy of borrowing at abnormally low rates was insistently maintained by the Treasury. It does not fall within the scope of this paper to discuss in detail the wisdom of this policy. Much can be said on both sides of the question. I content myself with observing that it was my opinion at the time, and the subsequent course of events has not altered the conclusion, that a distinctly higher range of rates on Government certificates in the summer and autumn of 1919 would have been a wiser policy. But even if the Federal Reserve Board had been convinced that the after-the-war financial policy of the Treasury was unwise, as to which there is no evidence one way or the other, I do not think the board could have refused to cooperate in executing that policy, taking an independent course and making a sharp advance in discount rates. It is, however, reasonable to surmise that the policy of the Treasury after the armistice would have been subjected to more searching scrutiny if the reserve board were less heavily weighted with Treasury officials. When account is taken of the future frequent borrowing requirements of the Government, the retention of two Treasury officials as ex-officio members of the reserve board seems most inexpedient. Borrowers on a large scale are not the most desirable of persons to be selected as directors of any bank. The Treasury as a borrower in times of peace should not be in position to exert a considerable, much less a controlling, direct influence on the discount policy of the reserve banks. Merely as a matter of simplification of administrative machinery, also, the functions of the Comptroller of the Currency should be transferred to the reserve board and the reserve banks. So much of diminution of direct Treasury influences as is involved in this proposal seems certainly desirable. Whether the Secretary of the Treasury should cease to be a member of the board is a question as to which a definite answer is less easily given. Upon the whole, I am inclined to think that the presence of the Secretary is desirable. The intimate understanding of the financial situation that a Secretary may gain as a member of the reserve board can hardly fail to be of advantage to him in the conduct of his office. The Secretary of the Treasury, as a member of the board, can also do much to defend the reserve system from unreasonable demands on the part of the public and, above all, from political onslaughts.

Returning once more to the course of credit under the reserve system, there remains for consideration the experience of the last 12 months, during which the reserve banks have been in position to exert complete control over the supply of credit and have also been able to take independent action. At the end of August, 1919, the gross debt of the Government reached its maximum, and though the Treasury continued to enter the market as a chronic borrower its strongest ground for insisting upon the policy of liberal loans at low rates could be urged no longer. With evident reluctance Treasury control of the discount policy of the reserve banks was relaxed and seems to have been entirely relinquished with the last issue of 4½ per cent certificates in January, 1920.

Full responsibility for the credit situation was regained in circumstances which imposed a severe test upon the reserve system and upon its management. After nearly five years of unexampled business activity, accompanied by unprecedented credit expansion and advances in prices, the activity of trade was unabated, the demand for credit was if anything more intense and prices were still moving rapidly upward. Beneath the surface, there were indications that even though large supplies of additional credit were still to be had, a period of readjustment could not be long postponed. Liberal credit was no longer, as at the beginning of a period

of activity, serving to stimulate production and direct industry into promising channels. It was rather tending to disorganize industry, subjecting it to an increasing extent to speculative influences, to wage disputes and numberless other strains. The average quality of the loans of the banks was becoming less satisfactory because of these conditions in industry as well as on account of extensive sales of goods in foreign markets on long credit terms. In short, life situation at the end of 1919 was one which by no possibility could be corrected by the application of additional supplies of credit. A check on further credit expansion followed by some contraction was the one sure remedy, and that remedy would have been quite as much needed even though an abundant supply of additional credit had been still available. It is, however, by no means certain that the reserve board would have taken measures to restrain credit during the course of the winter and spring of this year if the power of the reserve banks to extend credit within the limits of legal reserve requirements had not been nearly exhausted. The successive advances in discount rates made during the first half of the year were not then entirely the expression of a voluntary policy. It was a policy which in large measure was enforced by the reserve position of the banks. It was necessary to check further credit expansion. Otherwise, the reserve banks in the course of a few months would have held no reserve above legal requirements as a basis for credit to be used in meeting an emergency. To go on expanding credit until the last available dollar was employed was indeed our former practice, and the initial stages of the transition to a period of readjustment were always marked by crisis and panic. It is one of the inestimable advantages of the reserve system that the brakes were applied before the supply of credit was entirely exhausted and before trade activity had culminated in a crisis. We are still in the midst of a period of necessary readjustment and liquidation, but the immense superiority of the reserve system as compared with our former means of meeting similar situations is already conspicuously evident.

Although the process of readjustment is not completed, experience already furnishes a basis for fairly definite conclusions regarding some important aspects of the policy of the reserve banks in handling the situation. The discount rate of the reserve banks is clearly an effective means of checking credit expansion, but it is also evident that advancing rates influence the situation rather slowly. Credit continued to expand for some months after rates were finally advanced in May to the present high level. When credit is expanding rapidly, there is at any moment a considerable supply of unused credit scattered among the thousands of banks of the country the use of which is not subject to control by the reserve banks. The continued increase in the amount of Federal reserve notes for some months after credit expansion was checked is in accord with what was to have been anticipated. Increased requirements for currency accompany, but with some lag, the increase in credit in the form of deposits subject to check.

These conditions and tendencies prompt the suggestion that when rates are advanced in order to check credit expansion the practice of the Bank of England of advancing rates by increments of 1 per cent should be adopted. In making for the first time a test of the effects of advancing discount rates, it was perhaps natural and proper to move slowly. Experience during the last year indicates that advances of fractions of per cent are ineffective. It may be added that in this particular instance, it would have been of much advantage if somewhat greater progress in the process of readjustment had been made before the beginning of the crop-moving season, a result which would have followed a less hesitant discount policy.

The process of gradual contraction and orderly industrial readjustment seems at first sight in every respect superior to the short and severe crisis and panic followed by depression with which we have had frequent experience in the past. I do not doubt that the balance of advantage is heavily in favor of the slower process. At the same time it should be recognized that the slower process is attended by its own peculiar difficulties. While the aggregate loss is doubtless reduced, the burden of loss is apparently distributed in a somewhat different but by no means certainly in a more equitable fashion among the various groups of producers. The slow process of liquidation does not succeed in bringing about a slow and uniform general decline in prices. In fact, price changes seem to be more irregular, or at least the irregularities are more prolonged, than when periods of trade activity culminated in catastrophic disturbances. In this connection the query suggests itself whether farmers might not have incurred less loss if there had been a crisis in the early autumn that might have forced a more immediate reduction in prices of the goods they must buy.

The irregular distribution of the burdens of liquidation in some measure explains even though it does not give sufficient ground for complying with the widespread demands for assistance now being made by various classes of producers. Much of the occasion for special consideration will disappear when in the near future, as now seems probable, the decline in prices has completed the circle.

There is grave danger that the quack remedy of inflation through enforced accommodation from the reserve banks may be attempted. Such a remedy would be similar in all essentials to the grant of aid by the issue of paper money by the Government, a form of assistance that was urged but successfully resisted after the Civil War. It is not too much to say that it is now to be determined whether the people of the United States possess sufficient intelligence and endurance to permit the successful operation of anything better than a strait-jacket credit system. We have established a system which is designed to prevent collapse and complete disorganization. This presupposes that reserve banks will regularly hold in reserve large potential credit power. If we insist upon using such power as a means of temporary relief and stimulation, ultimate disaster is the certain consequence. Past experience shows that it is dangerous for governments to issue paper money. There is a constant temptation to overissue when confronted by real or imaginary emergencies. The same danger arises in the case of the reserve system—that public opinion and perhaps legislative action will compel the employment of its resources in a vain endeavor to cure evils which are mainly due to credit already granted in excess.

The process of industrial readjustment at best is painful and its burdens are most unevenly distributed. It seems pertinent therefore to inquire whether something more can not be accomplished through the reserve system than the mere modification and amelioration of conditions at the culmination of periods of business activity. Would it be possible so to operate the reserve system that conditions which compel widespread liquidation would not be developed, or at least would not be developed to so serious degree as in the past. This inquiry is rendered more significant by the serious danger that conditions which render subsequent liquidation unavoidable will develop more luxuriantly under the reserve system than was possible under the national banking system. Let us examine this point.

The liquidation now under way will doubtless lead to a considerable reduction in the loans of the banks to the public and in rediscounts at the reserve banks. It is not unlikely that a reserve ratio as high as 70 per cent will be seen before the beginning of the next period of active business and intense demand for credit. Moderate if not low discount rates will doubtless prevail at the beginning of the period. A large supply of credit will be available; much more, as we have seen, than could be furnished if the reserve banks like the Bank of England could not issue credit notes. I mention this familiar fact once more because the prewar discount policy of the Bank of England, with its changes in rates as the reserve increased or decreased, seems to give the sanction of successful experience to a policy for central banks that would allow credit to be extended freely at low rates whenever reserves are ample. Bank of England practice, however, loses significance and is positively misleading when it is applied to a banking system which loses no gold for purposes of domestic circulation as deposit credit expands. Again in prewar times, comparatively slight influences, whether at home or abroad, were sufficient to subject the reserve of the Bank of England to depletion from gold exports. For these two reasons credit expansion in England could seldom be carried far without bringing the reserve of the bank down to a point at which an advance in the discount rate would become necessary. In this country, whatever may be the situation in the distant future, gold exports for many years to come are not likely to be the almost automatic consequence of moderate credit expansion. This restraint on excessive credit expansion in any single country was effective when all important commercial countries were on the gold standard. It is not now effective because most of the world is on an inconvertible basis. Consequently the volume of credit which may be created in the United States will be determined for many years to come almost wholly by domestic influences. In these circumstances, while the reserve system may be expected to prevent the outbreak of panic, its expansive power is so great that with the reserve ratio the determinant of discount policy it can be confidently predicted that far wider price fluctuations will mark the successive stages of the business cycle than were experienced under the national banking system.

It should also be noted that the discount rate of the reserve banks is a somewhat less immediately effective instrument of credit control than that of the Bank of England in prewar days. A considerable portion of the loans of the British banks were of an international character which could readily be shifted to the money markets of other countries when London rates became relatively high. Owing to the present disordered financial situation of most countries, loans arising out of foreign trade and other international transactions no longer possess this quality so valuable from a banking standpoint. International loans have become no more transferable than domestic loans and, it may be added, with respect to payment at maturity without delay or renewals have become decidedly inferior to domestic loans.

The absence of branch banking in the United States also weakens the validity of comparisons between the discount rate of the Bank of England and those of the reserve banks. Credit is less fluid under our system of some 30,000 banks. There are much wider variations in the lending rates of the various commercial banks; there is no such general market rate of discount as in England. Consequently, the Bank of England practice of a discount rate slightly above the market rate can not have so pervasive an influence. Moreover, until the banks cease to be constant heavy borrowers at the reserve banks, a condition largely due as we have seen to the war, it will not be feasible as a regular policy to establish discount rates above the lending rates of member banks even of those in the large cities. When, however, it is the definite purpose of the management of the reserve banks to check credit expansion, it will probably be found necessary to establish discount rates which are considerably above the minimum rates at which some member banks are making some of their loans.

As a guide to discount policy, it must be admitted the reserve ratio has certain conspicuous advantages. It is definite and obvious. Public opinion may be expected to support the always unwelcome policy of credit restraint when that policy is enforced by a depleted reserve. It is unhappily very doubtful whether the public would have been reconciled to the advance in rates made last spring if the reserve banks had had, let us say, a reserve ratio of 55 per cent, and yet, all other things being the same, an advance in rates would have been no less desirable.

By parity of reasoning, it follows that reductions in discount rates need not wait upon the acquisition of a high reserve ratio. The present situation furnishes a convenient illustration. Credit expansion has already been definitely checked; there is no present danger that lower discount rates would stimulate a widespread demand for credit that would permit prices to move rapidly upward once more. The demand for credit is now largely for the purpose of holding goods for which purchasers can not be found. It is no longer a sellers' market. In these circumstances, it is at least possible that a slight reduction in discount rates, by encouraging many to resume normal business dealings, might facilitate the process of liquidation, and so make possible a more speedy reduction in the total volume of loans than will be secured through the maintenance of the present schedule of rates.

There is no substitute for the reserve ratio which possesses its peculiar virtues of simplicity and definiteness. To an enlightened business public, however, it should be evident that so delicate and at the same time potent an instrument as credit can not be wisely administered in a mechanical fashion in accord with simple definite rules.

Whether at any time it is desirable to impose restraint upon credit depends upon the uses to which credits are being put and upon the effects of these uses. The most definite indication that we possess of excessive credit is found in the decided upward movements of prices extending over a number of years. There is practically universal agreement that prices can not be held at an absolutely fixed level. Most would agree that advancing prices at the beginning of a period of activity stimulate production in some measure. Few, however, would question that at some stage in every period of business activity rising prices facilitate ill-judged undertakings and fail to increase industrial output. No doubt there would be wide differences of opinion as to just when this stage is reached in any particular business cycle. Even so, it is submitted that the expert judgment of a responsible body like the Federal Reserve Board, enjoying the benefit of general public criticism, provides a far more satisfactory basis for a discount policy than the variations of a reserve ratio.

The proposal to base the discount rate largely on the observed effects of credit expansion is not designed to secure the stabilization of prices. Such a policy would not be concerned with permanent changes in prices associated with variations in the world's supply of gold. It would aim merely at lessening price fluctuations within particular business cycles, checking somewhat the upward movement and thereby lessening the subsequent decline.

Nearly every economic and social question is complicated and many are rendered insoluble by the alterations between activity and depression of the business cycle. To mention but a single instance, consider the extent to which efforts to enlist an interest in efficient production on the part of wage earners have been frustrated for many years to come by the present widespread unemployment, an inevitable sequel of the orgy or inflation of the last five years.

This proposal to administer the reserve system in such a way as to moderate the fluctuations of the business cycle, will of course be met with the objection that it is politically hazardous. It will be urged that any attempt to influence prices will be resented by large and influential classes who would believe, whether rightly or wrongly that they were being subjected to needless loss or deprived of well earned gains. This difficulty, while unquestionably very serious, is less than would appear at first sight. We should not gauge the antagonism to restraint on credit exercised at an early

stage in a period of expansion by the outcry which is heard when enforced contraction occurs after years of excessive credit, rising prices, and feverish trade activity. Restraint in the use of credit if imposed at an earlier stage in the cycle will not be accompanied by widespread liquidation, followed by years of depression. Here as elsewhere it is the wiser course to endeavor to remove causes, working with the confident expectation that that discount policy for the reserve banks which will yield the greatest permanent advantage will finally secure general public approval.

In the event that no control of credit based on the observed effects of credit expansion at different stages in the business cycle is attempted by the Federal Reserve Board or, if attempted, is given up because of lack of public support, another, but in my judgment less satisfactory, method of lessening the danger of excessive credit should be adopted. At some favorable moment, when the public is in a conservative mood, the legal reserve requirements against Federal reserve notes, or against both notes and deposits, should be raised. A reserve ratio of 50 per cent or even 60 per cent would permit much more additional credit expansion than was possible under the national banking system, and quite as much as could be advantageously employed. The economic development of the country might have been somewhat more rapid at times in the past had more capital been available, but credit is not capital; it is simply an agency for transferring capital. I venture to assert that at no time in the past has the economic development of the country been retarded because of an insufficient supply of credit, while very frequently development has been retarded as a consequence of credit furnished in excess.

The experience of six years has disclosed no serious defects in the structure or management of the Federal reserve system, while the expansive credit power of the system, enormously greater than that under the national banking system, presents no serious danger for the future if suitable policies are adopted. Much more is clearly necessary than the adjustment of discount rates to variations in the reserve position of the reserve banks. A discount policy should be adopted which is designed to check the rapid expansion of credit in periods of trade activity. Such a policy is entirely practicable but it can not be adopted in the absence of general confidence in the wisdom of the policies of the management of the reserve banks, and it requires readiness on the part of the public to support these policies even when the immediate consequences are painful. Satisfactory results from the working of the reserve system seem assured if the management is given the support of an intelligent public opinion.

DISCUSSION.

R. C. LEFFINGWELL. No university man, certainly not one who studied economics in the university, can approach this audience without—I would not say trepidation, but—respect. I accepted your invitation not only with respect, but with real enthusiasm, because I look upon the economists of to-day as the priests of a religion of material salvation which must be successfully preached throughout this land if we are to survive the disastrous consequences of the great war.

I shall not allow myself to be diverted, either by my own impetuous disposition or by Prof. Sprague's cordial invitation, into a discussion of the Treasury's policies. I had the honor of reading a paper on "Treasury Methods of Financing the War in Reference to Inflation" before the Academy of Political Science last spring in New York, and any one who is interested in my answer to Prof. Sprague is respectfully referred to its proceedings.¹¹ The problem of to-day is the problem of banking and currency, and the assigned topic of this meeting is Federal Reserve Board policy. I propose to talk as briefly as I can about that absorbingly interesting subject. But in passing let me say this: The Treasury struggled, first, to finance the war so that it should be won, and, second, to finance it without avoidable inflation. There was never a moment when the latter thought was not in the minds of Treasury officials; there was never a moment when the American people did not know that their duty was to save and to buy Liberty bonds and pay taxes with their savings. The methods chosen by the Treasury, the Federal Reserve Board, and other instrumentalities of the Government to combat inflation were chosen thoughtfully and were on the whole very successful. No equal financial burden was ever assumed in a like period of time by this or any other Government in this or any other war, yet war inflation here was less than in other countries including nonbelligerents.

But inflation did come. It came to us before we entered the war. It came to Japan, it came to European neutrals. Inflation came because the world was wasting more than it was producing. We may be very ingenious in our methods and very wise in our policies, but they could not solve the problem presented by the fact that

¹¹ Proceedings of the Academy of Political Science (New York), vol. IX, no. 1.

the world was using up more than it was producing. It is exceedingly important that we should have the discussion of Federal reserve policies we are having to-day. But it is more important that we should realize what Federal reserve or Treasury policies will not do. They will not take away the curse of war. We fought a great war. We are proud of it and glad of it. But from the economic point of view, it was a reckless debauch, and the people ought to be told that the next time they enter upon an economic debauch they must pay the price, and the price will be registered in inflation. We must not delude ourselves, or those who rely upon us, with the belief that the consequences of economic waste can be avoided by any amount of wisdom and ingenuity in finance or banking.

Having thus got the question of method back in perspective, let us consider the Federal Reserve Board's policies. The problem of credit control since the creation of the Federal reserve system, shortly after the war broke out in Europe, has passed through four phases: (1) Before we entered the war, (2) during our active participation in the war, (3) the first year after armistice, and (4) the present readjustment period.

Before we entered the war, expansion in this country was based upon the importation of gold and investment securities. The Federal reserve system was as powerless as a babe unborn to prevent it. The Federal reserve banks were hard put to it to earn their operating expenses. Member banks did not have to borrow and therefore bank rates could not be effective.

The outbreak of the war in Europe, prior to the organization of the Federal reserve banks, found this country well nigh helpless to meet the financial and banking problems thrust upon it. New York City had trouble to meet its foreign obligations in gold. The New York Stock Exchange was closed for a protracted period and later hesitatingly resumed operations under careful restrictions. These things happened because our financial system was in its infancy and notwithstanding the fact that America was not a party to the war. It was not long before the Federal reserve system was put in operation, and when, nearly three years after the outbreak of the war in Europe, America herself entered the war and assumed financial burdens of unparalleled magnitude, the Federal reserve system made it possible for us to meet them without financial disturbance and without embarrassment of the Nation's capacity to produce and transport war materials and supplies. The Federal reserve authorities have no need to shelter behind the Treasury's broad shoulders and they are entitled to high praise and the lasting gratitude of the American people for the important part they took in financing the great war. They advised the Treasury in the dark days of the war. Treasury officials and Federal reserve authorities did not always agree among themselves or with each other, but, in the proud record of the Treasury, as well as of the Federal reserve system, members of the Federal Reserve Board and governors and chairmen of the Federal reserve banks are entitled to claim a share.

After we entered the war the addition of this Government's buying power to the buying power of the Governments of Europe created a wholly abnormal situation. The enthusiasm of our War Department and Navy Department was unlimited. Their orders and contracts called for goods and services far in excess of the country's capacity. During the whole period of the war any attempt of the Federal Reserve Board to control credit through rates would have been futile. The Treasury would have had to meet any rate they made at home, and the Federal reserve bank rate could have no effect upon the international situation, because the international movement of goods, gold, and capital was controlled by foreign Governments or our own for the purposes of the war. The adoption of a "dear money" policy during the war, with a view to preventing inflation, would have failed of that purpose unless it had been carried to such an extreme as to bring about such conditions in war time as exist to-day, in which case we should have lost the war and would have had to inflate afterwards in order to pay the indemnity which Germany would have imposed upon us. No: you can not use rates in such a period as that from April, 1917, to November, 1918, effectively to control credit. You have to adopt methods such as were adopted, and with a very extraordinary degree of success. The response which the American people made to the efforts of the Treasury and Federal Reserve Board, of the Liberty loan and war savings organizations, of the Capital Issues Committee, of the Food and Fuel Administrations, and of the War Industries Board, for the most part without compulsion of law, to conserve capital, credit, goods, and services, was amazing proof of the passion with which the people entered the war. They worked and they saved and they did without things, and they are entitled to be proud of it.

After the war was over in the fighting sense, it went right on in the Treasury sense. We reached the peak of expenditures in the three months, November and December, 1918, and January, 1919. We spent \$2,000,000,000 a month. That was as much as the

first Liberty loan each month. Since armistice day this Government has paid out as much as before armistice day, \$20,000,000,000 before and \$20,000,000,000 after. The gross debt of the Government on armistice day was \$18,000,000,000. Nine months later it was \$26,500,000,000. While the Government debt was mounting thus, the same condition continued which had existed during the period of active warfare. It was no more practicable to exercise control of credit by the use of dear money than it had been before. Indeed, it was less practicable, because the enthusiasm, devotion, and self-sacrifice of the American people while war was on vanished over night with the signing of armistice. The bills did not get paid any easier, but a good deal harder, because the Germans had capitulated.

The magnitude of the Government's expenditures after armistice day was such that plans had to be made for funding the greater part of them. The Victory Liberty loan was floated in April and May, 1919, successfully, and a large part of the after-armistice indebtedness was lodged with investors. It could not have been floated in any such amount upon any terms in a period of dear money. If it had not been for the Victory loan, the floating debt would have amounted to more than \$8,000,000,000 on August 31, 1919. You can not have credit control with an unmanageable floating Government debt. If the Federal Reserve Board had prematurely adopted a dear money policy, they would have rushed into the difficult position in which unfortunately the Bank of England found itself because the British floating debt had gotten out of hand.¹³

The situation I have described did not really end on August 31, 1919—not indeed until January, 1920. Notwithstanding the success of the Victory loan, it was not paid for in full until the latter part of November, 1919, nor had the Fourth Liberty loan, issued in the fall of the previous year, yet been paid for in full; and the Federal Reserve Board remained in a difficult position with respect to the problem of credit control on this account and on account also of the fact that nearly \$2,000,000,000 of Treasury certificates of indebtedness matured within six weeks, or thereabouts, in December, 1919, and January, 1920. The last six months of 1919 were therefore trying months, and the Federal reserve authorities, rightly I think, moved cautiously in the use of the discount rate, testing that instrument under novel conditions. Early in November, 1919, they began a series of fractional increases in rates, but notwithstanding that caution, a quasi panic in the securities market, particularly in Government bonds, developed in the latter part of November, 1919.

There were a number of other obstacles in the way of more rapid progress in establishing credit control during that period:

The Treasury was in honor bound to use the bond purchase fund established by Congress for that purpose to support the market for Liberty bonds. Thus whatever pressure upon the money market resulted from the effort of the Federal reserve authorities to control credit was automatically relieved by the Treasury. It is noteworthy that efforts to control credit never gave any sign of becoming effective until in April, 1920, the Treasury's moral obligation having been satisfied, it discontinued purchases for the bond purchase fund.

The Federal reserve authorities had, wisely I think, undertaken the task of creating a market for acceptances, but in the effort to do so had felt it necessary to take acceptances at an artificially low rate.

An arrangement had been entered into during the war by which an increase in the clearing banks' rate on interbank deposits would result from any increase in the reserve banks' 90-day rate on commercial paper. It was generally agreed that such an increase in the rate upon interbank deposits would be harmful to the whole situation, but the Federal reserve authorities did not find it possible to eliminate this arrangement until January, 1920.

The effort to eliminate the differentials in favor of loans on Government securities, which had much to commend it from a theoretical point of view, placed the Federal reserve system in a dilemma between subsidizing inflation by maintaining a rate much below the market on commercial paper, or, on the other hand, creating a disaster in the market for Government securities. It was finally solved in January,

¹³ Economist, London, Jan. 24, 1920, p. 113: "Plenty of money and a consequent demand for bills have been the chief features of the internal history of the money market. The plenty may be attributed to the fresh creation of ways and means advances, necessitated by the maturing of more Treasury bills than were applied for. By this process, as we have frequently pointed out, dealers in and users of credit can now at any time oblige the Government to create more 'cash at the bank' by the weapon that they hold in the shape of one thousand millions odd Treasury bills outstanding. Thus the powers that be can make money dear by paying more for it, but they can not make it really scarce until, by taxation or otherwise, they have reduced the effectiveness of this weapon."

1920, subordinating theory to the practical requirements of the situation, by elevating the commercial rate considerably more than the rate on war paper.¹³

Though something may be said for the view that in the latter part of 1919 there might have been a somewhat earlier and greater advance in rates on commercial paper and in the open market buying rates for acceptances, my own judgment is that this is a question of detail rather than of substance, and that the effort to make money really dear before January, 1920, when the Government was first able to reduce its floating debt to manageable amounts and maturities, would have risked more than it could have hoped to gain.

During the whole of 1919 the continuance of war expenditures and policies by the other departments of our Government, such as the War and Navy Departments, the Shipping Board, and the Food and Railroad Administrations, and the expenditures of foreign Governments out of loans made by the Treasury in pursuance of credits or commitments previously made, continued the abnormal demand for goods and services and the inflation of prices and wages, and of the public debt. Prof. Sprague spoke of one instance: The regrettable fact is that the Government of the United States continued to furnish railroad transportation at less than cost until September 1, 1920, nine months after the Federal Reserve Board adopted its dear money policy, and continues to-day to lend money to the railroads at less than cost and much less than the market rate.

On the other hand, the removal by the Treasury and the Federal Reserve Board of the gold embargo immediately after the Victory loan was the most important and effective step toward deflation taken in 1919.

During the latter half of 1919 the Federal Reserve Board attempted to deal with the problem of inflation by what Dr. Miller has called "direct action." It was apparent that because of the gold embargoes maintained by practically every country except the United States, and because of other extraordinary conditions, an increase in the reserve banks' rates could not operate upon the international situation, in accordance with the prewar classical example of the Bank of England, for instance, either to cause the importation or curtail the exportation of gold or to curtail the importation or increase the exportation of commodities. An increase in rates could operate solely upon the domestic situation, and with painful results. Under these circumstances the Federal Reserve Board was, I think, bound to make the effort to deal with the problem by direct action. As a matter of fact, it was not until the spring of 1920, when both direct action and dear money were in full effect, that the reserve system was able to get any control of credit.¹⁴

A difficulty, peculiar to this country, in the way of the successful exercise of credit control by the Federal Reserve Board, whether by direct action or by dear money, lies in the fact that there are some 30,000 banks and trust companies in the country of which only some 10,000 are members of the Federal reserve system, and that non-member banks and nonborrowing member banks possessed an enormous capacity for expansion independent of the Federal reserve system.

When in January, 1920, the Government's floating debt had at last been reduced to manageable amounts and maturities, but the hoped for liquidation did not materialize, the Federal Reserve Board proceeded with vigor to control credit through rates. There was no reluctance about the Treasury's acquiescence in this change in the discount policy of the Federal Reserve Board. On the contrary, the Treasury strongly advised the 6 per cent rate which was adopted in January, and the 7 per cent rate which was adopted in May, 1920.

In thus advancing rates the Federal Reserve Board proceeded wisely and courageously in the effort to control expansion. With equal wisdom and courage it has not

¹³ The Federal reserve banks' holdings of paper secured by Government war obligations reached their peak on May 16, 1919 (just before the date, May 20, 1919, when the first payment on the Victory loan reached the Federal reserve banks), when the amount of such paper was \$1,893,000,000. On the same date, May 16, 1919, the Federal reserve banks' holdings of commercial paper, including bills bought in the open market, were at about low-water mark, \$139,000,000. Since May 16, 1919, there has been a pretty continuous contraction in their holdings of paper secured by Government war obligations and expansion in their holdings of commercial paper. On December 29, 1919, war paper had been reduced to \$1,510,000,000, but commercial paper, including acceptances, had increased to \$1,270,000,000. On December 3, 1920, war paper had been reduced to \$1,161,000,000, but commercial paper had increased to \$1,859,000,000.

¹⁴ The Economist, which has been a consistent critic of the Bank of England's dear money policy, puts the argument for direct action briefly in its issue of January 3, 1920, page 3, as follows: "In old days when the gold standard was effective, raising money rates at a time of undue credit expansion used to increase the basis of credit by bringing us gold. In these times no such effect can be counted on, and the higher price that has to be paid for money by speculators in securities and commodities has little effect upon them in view of the great fluctuations in prices and the large profits that these fluctuations bring them. If credit is to be reserved for producers and distributors of necessities and restricted for those who are holding up commodities, this end would seem to be best accomplished by joint action on the part of the banks."

attempted to prevent it; and by permitting rates to remain below the open market rates and credits to be expanded during the period of deflation of prices, it has prevented the present business depression from degenerating into an old-fashioned panic.

The experiment made in 1920 of establishing penal rates for excessive borrowings was well worth trying. It may be questioned, however, whether experience has justified it. Certainly the adoption of the system of penal rates in a given Federal reserve district does not justify the maintenance of a basic rate in that district lower than the rate maintained by reserve banks of neighboring districts or of the financial centers of the country.

Turning now to the future of Federal reserve policy:

I share Dr. Miller's objection to Prof. Sprague's suggestion that Federal reserve rates should be determined by price movements. There is no man, or group of men, to whom the American people will, or should, accord the right to determine whether they shall be prosperous or miserable, whether they shall have high prices or low prices, whether they shall have good times or bad times. The day Prof. Sprague's suggestion is adopted by the Federal Reserve Board marks the end of the Federal reserve system. It would be absurd for the Federal Reserve Board to ignore price movements as symptoms of the general situation, but it can not base its discount policy upon them.

On the other hand, the reserve alone is not an adequate guide. The obvious first principle is that the discount rate should be above the market rate, whether in consequence of the elevation of the reserve banks' rates or the depreciation of market rates. When it is possible to bring about this condition, it will be the first duty of the Federal reserve authorities to see to it that the command thus obtained of credit is maintained. When the reserve banks' rates are above the open market rates, they will exert an automatic pressure on the banks, which can not be expected to meet their customers' demands habitually at a loss. It is true that under normal conditions a central bank's rate, even when it is above the market rate, is not always effective. As I have pointed out, the reserve banks' rates were ineffective before we entered the war. But that situation need not concern us now nor for a long time to come, I imagine. It can not happen until the production and saving of real wealth have made good the war's waste, and the independent resources of the banks suffice for the normal requirements of their customers. Then the member banks' dependence upon the Federal reserve system will be as it should be, seasonal or occasional, and not habitual. Until then the market rates will tend to maintain themselves above reserve bank rates automatically, unless, of course, panic rates should be established, and we may be confident that they will not be.

If the reserve gets big enough to be embarrassing, the best cure for the situation which will then arise is to pay out gold and gold certificates, and restore them to circulation. Currency and credit have been expanded by the Federal reserve system, both because of the economy in the use of the reserve permitted by the Federal reserve act and because of the withdrawal of gold and gold certificates from circulation in this country and the substitution of Federal reserve notes requiring only a 40 per cent reserve. We shall not have restored our prewar financial strength until we have returned to circulation the gold and gold certificates withdrawn during the war and since, and thus recreated the greatly depleted "secondary reserve." To the extent that gold and gold certificates are thus restored to circulation and Federal reserve notes withdrawn, the practical importance of the objection raised by Prof. Sprague and Dr. Miller to the Federal reserve note as a credit note, as compared with the Bank of England note as a gold note, will be reduced.

In conclusion: Vastly important as are these questions, more important by far is the fact that to-day the governments of the world are busily engaged in dissipating the resources of the people of the world; and the Government of the United States of America is not guiltless. Just so long as we enroll armies and build navies in preparation for future wars, as men rush to Washington for relief and for special privileges, just so long will the fabric of the economic state be in peril. There is nothing that economists can do, nothing that the American people can do to save themselves, except demand that the waste of public funds shall stop—that there shall be no more militarism, no more subsidies or doles.

The Federal reserve authorities have stood, during the three or four years of my acquaintance with them, for sound things in finance, for sound things in banking and currency. They are entitled to the support of all good citizens, because they stand to-day with their shoulders squared against the winds of popular stupidity, of political ingenuity, and of selfish interest. Give them your support.

[Reprinted from the American Economic Review, June, 1921.]

FEDERAL RESERVE POLICY.

[A. C. Miller, Federal Reserve Board, Washington, D. C.]

The acute distress and the economic hardship resulting from the business and price recession movements of the past eight months, which have been experienced in all sections of the country, have drawn attention to the Federal reserve system to a degree not hitherto experienced and have made the operations and methods of the Federal reserve banks a matter of widespread public interest. The growing appreciation of the fact in the past few months—even in sections of the country where a strong disposition was manifested last autumn to charge the Federal reserve system with responsibility for the collapse of prices—that the recent liquidation movement has, in the main, proceeded from world-wide economic causes and is incident to the general economic readjustment made necessary by the profound economic disturbances worked by the war has done much to clarify the atmosphere and to make the moment favorable for a review and discussion of Federal reserve policy and practice. While there is every reason to believe that the first and worst stage of the postwar economic readjustment is near its close, there is enough likelihood of further periods of economic difficulty and strain in the process of completing the general readjustment to make it a matter of great public concern to consider how the Federal reserve system may best function in assisting the industry, trade, and business of the country through such further periods of uncertainty and pressure as may occur.

It is but little more than six years since the Federal reserve system was organized and began operations on a modest scale. In that brief period of time it has had to meet a greater variety of conditions and problems than have ever confronted any system of reserve banking. Since the armistice it has had to cope with economic and financial problems of unprecedented magnitude and great complexity. It has rendered continuously the greatest assistance to the Treasury in making short-term borrowings. It has provided the credit basis for financing our enormous exports on credit to Europe. It is primarily to its steadying and moderating influence that the drop in prices during the past eight months did not eventuate in a complete and disastrous collapse. All of these things have been accomplished without ever for a moment putting the maintenance of the gold standard or the solidity and integrity of our system in jeopardy. These things augur well for the future of reserve banking in the United States. The Federal reserve system has met its first searching tests on the whole with remarkable success. The fact, moreover, that in the heat of a presidential campaign, in which the attitude and methods of the Federal reserve system were frequently the subject of bitter attack in sections of the country which felt in a peculiarly high degree the impact of the price-recession movement, it did not yield to sectional or political pressure of any character, has done much to set at rest the doubt, often expressed at the inception of the system, as to whether any system of reserve banking under governmental supervision could be fully successful in the United States because of "politics."

A great banking system is not, however, to be regarded as a ready-made contrivance. The legislator can frequently foresee much and the law can do much to make provision for future contingencies and establish safeguards against future temptations; but when all is done that can wisely be done by legislative prescription and legislative safeguards, it still remains true that a great banking system must be largely the result of growth and development in the course of shaping its policies, devising methods, promoting practices, and adapting its operations to the exigencies of differing situations as they arise. Such is peculiarly the case at the present time. The Federal reserve system must learn its ways and get its gait in a world more profoundly disturbed financially, economically, socially, and politically than ever before. Severe, therefore, as are the tests which the system has already had to meet, the developmental stage may not yet be said to be over. Traditional methods of reserve banking, developed in the experience of Europe, can not be mechanically adopted in the administration of the Federal reserve system. Much pioneer work in blazing new paths must therefore needs be done by those who are guiding its development, and they will need all the help they can get from enlightened discussion and large-minded consideration of their problems. Recalling Bagehot's penetrating observation that "the

abstract thinking of the world is never to be expected from persons in high places"¹⁵ and recalling also how much the development of the English banking system in the nineteenth century owed to scientific economic discussion, it is much to be desired that American economists who are interested in problems of credit and banking or in the bearing of credit administration upon economic conditions should give close thought to Federal reserve problems. It is for this reason that Dr. O. M. W. Sprague's notable examination of the discount policy of the Federal reserve banks¹⁶ is particularly welcome. His paper serves well as a point of departure for (1) a review of Federal reserve policy in the past and (2) a consideration of factors and difficulties that will have to be reckoned with in adjusting the methods and operations of the Federal reserve banks in the future to new conditions and altered circumstances.

I. Leaving out of consideration many minor but by no means unimportant features of Federal reserve policy in order to concentrate attention upon more fundamental aspects, it may be said that the three chief elements of the policy of a central bank or system of reserve-holding institutions are best disclosed in connection with the attitude adopted toward (1) gold, (2) currency, (3) credit.

While thus separately enumerated, however, the policies pursued with respect to gold, currency, and credit by the Federal reserve banks are not to be regarded as separate and unrelated policies, but as closely complementary and integral parts of Federal reserve policy. It would perhaps be nearer the truth to say that the policy pursued with respect to gold and the policy pursued with respect to currency are elements in the policy pursued with respect to credit, the regulation of the flow and volume of credit being in the last analysis the primary function of the Federal reserve banks. Whatever policy the Federal reserve system may pursue with respect to either gold or currency must take its color and occasion from the policy pursued with respect to credit, and such has been the case in the past.

GOLD POLICY.

1. The first phase of the Federal reserve system's policy with reference to gold was developed in connection with the heavy influx of gold which set in toward our shores soon after the beginning of the European war, and which up to the end of the year 1916 added approximately \$1,200,000,000 to our national monetary stock. The Federal reserve banks at this time not being possessed of any ready or adequate method of impounding this redundant gold, the Federal Reserve Board recommended in 1916 an amendment to our banking statute giving the board the power to raise the reserve requirements of member banks. The object sought was to prevent, when and as it seemed desirable, the new gold which was accumulating in the vault reserves of member banks from becoming the basis of an undesirable expansion of credit. It will be recalled that at this time the Federal reserve banks were operating under the terms of the Federal reserve act as originally enacted, the required reserves of member banks being carried partly with reserve banks as balances, partly in the vaults of member banks, the remainder at the option of the member banks being carried either in their own vaults or with the reserve banks. It was hoped that a sufficient number of the leading member banks would appreciate the need of cooperation with the board's purposes in preventing the abnormal increase in our gold supply from providing a basis of inflation, to secure their support for this amendment. This amendment failed, but in September, 1916, the Federal reserve act was amended so as to permit member banks, at their option, to carry the whole of their required reserves as balances with the Federal reserve banks. The object of this amendment was to concentrate a larger portion of the actual gold reserves of member banks in the hands of the Federal reserve banks. In brief, these first phases of the Federal reserve system's gold policy developed out of its credit policy as a method of restraining undue and unnecessary expansion of credit at a time when the reserve banks had not yet attained a position where they could exercise any effective control over the course of the country's credit operations by discount rates.

¹⁵ Reference: Lombard Street, by Walter Bagehot, p. 179. The whole passage with reference to the early management of the reserve of the Bank of England is worth quoting: " * * * the directors of the Bank of England were neither acquainted with right principles nor were they protected by a judicious routine. They could not be expected themselves to discover such principles. The abstract thinking of the world is never to be expected from persons in high places; the administration of first-rate current transactions is a most engrossing business, and those charged with them are usually but little inclined to think on points of theory, even when such thinking most nearly concerns those transactions. No doubt when men's own fortunes are at stake, the instinct of the trader does somehow anticipate the conclusions of the closet. But a board has no instincts when it is not getting an income for its members and when it is only discharging a duty of office."

¹⁶ In the American Economic Review for March, 1921, p. 16.

The following table, which sets forth changes in the leading items of the Federal reserve banks' condition, shows the changes in the system's gold position to the end of March, 1921:

[In millions of dollars.]

Date.	Net imports (+) or exports (-) of gold.	General stock of gold in United States.	Federal reserve banks. ¹		Net deposits and note liabilities. ¹	Reserve ratio. ¹
			Gold reserves.	Total cash reserves.		
Nov. 27, 1914.....		1, 635	228	262	252	104.2
End of March, 1917.....		3, 089	978	947	1, 055	89.0
End of May, 1919.....		3, 092	2, 188	2, 255	4, 350	51.5
End of March, 1920.....		2, 662	2, 935	2, 057	4, 821	42.7
End of March, 1921.....		3, 001	2, 222	2, 437	4, 585	53.1
Changes for period:						
Nov. 1, 1914, to end of March, 1917.....	+1, 189	+1, 254	+ 710	+ 685	+ 813	-15.2
End of March, 1917, to end of May, 1919.....	- 29	+ 3	+1, 250	+1, 308	+3, 285	-37.2
End of May, 1919, to end of March, 1920.....	- 404	- 430	- 253	- 198	+ 471	- 9.1
End of March, 1920, to end of March, 1921.....	+ 376	+ 339	+ 287	+ 380	- 236	+10.4

¹ Bank figures relate to the last Friday of the month, except those of March, 1921, which are as of Mar. 31; deposit liabilities and reserve percentages have been figured on a uniform basis throughout the table.

The next phase of the Federal reserve system's gold policy came with our entry into the war in 1917. The note-issue provisions of the Federal reserve act were then liberalized so as to permit the direct issue of the Federal reserve notes against gold as collateral security, the gold thus held as security in the Federal reserve agent's department being counted as reserve required against Federal reserve notes; and the provisions concerning member banks' reserves were changed, first, by reducing their required reserves, and, second, by requiring that their reserves should all be carried as cash balances with Federal reserve banks. The object of these changes was to enable the Federal reserve system to strengthen itself against the credit demands which it was foreseen the war into which we were entering would occasion. The policy, in brief, was to impound as much of the stock of monetary gold in the country as possible in the Federal reserve system, where it would supply, as circumstances made it necessary, an adequate gold basis for an enlarged issue of Federal reserve notes and reserve deposit credit in connection with the vast loan and financial operations of the war. Here again the gold policy of the Federal reserve system is to be interpreted in the light of its attitude toward credit conditions and needs. Just as in the first phase of its gold policy its objective was to restrain credit expansion at a time when such expansion was not necessary, so now its objective was to provide an ampler base for credit expansion in view of the changed situation and its credit requirements.

The next important phase of the gold policy of the Federal reserve system came in 1919 with the lifting of the embargo on the exportation of gold in June of that year on the recommendation of the Federal Reserve Board. The embargo on gold was not originally imposed at the instance of the Federal Reserve Board, although the board was charged with the responsibility of administering it. When one form after another of the various controls which had been set up over industry, trade, transportation, fuel, etc., began to fall away in 1919, the Federal Reserve Board recommended a lifting of the gold embargo, although the Federal reserve system was still confronted with the credit problems of the Treasury and had not yet, on account of the Treasury financing, regained a normal control of its discount operations and its discount policy. At a time when it was virtually helpless to influence the course of the money market by the adjustment of discount rates to actual conditions, it sought to exercise what influence it could over the expansion of banking credit in the year 1919 by permitting the exportation of gold, and thus exposing the gold reserve of the Federal reserve system to depletion by foreign drains. The loss of gold from the country thus occasioned to the end of the year 1919 amounted to \$322,000,000,000. The loss occasioned to the Federal reserve system amounted to \$125,000,000, and helped to bring nearer the day when the Federal reserve banks must be permitted to resume their normal relation to the money market and to exercise a control through discount rates. Thus again it appears that the gold policy of the Federal Reserve Board was a reflection of its attitude toward credit conditions, although an important consideration in the lifting of the gold embargo was, also, the desire to maintain and upbuild American financial prestige by restoring to the American market the character of a free gold market.

CURRENCY POLICY.

2. There was little occasion, during the first years of the Federal reserve system, for the Federal Reserve Board to develop a currency policy. According to the original conception of the Federal reserve act, and in view, further, of the fact that at the time of the organization of the new system the country was supplied with a large volume of currency in the form of national bank notes, the Federal reserve note was regarded as a means of satisfying seasonal or emergency requirements for additional circulation. When the great gold influx set in, in 1915, the Federal reserve system pursued the policy of issuing Federal reserve notes in exchange for gold, and the Federal reserve note, up to the time of our entry into the war in 1917, was in effect a gold certificate. The object sought in this policy, especially in view of the extraordinary character of the shifting of the world's stock of monetary gold then in progress as an incident of the war, was to treat the reserve banks as repositories of gold against the day when it seemed reasonable to expect that the largest portion of our new acquisitions of gold would flow back to Europe, and was also in furtherance of the early credit policy of the board, already described. Under the terms of the Federal reserve act, Federal reserve notes were not available as legal reserve money to member banks. One of the practical effects, therefore, of the issue of Federal reserve notes in exchange for gold was the withdrawal of this gold from ordinary banking use, particularly from member bank reserves, where its accumulation was already beginning to work an undue expansion of credit. In brief, currency policy was developed upon lines paralleling the Federal reserve system's credit policy, which, as already stated, was aimed, at this time, at a control of credit expansion, the situation not yet having developed to a point where the traditional method of the control of expansion by means of discount rates could be made effective.

During the period between the end of November, 1914, and the end of March, 1917, net imports of gold into the United States amounted to \$1,189,000,000 while the increase in the gold held by the reserve banks and the reserve agents was about \$710,000,000. The difference between these two amounts represents additions to the gold holdings of national, nonnational, and private banks, to gold held earmarked for foreign account, and to gold in circulation. It appears, therefore, that even before the entry of the United States into the war, the larger part of the gold coming into this country found its way into the Federal reserve banks and was impounded there.

After we entered the war and the Federal reserve act was liberalized in its note issue provision, the board systematically continued the policy, already noted in connection with the discussion of its gold policy, of impounding gold in exchange for Federal reserve notes. It was expected that the gold thus acquired would be needed in the process of providing the credit facilities necessary for financing the war and in taking care of the extraordinary requirements of business occasioned by the war.

It was of course recognized that the degree of credit assistance that the Federal reserve banks might be called upon to extend to their member banks in the process of floating the Government's war loans might easily reach the point of producing a considerable inflation of credit. But the theory upon which the board proceeded with respect to the issue of Federal reserve notes was that the currency, as such, would not promote inflation, and that restriction of note issues by Federal reserve banks in response to the requirements of the community was not therefore advisable or necessary. On more than one occasion, as the volume of Federal reserve notes in circulation showed substantial increase, the board stated its view that the increased issues were occasioned by the rise of prices, and that in due course, as prices ceased to rise or showed a tendency to fall, the Federal reserve note currency which was found to be in excess of the country's requirements would return to the banks. The board's view was most succinctly stated in its letter of August 8, 1919, to the chairman of the Senate Committee on Banking and Currency:

"Federal reserve notes are not legal tender, nor do they count as reserve money for member banks. They are issued only as a need for them develops, and as they become redundant in any locality they are returned to the Treasury at Washington or to a Federal reserve bank for redemption. Thus, there can not at any time be more Federal reserve notes in circulation than the needs of the country at the present level of prices require, and as the need abates the volume of notes outstanding will be correspondingly reduced through redemption."¹⁷

How far the currency theory thus stated has been borne out by recent changes in the volume of Federal reserve notes in circulation can now be determined. Federal reserve notes attained their maximum amount for the year 1919 on December 26, when they stood at \$3,057,646,000. With the advent of the year 1920, a return flow of

¹⁷ Federal Reserve Bulletin, August, 1919, p. 70L.

Federal reserve notes set in. This movement, however, was short lived. Between December 26, 1919, and January 23, 1920, Federal reserve note circulation was reduced by \$213,419,000. Thereafter there was a steady increase in the volume of Federal reserve notes issued and in circulation, attaining the amount of \$3,404,931,000 on December 23, 1920, when a return flow of substantial dimensions set in which is still in process. The drop from the high point in December, 1919, to the low point of 1920, was \$213,419,000, and from the high point of 1920 to April 15, 1921, is \$536,404,000.

The two movements just referred to indicate not only changes in the volume of currency owing to seasonal needs, but also a connection between the volume of credit and the volume of currency, thus lending much support to the board's theory that the expansion of the currency is a consequence of the expansion of credit and the rise of prices, and that the expansion of the currency is not therefore to be regarded as a casual factor in price movements:

"The increased volume of Federal reserve notes in circulation during the past three years, in so far as it is not the result of direct exchanges for gold and gold certificates which have been withdrawn from circulation, is the effect of advancing wages and prices, and not their cause."¹⁸

Whether this view (with all it implies) of the relation of currency to credit and prices, which, it must be admitted, has the sanction of high authority in our own and other countries and considerable support from banking and currency experience under normal conditions, can safely be taken as an invariable principle of reserve bank action in the future will be considered later in this paper.

CREDIT POLICY.

3. Credit policy was only of theoretical moment in the first years of the Federal reserve system. Easy credit conditions in the United States, because of the reduction of member bank reserve requirements and the great influx of gold, made reserve bank credit policy and discount rates of little actual consequence until the late autumn of 1916. Then, for the first time, did a credit situation develop which gave to the rates of some of the Federal reserve banks a degree of effectiveness. The increasing pressure for credit funds, which would have developed in the year 1917 even if the United States had not entered the war, would undoubtedly have led to the development of an effective discount policy by the Federal reserve system—a policy in which main reliance would have been put upon rates, and under which reserve bank rates would have been adjusted to market conditions so as to keep them, in the larger financial centers at least, at or above the ordinary commercial rate; all of this in accordance with well-recognized principles of reserve bank practice. With the entry of the United States into the war, the outlook was changed, and the Federal reserve system was confronted with large and difficult problems of credit growing out of the loan policy and loan operations of the Treasury. From that time forth to the beginning of the year 1920, the discount policy of the Federal reserve system was shaped not in accordance with money market conditions—not with the idea of using reserve bank rates as an instrument of effective control of the money market—but with the primary purpose of assisting the Treasury in the flotation of its great bond issues and its short-term certificate issues. In brief, the discount policy of the Federal reserve system was treated as an element of the Treasury's loan policy, the Federal reserve system virtually ceasing to exercise, for the time being, its normal function of regulating credit. The position of the Federal Reserve Board with respect to the bearing of Treasury policy upon the Federal reserve system has been explained in its several annual reports,¹⁹ and recently was succinctly stated by the governor of the Federal Reserve Board at the joint hearings held before the Senate and House Committees on Agriculture on December 3, 1920.²⁰

"The Federal Reserve Board adopted a policy in order to assist in the war financing which was economically unsound. I say this frankly. Congress authorized certain loans. It authorized the Secretary of the Treasury to determine the rates at which the loans should be issued. The Secretary of the Treasury asked the advice of experts and then fixed the rates of interest to be borne by the several issues of bonds, notes, and certificates. During the time we were actually at war something like \$18,000,000,000 of bonds were sold to the people, an amount certainly in excess of the normal investment power of the American people in such a short time, and the only way in which those loans could be financed was through the instrumentality of the banks. The only way the banks could undertake to do it was to get some assistance from the Federal reserve banks and at a low rate. The low rate of interest borne by

¹⁸ Federal Reserve Bulletin, August, 1919, p. 702.

¹⁹ See report for 1920, pp. 11-15; for 1919, pp. 67-73; and for 1918, pp. 1-5, 85-87.

²⁰ Pp. 62, 63 of the hearings entitled "Reviving the Activities of the War Finance Corporation."

these bonds was fixed with a view of holding down the expenses of the Government as far as possible. Anyway, that is something the Federal Reserve Board has no responsibility for. In order to make possible the floating of these bonds, we fixed a rate less than their coupon rate. Some member banks announced that for a period of six months there would be a rate of 4½ per cent on notes secured by Government obligations. The result was there was no loss to subscribing banks pending the distribution of the bonds to the public. There were successive bond issues. The principal reason why discount rates were not increased earlier than they were in 1919 was on account of Treasury financing."

This may be taken as the official statement of the Federal Reserve Board with respect to the discount policy followed by the Federal reserve banks to the end of the year 1919.

It is clear that the point at which the loan policy of the Treasury affected the Federal reserve banks was the money rate. Discount rates were maintained at artificially low levels from shortly after the beginning of the war in 1917 until the end of the year 1919. The particular device which was employed in aid of the Treasury's loan policy, as is well known, was the establishment and maintenance of (1) preferential rates on bond and certificate secured paper, as compared with commercial paper, and (2) a differential in favor of the rate on such bond and certificate secured paper as compared with the interest rate borne by the bonds and certificates. The immense credit resources of the Federal reserve system were thus availed of by the Treasury during this period to make and maintain an artificial money market. In effect, the power of the Federal Reserve Board as the ultimate regulator of the discount policy of the Federal reserve banks was put in commission, and rates were fixed, not "with a view of accommodating commerce and business,"²¹ in accordance with normal principles, but with a view to accommodating the financial program of the Treasury in accordance with emergency principles.

Whether the Treasury's loan policy and methods of short-term borrowing were well conceived is not here in question. Indeed, the time has not yet come for passing judgment upon the policies of the Treasury in connection with the financial conduct of the war. It is, however, possible to speak of that feature of Treasury policy which most vitally affected the Federal reserve banks. The wisdom and the necessity of the device of an artificial money rate, carried to the point that it was by the maintenance of a differential rate upon so-called war loan paper, may be questioned. In the light of subsequent developments it may be questioned whether it was not a costly device to the country. While the bad economic consequences of artificially low discount rates were minimized during the war by the many various controls over the economic activities of the people that were then set up, a precedent was established which it was found difficult to set aside after the war.

The controls which were set up during the war on production, trade, and consumption, such as the War Industries Board, War Trade Board, Food Administration, Fuel Administration, Railway Administration, Shipping Board, Capital Issues Committee, New York money committee, had very important financial consequences. Their bearing upon the credit situation and upon the credit problem of the Federal reserve banks was especially important. They acted in effect, though that was not their intended purpose, as a control of credit expansion at the source by limiting the occasion for the use of credit and by confining its use to such purposes as were deemed essential to the prosecution of the war.²²

But with the close of the war—that is, with the cessation of hostilities following the armistice—these various controls were soon lifted: "The moment we knew the armistice to have been signed we took the harness off."²³ It was very generally expected that business and industry, if freed from restraint, would soon effect their return to a normal condition. Early in the year 1919, however, industrial stagnation and unemployment were in evidence, and a fresh survey and diagnosis of the economic situation was made by the Industrial Board²⁴ set up under the auspices of the Department of Commerce for assisting the readjustment of industry and trade to a more stable basis. Its main effort was directed to bringing about revision of prices and stabilization of the expected fall of prices. Events soon showed that the policy of "price stabilization" was based on a faulty economic diagnosis. It was not many months after the close of the war that prices began to rise. The main impulse came from the release of buying power which had been in restraint during the war. A

²¹ The language of the Federal reserve act, sec. 14, par. D.

²² Federal Reserve Bulletin, October, 1918, pp. 922-924. If these various controls which were in effective operation in the last months of the war had been made equally effective early in the war, it is probable that a better financial and credit situation would have been maintained throughout the war; in brief, that there would have been less inflation of credit and prices than in fact developed.

²³ From President Wilson's address to Congress, delivered Dec. 2, 1918.

²⁴ Federal Reserve Bulletin, March, 1919, p. 246.

seller's market began to develop in the spring of 1919. The consumer demanded goods; price was a secondary consideration. Dealers, both wholesale and retail, were bidding against one another for such supplies as there were, and manufacturers were bidding against one another for raw materials and labor. The rapid rise of prices induced buying for speculation, and speculation in its turn accelerated the rise of prices. Inflation was becoming cumulative and systemic in its effects, and pervading the whole body economic. This is the explanation of a phenomenon which has puzzled so many people. During the war, expansion of credit was restrained from working its full economic effects in the form of price inflation and speculation. After the war it was let loose when the various controls above enumerated were lifted and the huge volume of credit created during the war was permitted to diffuse itself.

The credit and business situation which developed in the United States in 1919 was one that needed restraint. A seller's market usually needs credit restraint before it passes the limit of safety, just as a buyer's market usually needs the help of credit support. It would have been of the greatest advantage to the country if such restraint²⁵ had been exercised by the Federal reserve system in the year 1919, and the development of the runaway and speculative markets, which developed in the second half of the year, been measurably prevented. The Federal reserve system was the one important agency of control left to the country after the various war controls had disappeared. All the more important was it, therefore, that it should be in a position to function as effectively as possible. Its burden and responsibility, even under the most favorable view of the situation, were undeniably large, and would have imposed a severe test upon the system. In the light of what transpired in the year 1920, as is now a matter of universal knowledge, there is every reason to believe that if the Federal reserve system had functioned as effectively in 1919 in regulating credit as it did in 1920 in retarding and eventually arresting expansion, it would have rendered an inestimable service to the country and would have prevented many of the unhealthful developments in business and credit from gaining the headway which made action of so drastic a character as that which was taken in 1920 necessary. How much of the business distress and economic hardship experienced by the country during the past year would have been avoided had the Federal reserve system been in a position to pursue a discount policy in the second half of the year 1919 such as the trend of developments clearly indicated to be necessary can not of course be determined. Much of the hardship suffered by the country in 1920 might, however, have been avoided by the adoption in 1919 of an effective precautionary policy of credit control. That such a precautionary discount policy would have been adopted by the Federal reserve system, had it felt free to act, will not be doubted by any one acquainted with the attitude of the Federal Reserve Board and the Federal reserve banks at this time. As early as June, 1919, after the close of the Victory Liberty loan campaign, which, it will be remembered, was announced to be the last of the war loans, the Federal Reserve Board expressed its concern over the unhealthful tendencies which were in process. Counsel and warnings of similar purport were subsequently repeated. The necessity of restraint upon the borrowings of member banks for speculative purposes by other means than advances in discount rates²⁶ was pointed out, and such restraint was urged. Here and there, for a while, there were some slight evidences that the situation was being controlled, but no large results were achieved, and speculative tendencies of a dangerous character and large dimensions, involving speculation in land and commodities as well as in securities, gained increasing momentum through the autumn of 1919. "Direct action," so-called, as a method of credit control was not succeeding.²⁷ The expansion of credit and the rise of prices went on apace. Speculation flourished. It could no longer

²⁵ The month of September was the time to have gotten control. The public debt reached its maximum at the end of August, and a great reduction of the floating debt occurred in September. Total war loan paper for the 12 Federal reserve banks dropped from \$1,635,233,000 on Sept. 5, 1919, to \$1,383,896,000 on Sept. 19, following the redemption of certificates on Sept. 15 of \$431,910,000. The rise was then rapid, reaching \$1,771,028,000 on Nov. 7. The movement of total bills discounted paralleled the variations in war loan paper closely. On Sept. 5, total bills discounted for member banks were \$1,847,418,000. They fell to \$1,845,881,000 on Sept. 19, and rose to \$2,189,439,000 on Nov. 7. The expansion of the loan account of the Federal reserve banks during the seven weeks from Sept. 19 to Nov. 7 amounted to over \$500,000,000.

For the Federal reserve bank of New York, total war loan paper dropped from \$672,070,000 on Sept. 5, 1919, to \$483,053,000 on Sept. 19. It then rose to \$795,212,000 on Nov. 7. On Sept. 5, total bills discounted amounted to \$724,861,000, falling to \$528,592,000 on Sept. 19, and rising to \$904,351,000 on Nov. 7. The expansion in total bills discounted in the seven weeks from Sept. 19 to Nov. 7 amounted to approximately \$375,000,000.

²⁶ "The Federal Reserve Board is concerned over the existing tendency toward excessive speculation and while ordinarily this could be corrected by an advance in discount rates at the Federal reserve banks, it is not practicable to apply this check at this time because of Government financing." (From a letter, sent by the Federal Reserve Board to the chairmen of the Federal reserve banks, June 10, 1919.)

²⁷ "These warnings, however, were only a transitory expedient and were given only momentary attention by many banks. The board was prepared, as soon as Treasury exigencies permitted, to resort to the well-known method of advancing the rate of discount." (Annual report for 1920, p. 12.)

be doubted that the Federal reserve system must undertake the regulation of credit by means of discount rates. A beginning was made by the slight advance in discount rates on war loan paper on December 11, 1919, with every expectation and intention on the part of the Federal reserve system of assuming full control of its discount policy with the advent of the year 1920.

All this is said dispassionately and objectively, by way of explanation of a critical period in the history of Federal reserve policy. The Treasury, as well as the Federal reserve system, had its difficulties. While the war, in a fighting sense, was over with the advent of the year 1919, it was not over in a financial sense. The Treasury was still confronted with vast financial obligations. The financial precedent established during the war carried over into the year 1919. Reserve bank policy continued to be subordinated to Treasury policy, and discount rates throughout the year 1919 were maintained at artificially low levels. The device of an artificial discount rate provided too comfortable an expedient alike to the Treasury and to the banks of the country, which were still burdened with commitments made under the "borrow and buy" Liberty loan slogan, to be easily relinquished. Thus was the Federal reserve system controlled in the matter of its discount policy at the very time when the interest of the country at large required that it should be free of control in order that it itself might control.

With the year 1920²⁸ the Federal reserve banks entered upon the exercise of their function of regulating credit in accordance with business and economic indications, and, under circumstances of extraordinary difficulty and for the first time since the outbreak of the war, undertook to develop a policy of credit control by means of discount rates. About the same time the Treasury adopted the policy of adjusting the interest rate on its short-term borrowings to the state of the money market. It is not for the Federal Reserve Board to estimate the wisdom of the credit policy pursued by it in the year 1920. It may, however, with propriety speak of the attitude which led to that policy. There was nothing "hesitant"²⁹ in the policy adopted by the board at this time. Rates were advanced as follows in January, 1920: Commercial paper rate, from 4½ per cent at 10 banks and 5 per cent at 2 banks to 6 per cent at all banks; certificate of indebtedness rate, from 4½ per cent to 4¾ per cent according to the rate borne by the certificate to 4¾ per cent on all classes of certificates; Liberty bond rate, from 4½ per cent at 10 banks and 5 per cent at 2 banks to 5¾ per cent at all banks. Such marked advances of rate do not betray "hesitation;" they evidence conviction.³⁰ This first advance in rates not proving effective, further advances were made in the early summer—the commercial rate at the largest Federal reserve banks being advanced from 6 per cent to 7 per cent, rates on certificates from 4¾ per cent to 5¾ per cent at seven banks, and from 5 per cent to 6 per cent at five banks, according to the rate borne by the certificate, and rates on Liberty bonds from 5¾ per cent to 6 per cent at six banks, and to 5¾ per cent at one bank, the rate being left unchanged at the remaining five banks.

The reserve ratio for the Federal reserve system as a whole on January 2, 1920, was 43.7 per cent as compared with 50.8 per cent on July 3, 1919. It declined to 42.8 per cent on July 2, 1920. The board's action in raising rates was therefore clearly supported by the reserve position of the banks. But there is nothing in the action taken then or at any time later in the year to justify the statement that the board's discount policy in 1920 was not "the expression of a voluntary policy."³¹ The board's attitude is clearly indicated in its annual report for 1919: "The expansion of credit set in motion by the war must be checked. Credit must be brought under effective control and its flow be once more regulated and governed with careful regard to the economic welfare of the country and the needs of its producing industries."³² The action taken by the Federal reserve banks in 1920 was taken not primarily to protect their reserves but to control the rate of expansion of credit. It should be distinctly noted in reviewing the situation of the reserve banks during the years 1919 and 1920 that the reserve ratio of the Federal reserve system was declining not because reserves were being depleted through loss of gold, but primarily because the credit facilities of the system were being too freely drawn upon by the banks of the country and the

²⁸ "Fortunately the condition of the Treasury is such that the board can now feel free to inaugurate discount policies adjusted to peace-time conditions and needs." (Annual report for 1919, p. 69.)

²⁹ The term used by Mr. Sprague in the article already cited, p. 24.

³⁰ "It was the board's conviction, however, at the close of the year (1919) that a substantial advance in all discount rates was necessary and that it should not be long delayed." (Annual report for 1919, p. 4.)

³¹ "It is, however, by no means certain that the Reserve Board would have taken measures to restrain credit during the course of the winter and spring of this year (1920) if the power of the reserve banks to extend credit within the limits of legal reserve requirements had not been nearly exhausted. The successive advances in discount rates made during the first half of the year were not then entirely the expression of a voluntary policy. It was a policy which in large measure was enforced by the reserve position of the banks." (Sprague, article cited, p. 23.)

³² Annual report for 1919, p. 71.

liabilities of the reserve banks in the form of deposits and notes mounting at a steady and startling rate. The decline of the reserve ratio reflected quite accurately the credit expansion which was in process.³³ The solicitude of the board arose not because of loss of gold—for the total gold holdings of the reserve system showed little variation (amounting on Jan. 3, 1919, to \$2,091,194,000; on July 3, 1919, to \$2,128,946,000; on Jan. 2, 1920, to \$2,062,615,000; on July 2, 1920, to \$1,971,696,000; and on Dec. 31, 1920, to \$2,059,333,000)—but because of the unhealthy credit situation which had been developing since the summer of 1919 and which threatened to culminate in disaster unless subjected to control. While this condition was reflected in the decline of the reserve ratio, the board's discount policy was directed toward improving the reserve position of the Federal reserve banks not by increasing their reserves but by checking the constant expansion of their liabilities and by setting in operation forces which would make for a healthier credit situation. It raised rates to protect the reserve banks against abuse of their credit facilities and to protect the community and the general business and economic situation against the consequences of such abuse.

Whether the Federal reserve system would have had the support of public opinion to the extent it had during the past year had the bad situation which the Federal Reserve Board was undertaking to improve not been unmistakably reflected in the reserve position of the banks may well be doubted:

"As a guide to discount policy it must be admitted the reserve ratio has certain conspicuous advantages. It is definite and obvious. Public opinion may be expected to support the always unwelcome policy of credit restraint when that policy is enforced by a depleted reserve. It is unhappily very doubtful whether the public would have been reconciled to the advance in rates made last spring if the reserve banks had had, let us say, a reserve ratio of 55 per cent, and yet, all other things being the same, an advance in rates would have been no less desirable."³⁴

It is this consideration, thus well stated, which has given to the bank reserve ratio in the past its authoritative position as a credit and banking indicator. It is this same consideration which will assure it a position of almost equal importance in the future. Tradition, it must never be forgotten, has much to do with matters of banking and credit practice. The popular tradition that the reserve ratio is the index of changes in the credit situation will therefore be slow to disappear. Particularly will this be true in the United States, where long adherence to the principle of legislatively prescribed minimum banking reserves has much of the sanction of a first principle. The proposals often made in recent months to abandon the reserve ratio as an indicator of discount policy and to base discount policy hereafter on the observed effects of credit on prices,³⁵ have, therefore, the character of academic proposals, even in present circumstances, which, it must candidly be admitted, are less favorable than was ordinarily true in the past to quick responsiveness on the part of the reserve ratio to changing business, credit, and price conditions. As an abstract proposition, the proposal to substitute a price indicator for the reserve ratio as a guide to discount policy has much economic merit. The rigors of the recent price-readjustment process through which the United States, in common with the rest of the commercial world, has been passing have emphasized the value of price stability. Price disturbances not originating from inevitable natural causes are bad and costly alike to producer and consumer. It is not surprising, therefore, in view of the trying experiences of recent years, that effort should be made, in reviewing the working of present-day credit and banking machinery, to find some guide to credit policy that will give to the community greater protection against unsettling changes in the price level. Recent American experience, it may also be admitted, has demonstrated that good banking administration in times of economic disorder, at least, presents more than a problem of merely maintaining the reserve ratio, in a conventional or perfunctory sense.

Without entering upon the discussion of controverted questions of economic theory touching the relation of changes in prices to changes in the volume of credit, it may be assumed that the retardation of the flow of credit in times of expansion and the acceleration of the flow of credit in times of business recovery following a period of depression have an appreciable bearing on price movements. As a theoretical propo-

³³ Studies made by the Statistical Division of the Federal Reserve Board indicate that for the larger part of the year 1920 the reserve ratio has fluctuated in close accord with changes in note and deposit liabilities. As between notes and deposits, the indications are that for shorter periods of time changes in the ratio follow fluctuations in deposits, while for longer periods of time the decisive influence on the ratio is exercised by changes in the volume of notes. An effort has been made to devise an "Index of divergence," or formula for estimating the relative effects of changes in liabilities and of changes in reserves on the movement of the reserve ratio. (See paper by E. A. Goldenweiser, "Index of Divergence," in the forthcoming September number of the *American Statistical Review*.)

³⁴ Sprague, article cited, p. 27.

³⁵ *Ibid.*, p. 28.

sition, therefore, it is entirely conceivable that the discount policy of the Federal reserve system might be governed by indications of impending price changes, with a view of mitigating their cyclical fluctuations. While such an undertaking would raise some new and difficult problems of credit administration, no doubt in time of the technique of a plan of credit regulation based on price indices could be worked out and made administratively practicable if public sentiment demanded. But there is now no warrant in the statute under which the Federal reserve banks are organized for undertaking to regulate their credit operations on any such basis. The economic logic of the Federal reserve act is clearly predicated upon the theory that the Federal reserve banks shall be operated with regard to reserve ratios, and "rates be fixed with a view of accommodating commerce and business." It would imply a very latitudinarian construction of the term "accommodating commerce and business" for the Federal Reserve Board and the Federal reserve banks to adopt the "observed effects of credit on prices" as their rule of action in the future. There is not, however, the slightest reason for supposing that such a procedure on the part of the Federal reserve banks would be viewed with public approval. Quite the contrary. Public sentiment in the United States is, and always has been, highly sensitive in matters of credit control, and precisely, among other reasons, because of the bearing that such control has, or is believed to have, upon the movement of prices.

The popular dread of "contraction," based, as it is, upon the popular assumption of a close, immediate, causal connection between contraction and falling prices, has seldom, if ever, been appealed to in vain in the United States in times of economic pressure. There is not the slightest warrant in either the remote or recent economic history of the United States for supposing that the American public would sanction or tolerate a discount policy on the part of the Federal reserve system avowedly based upon price indexes, even if it were clear that such a practice were otherwise advisable. It would be regarded as tantamount to the setting up of a credit and price despotism. This fear of contraction and its consequences is one of the most persistent phases of American popular economics; practically viewed, it has the force of an instinct and is the explanation of many, if not most, of the otherwise puzzling vagaries of American financial history. One of its earliest and most energetic manifestations; it is well to recall, was the bitter hostility aroused against the second Bank of the United States because of the financial pressure experienced in 1833-34, alleged to have been due to the sinister purposes and czarist methods of the great banking institution against which Andrew Jackson was successfully arraying the forces of public sentiment in many sections of the country. Later manifestations of the same feeling abound in the decades following the Civil War, when the Nation was confronted with the problem of correcting currency disorders resulting from the Civil War. Recent events, in the autumn of 1920, have given evidence of the persistence of a similar strain of sentiment.

The problem of credit and currency regulation in a country as vast as the United States, and as complicated in its economic organization with different sections of the country in different stages of economic development and maturity, presents a very difficult problem even under normal conditions.³⁶ This, among other things, is the explanation and justification of the use of the regional principle in determining the structure of our system of reserve banking, as against the principle of a single central institution, nation-wide in the scope of its operation and control—the regional principle permitting of a closer adaptation of credit policy to regional or local conditions. The discount or credit policy of a reserve bank, whether organized on the regional or the central principle, must always be the expression of a judgment as to when a situation has arisen in business, industry, or credit which indicates the desirability of action on the part of reserve holding and credit and currency regulating institutions. That judgment must be a live judgment, not a mechanical judgment. A great variety of factors enter into the determination of appropriate discount policy. Among these may be mentioned the state of business, industry, and trade (both domestic and foreign), the state of money markets (both domestic and foreign), international gold movements, seasonal conditions and needs, accidental economic disturbances, sometimes political conditions and the international situation, the stage of the business cycle, price movements,³⁷ and the state of banking reserves. No one of these by itself can be conclusive of action to be taken. Each has its own value and significance; and competent judgment on the part of reserve institutions depends in great measure upon the skill and capacity developed to give to each of these several factors its due weight in any given set of

³⁶ See Sprague, article cited, pp. 26-27: "There is no such general market rate of discount as in England. Consequently, the Bank of England practice of a discount rate slightly above the market rate can not have so pervasive an influence."

³⁷ "While the Federal Reserve Board will always be mindful of the interdependence of credit and industry and of the influence exerted on prices by the general volume of credit, the board, nevertheless, can not assume to be an arbiter of industry or prices." Annual Report for 1919, p. 73.

circumstances in determining the matter of credit policy. But when all this is said, it may yet be added that ordinarily there is no one indicator which is more suggestive of the occasion of considering action on the part of a reserve bank than a change in its reserve ratio.³⁸

II. Viewing the matter practically, the problem of developing a more satisfactory technique under the Federal reserve system, and one adapted to American conditions, is not that of finding a substitute for the reserve ratio as a guide to credit policy, but rather that of finding how to make our reserve ratio a more sensitive and immediate indicator of changing conditions in the credit situation than it now is. The problem, it must be admitted, has its very considerable difficulties; and these difficulties would be many, even under normal conditions. But the problem has been immensely aggravated by the disorganization of the whole mechanism of monetary standards and international credit and price relationships, and the artificial redistribution of the world's stock of monetary gold, which have resulted from the war. It would also deserve careful study, if space permitted, whether the changes made in the structure and safeguards of the Federal reserve system by the amendments made in June, 1917, as a part of the financial preparation for war, are not destined to operate prejudicially to the best functioning of the reserve banks as credit regulators, for the effect of the 1917 amendments has been to make the reserve ratio of the Federal reserve banks more sluggish in its responsiveness to changing conditions than it was under the original provisions of the reserve act. But even under the provisions of the reserve act as originally enacted, the reserve ratio of our reserve banks was probably a less sensitive indicator than that of the Bank of England, the institution which served as a general model after which our Federal reserve system was patterned, and the institution whose methods of operation were believed to supply the best model in shaping the discount practices of our system.

The essential principle upon which the Bank of England is organized, as I see the matter, is unfettered discretion on the part of the bank in the matter of credit issue, combined with rigid restriction in the matter of note issue. This is the net outcome of the legislation of 1844, which specified no required reserve against deposits of the Bank of England, but a reserve of 100 per cent against all new issues of notes.

In practice how does this system work? In a word, it has worked to make the state of the banking reserve of the Bank of England a very sensitive and immediate indicator, and therefore a very satisfactory guide to changes in discount policy. Under the English banking system as it operated before the war, any undue expansion of business and credit would, in swift course, make itself felt in the form of a demand for more than the usual volume of cash at the Bank of England. The Bank of England having no power to issue fiduciary notes to meet such demand, its cash—consisting of gold or Bank of England notes covered by gold—would be the source from which the demand would be met. The depletion of its reserve thus resulting from an undue credit expansion would quickly indicate the need of action on the part of the bank to protect its reserve by raising its discount rate, and thus, by a process which had become almost automatic in its character during the course of the 40 years preceding the war, undue and unhealthful expansion of credit would be brought under control before it gained too much headway. All the more was this the case because an undue expansion of credit usually brought with it a gold export demand, for it is particularly to be noted that the rigid adherence to the practices of an effective gold standard and of a free gold market contributed greatly to the success of the English system of credit control. Under the English system credit expansion usually gave rise to an external as well as an internal drain upon the cash holdings of the Bank of England. The combined effect of the two was to elevate the importance of the bank's reserve as a barometer of the credit situation almost to the position of being an instrument of precision.

England, like the United States, in contrast to the countries of the non-English-speaking world, is habituated to the use of bank credit in the form of the deposit account rather than of the bank note. Her example is, therefore, of particular value for us.

It has sometimes been argued, from the fact that the United States is a check-using country, that regulation of the currency is a negligible matter in the technique of banking control in the United States, supposing, of course, that care is always taken to make sure that all notes which are issued are fully protected by collateral security of indubitable character and value. In opposition to this view, I believe that regulation of bank-note currency, even in check-using countries, is at times a matter of first importance. I believe this to be measurably true, even under normal conditions when the commercial world or the major portion of it is operating under an effective

³⁸ Sprague, article cited, p. 27: "There is no substitute for the reserve ratio which possesses its peculiar virtues of simplicity and definiteness."

gold standard and there is much gold or gold currency in actual everyday use and bank notes are convertible into gold, and principally for the reason that an increase in deposit credit invariably occasions, in due course, an increase in the demand for currency. Even check-using countries, like England and the United States, can not do business without the use of a considerable proportion of hand-to-hand currency, the proportion of currency to credit in the United States being about \$1 of currency to \$5 or \$6 of credit. The conditions upon which the community can get additional supplies of currency are therefore an important factor in credit regulation. The regulation of currency becomes, in fact, a method of regulating the flow and volume of credit. Important as it is that additional supplies of currency should be forthcoming on ready terms in certain circumstances, e. g., in times of seasonal or emergency need, it is equally important at other times, when an undesirable credit or business situation is developing, that the conditions should not be easy. In general, it may be stated that the easier the conditions (that is, in terms of the effect on the reserve percentage) upon which banks of issue can furnish additional supplies of currency, the greater will be their difficulty, especially at times when their reserve ratio runs high, of regulating or controlling the volume of credit. It is, therefore, of first importance, under any system of reserve banking which undertakes to govern credit by primary reference to the reserve ratio, that the reserve ratio should fall or rise in quick and close reaction to changes in the volume of credit.

The matter is, in last analysis, largely one of psychology. The banker, no less the central banker than the ordinary commercial banker, looks at the reserve ratio as a gauge of the credit situation. So does the general community. Why this should be so need not here be analyzed. It is sufficient to emphasize the fact, and to point to one of its important implications in connection with our scheme of Federal reserve banking. A bank-note currency when it has little of the quality of a fiduciary note is more calculated to bring alike to the bankers' and the community's attention the fact and the meaning of credit expansion than when it has much of the fiduciary quality. This is a fair deduction from the 40 years of English banking experience before the war. It is also the explanation of British determination since the war not to change the character of the Bank of England note as, in effect, a gold certificate, although such change has frequently been proposed in recent years:³⁸

"We are of opinion that the principle of the act of 1844, which has upon the whole been fully justified by experience, should be maintained, namely, that there should be a fixed fiduciary issue beyond which, subject to emergency arrangements which we recommend below, notes should only be issued in exchange for gold. * * * We think that the stringent principles of the act have often had the effect of preventing dangerous developments and the fact that they have had to be temporarily suspended on certain rare and exceptional occasions (and those limited to the earlier years of the act's operation when experience of working the system was still immature) does not, in our opinion, invalidate this conclusion."³⁹

"No doubt it would be possible for the Bank of England, with the help of the joint stock banks, without any legal restriction on the note issue, to keep the rate of discount sufficiently high to check loans, keep down prices, and stop the demand for further notes. But it is very undesirable to place the whole responsibility upon the discretion of the banks, subject as they will be to very great pressure in a matter of this kind. If they know that they can get notes freely, the temptation to adopt a lax loan policy will be very great. In order, therefore, to ensure that this is not done, and the gold standard thereby endangered, it is, in our judgment, imperative that the issue of fiduciary notes shall be, as soon as practicable, once more limited by law, and that the present arrangements under which deposits at the Bank of England may be exchanged for legal tender currency without affecting the reserve of the banking department shall be terminated at the earliest possible moment. Additional demands for legal tender currency otherwise than in exchange for gold should be met from the reserves of the Bank of England and not by the treasury, so that the necessary checks upon an undue issue may be brought regularly into play."⁴⁰

"Whenever before the war the bank's reserves were being depleted, the rate of discount was raised. This, as we have already explained, by reacting upon the rates for money generally, acted as a check which operated in two ways. On the one hand, raised money rates tended directly to attract gold to this country or to keep gold here that might have left. On the other hand, by lessening the demands for loans for business purposes, they tended to check expenditures and so to lower prices in this country, with the result that imports were discouraged and exports encouraged,

³⁸ From the report of the British committee on currency and foreign exchange (frequently called the Cunliffe report) reprinted in the Federal Reserve Bulletin, December, 1918, pp. 1178-1192.

³⁹ Federal Reserve Bulletin, December, 1918, p. 1187.

⁴⁰ *Ibid.*, pp. 1184-1185.

and the exchanges thereby turned in our favor. Unless this twofold check is kept in working order the whole currency system will be imperiled. To maintain the connection between a gold drain and a rise in the rate of discount is essential."⁴³

An examination of our own experience during the past three years does much to confirm the wisdom and the correctness of the conclusion of the Cunliffe report. The machinery and safeguards set up in the reserve act as originally enacted also bear evidence of wholesome appreciation by the framers of the act of the danger of laxity in the administration of credit under a system of elastic note issue. The power to issue notes was separated from the power to make discounts. The latter was given to the Federal reserve banks, subject to certain review by the Federal Reserve Board; the former was exclusively vested in the Federal Reserve Board. It was not alone for the safety and protection of the note holder, but also for the protection of the general community against the consequences of excessive or illregulated issues of credit and currency that this arrangement was made. It was perceived that the power to regulate the currency carries with it an indirect but considerable power to regulate credit; for power over currency is, in effect, and, within limits, power over reserves; and power over reserves is power over credit. Close attention, therefore, should be given by students who are interested in the development of methods and practices of reserve banking in the United States to the bearing of currency issue and regulation upon credit control. Much more importance, I believe, attaches to the function of currency regulation than is ordinarily recognized by economists in the United States. By increasing or diminishing the fiduciary element in the Federal reserve note, or—stating the proposition in terms of gold—by diminishing or increasing the gold element in the note, the Federal Reserve Board has the power to protect the reserves of the Federal reserve banks against, or to expose them to depletion and thus to affect their reserve ratios, and thereby make their ratios more faithful economic indicators, both to the banks and to the public, of the credit situation and outlook. Regulation of Federal reserve note issue, if wisely conceived and competently administered, is capable of use as a preventive measure against an undesirable expansion of credit in its earlier and more insidious stages by making the supplying of currency by reserve banks eat into their reserve more rapidly, thereby making their reserve ratio a more trustworthy reliance than it now is as a guide to credit policy.

The line of reasoning pursued above may seem to overlook or run counter to the well established theory that a truly convertible bank note currency, such as is the Federal reserve note, is self-regulating, and can not, except temporarily, be issued in excess. Our Federal reserve note is, no doubt, self-regulating in the sense that its volume adjusts itself to the volume of circulating deposit credit and the level of prices. It is not, however, by this test alone, or by this test primarily, that the self-regulating quality of a convertible currency is to be tested, more especially in view of the widespread derangements in the machinery of monetary standards and international exchanges which exist at this time and which promise to continue for a very considerable period of time. The theory that a convertible bank note currency is self-regulating and supplies its own corrective against overexpansion was in the nature of a corollary of the gold standard when the monetary and banking practices associated with the gold standard were in effect in a considerable number of countries. It was on such assumptions, and under the monetary conditions that existed in Europe before the war, that gold reserves⁴⁴ and convertible bank note issues of the several leading countries had a very definite and important significance as economic and credit regulators, more particularly as devices for setting in operation deterrent or corrective forces against credit expansion and price inflation. The theory of the self-adjusting character of a convertible bank note currency undoubtedly has much validity in normal circumstances—in such circumstances as existed prior to 1914. When the commercial world, or a sufficiently large number of the leading commercial countries, are operating on a gold basis, and prices in these countries are gold prices, the international flow of gold undoubtedly does much to act as a deterrent to excessive credit and currency expansion in gold standard countries. Currency and credit expansion, and rising prices, in such circumstances

⁴³ Federal Reserve Bulletin, Dec., 1918, p. 1183.

⁴⁴ Looking at the matter of reserves from the economic point of view, the adjustment of the volume of a country's credit and banking currency to what is necessary to maintain prices at their proper economic level may be described as the most important function of a nation's banking reserve. The gold of the world and the new gold as it comes from the mines is constantly in process of distribution and redistribution. It is thus that the international price level is maintained or rectified in accordance with underlying conditions governing the equation of international demand and supply of the different countries. As such, the gold reserve is an economic regulator of the very first importance. It is a method of testing the character and volume of a country's credit and currency and so keeping it from getting out of line with economic requirements, particularly in relation to world conditions. (*American Economic Review*, Supplement, Vol. IX, No. 1, p. 142, article entitled "After-War Readjustment: Liberating Gold.")

bring about an unfavorable balance of trade, raise the foreign exchanges, and set in motion an outflow of gold and a return flow of bank notes for redemption in gold to meet the foreign drain. All of this may be freely admitted; but the conditions which the theory of the self-controlling character of a convertible bank note currency assumes do not now exist because the conditions requisite to the functioning of an effective gold standard do not exist. The theory of bank note convertibility as a protection against overexpansion therefore breaks down. The larger portion of the commercial world is not now on a gold basis, though the United States is. No one country, however important, can, by itself alone and for itself alone, maintain an effective gold standard. The monetary history of the United States in recent years conclusively establishes this proposition. The gold movements involving the United States in recent years have been predominantly one-way movements. We hold a disproportionate part of the world's stock of monetary gold and are adding to our holdings—a new gold movement of large dimension and portentous significance having recently set in.⁴⁴ Convertibility as a protective device has little meaning in such a situation. The self-regulating quality of our bank note currency has therefore been in abeyance, and has offered, and could offer, no protection, or at any rate no adequate protection, against the insidious process of gold-credit inflation.

Lacking the agency of two-way gold flows, in proper relationship, we must find and set up some other agency, at least so long as present abnormal conditions continue, for regulating our currency—and that means primarily for determining its volume in accordance with changing conditions and requirements—if a good credit situation is to be reestablished and maintained in the United States, and the likelihood of the repetition of costly alternations of feverish activity and painful recession in business is to be reduced, or at any rate the violence of such alternations to be mitigated. The agency I am proposing for this purpose is the adoption and the development by the Federal reserve system of a currency policy and a gold policy designed to operate upon the reserve ratios of the several banks so as to make those ratios a better index of the credit situation and a better guide to credit policy. I use the term "credit policy" rather than "discount policy" because the former is a broader conception and because the latter implies pretty exclusive reliance upon changes of discount rate as the instrument of credit control. The maintenance of good credit conditions appears to me to make the problem of credit administration one of credit regulation rather than one of credit control. Prevention, rather than control, should be the objective of a competent credit policy in the United States. This is not to say that changes of discount rate have no place in credit policy. They have, indeed, a very important place, but credit policy does not place exclusive reliance on rates; because regulation, not control, is its purpose. It aims to deal with tendencies or situations in the making, rather than to await their development before acting. While credit policy uses the rate as an instrument, it does not make the rate its only reliance, and when it uses the rate, uses it in time so as to prevent the necessity of resort to extreme and puni-

⁴⁴ Between Oct. 15, 1920, and April 15, 1921 (the latest date for which figures are available) the Federal reserve banks have increased their gold holdings by the amount of \$294,778,000. The great bulk of this, aggregating \$251,606,000 represents accessions since Dec. 10, 1920. This is mainly new gold from the South African mines, bought in the London market for American account because of the premium on the dollar, and because of the further fact that the United States is a free gold market. The increase thus occasioned in the reserves of the Federal reserve banks has had a pronounced effect upon the rise of their reserve ratio.

Between Oct. 15, 1920, and Apr. 15, 1921, the reserve ratio of the 12 banks combined increased 31 per cent, and that of the New York Federal reserve bank increased 44 per cent, as the tabulation below shows. A careful calculation indicates that the 31 per cent increase for the 12 banks combined is attributable to the three factors involved in the following proportions: Decline in Federal reserve note circulation, 11 per cent; decline in deposits, 4 per cent; and increase in reserves, 16 per cent. For the New York bank the ratio shows a rise of 44 per cent, distributed as follows: Decline in Federal reserve note circulation, 9 per cent; decline in deposits, 6 per cent, and increase in reserves 29 per cent.

Item.	Twelve banks combined.		Federal reserve bank of New York.	
	October 15.	April 15.	October 15.	April 15.
Note liabilities	\$3,353,271,000	\$2,868,527,000	\$875,737,000	\$762,173,000
Deposit liabilities	1,915,731,000	1,754,943,000	764,466,000	680,283,000
Deposit and note liabilities combined	5,269,002,000	4,623,470,000	1,640,203,000	1,442,456,000
Total reserves	2,154,911,000	2,485,077,000	607,400,000	767,474,000
Reserve ratio	40.9	53.7	37.0	53.2

tive levels. Having regard to the practical and traditional importance of the reserve ratio as the conventional credit and banking indicator, credit policy administrators currency and gold so as to support its purpose by acting on the banking reserve and checking the development of lax loan policy tendencies on the part of either reserve banks or member banks. Thus are gold policy and currency policy not only complementary to one another but also inseparable elements in a comprehensive credit policy.

It would lengthen this paper unduly, even were this the proper place and occasion, to describe the *modus procedendi* which would be necessary in order to give effect to the ideas which have been set forth on Federal reserve policy for the future. The discussion has concerned itself with matters of experience, with matters of theory, and with questions of principle and of policy, rather than with a program of action. The revision of our reserve bank practice, and the recasting of reserve bank accounting which would be necessary under a plan designed to give effect to the principles suggested, would not, however, present a difficult problem.

The main change in the published weekly statement of the Federal reserve banks that would be necessary would be to report the specific note reserve, held by the Federal reserve agent, and the specific deposit reserve, held by the bank. The existing practice⁴⁵ of stating the reserve position theoretically in the form of a ratio derived from a comparison of total reserves with combined note and deposit liabilities should be discontinued, or, if continued, be given merely for purposes of theoretical comparison, by the Federal reserve system, and a form of statement should be set up which would show the reserves actually held against deposits and notes respectively and separately, as the law contemplates.⁴⁶

The existing gold holdings of the reserve banks should be reapportioned between the deposit reserve and the note reserve. To the deposit reserve might be allocated an amount of reserve money equivalent, say, to 45 per cent⁴⁷ of their deposit liabilities as of the date when the new form of accounting would become effective.⁴⁸ To the note reserve should be allocated all the remaining reserve, and, as the law requires, be in the form of gold.⁴⁹

The reserve thus allocated to the deposit reserve should be regarded as the working reserve of the banking or discount department of the Federal reserve bank. The banks should be expected to conduct their discount operations on the basis of this reserve. Until conditions justified, the amount of this reserve should not be changed. Fresh accessions of gold received by the banking department should be transferred to the note reserve by way of substitution for other collateral held by the Federal reserve agent, or in exchange for Federal reserve notes. Withdrawals of gold from Federal reserve banks for foreign shipment should, for the present at least, be taken out of the note reserve by the presentation of Federal reserve notes for redemption in gold or by the substitution of commercial collateral for gold in the security held by the Federal reserve agent. The deposit reserve held by the banking department would thus be fairly constant in amount; the note reserve, on the other hand, would be variable in amount, fluctuating mainly in accordance with changes in the international flow of gold, increasing when an influx was in process and decreasing when an outflow was in process.

While the deposit reserve under the arrangement proposed above would be constant, the deposit reserve ratio would not be constant, but would fluctuate. Any expansion of the loan account of the Federal reserve banks would quickly reflect itself in the diminution of the reserve ratio below 45 per cent; any diminution of their loan account would quickly reflect itself in an increase of the reserve ratio above 45 per cent. In brief, fluctuations in the reserve ratio would reflect quickly and accurately changes in the volume of the reserve banks' discounts.

⁴⁵ The Apr. 15 statement of the 12 Federal reserve banks stated the reserve position for the banks combined as follows:

Ratio of total reserves to deposit and Federal reserve note liabilities combined	53.7 per cent
Ratio of gold reserves to Federal reserve notes in circulation after setting aside 35 per cent against deposit liabilities	65.2 per cent

The actual allocation of reserve moneys on that date showed, however, that an amount of gold equal to 52 per cent of notes in circulation was held by the Federal reserve agent or in the gold redemption fund, and that an amount of gold and lawful money equal to 56.5 per cent of their deposits was held by, or for account of, the banks.

⁴⁶ "Every Federal reserve bank shall maintain reserves in gold or lawful money of not less than 35 per cent against its deposits and reserves in gold of not less than 40 per cent against its Federal reserve notes in actual circulation."—Federal reserve act, section 16.

⁴⁷ This would provide a potential basis for an expansion of over \$500,000,000 of reserve bank credit before the deposit ratio would reach the legal minimum of 35 per cent.

⁴⁸ A reserve of 45 per cent represents the approximate reserve ratio against the combined note and deposit liabilities of the 12 banks at the beginning of the year 1921, when the gold influx began.

⁴⁹ The apportionment above proposed would result, on the basis of the April 15 statement, in the shifting of about \$200,000,000 of the gold now held in the banking department to the Federal reserve agent's department, and give a reserve ratio against notes of 59.1 per cent.

From time to time the situation of the reserve banks as a whole, and of the several reserve banks individually, should be reviewed in the light of current credit conditions and needs in order to determine whether any reapportionment of reserves should be made; whether, e. g., any given bank should enlarge its deposit reserve at the expense of its note reserve. The modus operandi for effecting such enlargement would be for the bank in question to substitute commercial paper for gold as the collateral security pledged with the reserve agent for notes issued to the bank, the gold thus released being covered into the deposit reserve. So far as the bank's reserve position was concerned, this would be tantamount to the transfer of a certain amount of gold from the note reserve to the deposit reserve in order to give the bank an enlarged basis of lending.

As a result, the reserve ratios of the Federal reserve banks would have a meaning not now possessed by them. As the banking and business community came to be educated to the new method of stating the position of the reserve banks, primary attention would be paid to the movements of the deposit reserve ratio: that ratio would be the immediate gauge of the banking and credit situation. As credit expansion was in process, that reserve ratio would decline much more rapidly than it now does. It would be a faithful indicator of what was going on. It would rise only in reaction to a decline in the rate of expansion or as liquidation was in process. Moreover, as the community came to appreciate the significance of changes in the deposit ratio, that ratio would come to be regarded with heightened interest because of the evident bearing, in the logic of reserve banking, of changes in the reserve ratio upon credit and discount policy. And thus would the problem of credit administration also be simplified and its solution be aided by anticipatory action, both on the part of the banks and on the part of the borrowing community.

The note reserve ratio, under the scheme of operation here under consideration, would have real significance as indicating the extent of the gold cover against Federal reserve notes. Fluctuations in the note reserve ratio would indicate the increase or decrease of Federal reserve notes outstanding, movements of gold into and out of the Federal reserve system, and reapportionment of existing gold holdings between the deposit reserve and the note reserve. In times like the present, when a heavy flow of gold toward our shores is in process, the effect of the proposed plan would be to give, or rather to restore, to the Federal reserve note more of the character of a gold certificate, which it had in the first years of the system, and to set up, under the guardianship of the Federal Reserve Board, a super reserve. When gold was accumulating⁵⁰ in the hands of the Federal reserve banks, the banks would substitute gold for other collateral pledged with the Federal reserve agent as security against outstanding issues of notes, new issues of Federal reserve notes being made only in exchange for gold until conditions arose which justified the issue of notes against commercial collateral.⁵¹

Thus would the new accessions of gold brought to us purely because of the derangements of international exchanges be kept in storage, as a note and super reserve. There this gold would be held against the day when it will, in part, have to be returned to Europe in the process of restoring the gold standard there—an undertaking in which we, hardly less than Europe, have both an interest and an obligation; and in the meantime it would be where it could be drawn into the banking or deposit

⁵⁰ Similarly, when silver and legal tenders are accumulating, as has recently been the case (on Apr. 15 the Federal reserve banks held \$198,198,000 of silver and legal tender notes, the Federal reserve bank of New York holding \$130,428,000 of this amount), the reserve banks should pay them out in supplying the demand of member banks for currency.

⁵¹ Supposing the reserve statement for the Federal reserve system were revised so as to report the deposit reserve and note reserve separately, the following example shows what effect a transfer of \$200,000,000 from the deposit reserve to the note reserve would have on the respective reserve ratios on the basis of the actual allocation of reserves as of Apr. 15, 1921:

	Before transfer of \$200,000,000 to note reserve.	After transfer of \$200,000,000 to note reserve.
Note reserve (i. e., gold with Federal reserve agent and in bank's redemption fund).....	\$1,483,001,000	\$1,683,001,000
Deposit reserve (i. e., all other cash reserves).....	982,076,000	782,076,000
Federal reserve notes in circulation.....	2,868,527,000	2,868,527,000
Total deposits.....	1,754,943,000	1,754,943,000
Ratio:		
Reserve against notes.....	52.0	59.0
Reserve against deposits.....	56.5	45.1

reserve, whenever circumstances justified its use to raise or restore the deposit reserve ratio at the expense of the note reserve ratio. Thus would these ratios attain a significance and value as indicators and guides not now possessed by the Federal reserve reserve ratio, and gold policy, currency policy, and credit policy become constituent and compensating elements in a balanced scheme of Federal reserve policy, whose primary purpose should be to promote and maintain a healthy condition of business and industry by regulating the flow and volume of credit with regard to the trend of business and the volume of production.

A. C. MILLER.

FEDERAL RESERVE BOARD, *Washington, D. C.*

Senator LENROOT. I would like to ask this question, Governor: If the discount rate had been raised, and the interest on the Government issues had also been raised, would not the high price levels have been reduced, in your judgment?

Gov. STRONG. Of course, Senator, that is a very difficult question to answer. My belief is, and I must express it with no supporting data, that such control as could have been exercised over the price level depended on a judicious and very skillful fixing of those interest rates on the Government loans and discount rates by the Federal reserve banks, with due regard to the interests of a great many other institutions and concerns that also had to be protected; as, for instance, the insurance companies, and the savings banks, which held a large volume of securities, and which they feared might be depreciated in value. In general, it might be true that a higher interest rate might have exercised some restraint on rising prices, and some restraint on expansion. But I feel that a fair comment upon that period is to look at it from the other point of view, that prices advanced in response to competitive bidding, which could not be controlled, certainly in the early days of the war, and the Federal reserve system was a bystander, expressing it that way, of that proceeding. They just kept the books, Senator, as to these price advances and increases, and as the currency expanded.

Senator LENROOT. When you speak of the early days of the war, do you mean the European War?

Gov. STRONG. Yes; and after we got into it.

Senator LENROOT. Why could we not have controlled it after we got into it?

Gov. STRONG. I do not think it was physically possible so to organize the country in that short time so that all competitive buying could be eliminated. It was eliminated, as you know, after some months of effort, very considerably; price control came, and a control over exports and imports and through rationing of particular industries to some extent, and extending credit only to those industries that were necessary for the production of war material. All of those elements were introduced, and those things were controlled in part by the War Industries Board. But it could not limit the buying of the civil population.

Senator LENROOT. Just one other question. Assuming that a higher interest rate would have tended to bring the prices down, the Government indebtedness would not have been as great, and the Government itself would have gained; we will now have to pay these obligations on the lowered price level, in all probability?

Gov. STRONG. That is true, if the control had produced lower prices; that is, the price levels would have been lower—

Senator LENROOT (interposing). But you have no way of determining what that would have been?

Gov. STRONG. It is an interesting subject of speculation, Senator. Concluding this discussion of the characteristics of the second division of the seven years, I want to say just a word about the policies of the Federal reserve bank of New York; they were especially directed to keep expansion at a minimum, but nevertheless to place the Government loans successfully, even though it involved expansion.

Representative SUMNERS. Who gave that direction, Governor?

Gov. STRONG. As to the policies?

Representative SUMNERS. I understood you to say that the New York bank was directed—

Gov. STRONG (interposing). The policy was directed—

Representative SUMNERS (interposing). I beg your pardon.

Gov. STRONG. Our policy was directed toward that end. Possibly I did not express that clearly. During this period we were constantly engaged in urging discrimination by all banks in our district, and I think it was general throughout the country, to discriminate in favor of loans to the industries which were necessary to the war and to the production of materials necessary to the maintenance of the health and morale of the people, and to restrict those that would be fostering needless expenditure by the people during that period.

Now, as to the third period. The armistice was signed in November, 1918, and I fixed the beginning of the third period as about August, 1918, and its conclusion at some indefinite period during the summer of 1920. When I come to read extracts from the original records of the bank, you will find that our policy presents a marked contrast to the previous period—that is, when we were struggling to raise money for the Treasury for war purposes. In August and September, 1918, the feeling began to spread that the war would terminate favorably to the cause of the Allies. A spirit of optimism developed, which had its first manifestation in a rising stock market in New York, as is almost always the case, and an increasing tendency to speculate.

Prior to that time we had established a system of reports which was so comprehensive that we knew every day about what was going on. I should say about the middle of August we began to get our first warnings as to the possibility of speculation. After the signing of the armistice, of course, there arose a fear of a very sharp reduction in our export trade and a very sharp reduction in the demand on the part of the United States Government for goods for war purposes. Much concern was also expressed about the unemployment which would result from this cessation, and the unemployment which would result from bringing the men home from Europe, and releasing the men who were then in training in the cantonments. This feeling caused a cessation in buying, and there was a short recession in business for the period, say, between January and March, 1919. I well recall numerous inquiries being made at the bank in February and March by taxpayers who were making their returns for income taxes, showing that profits which they had returned for the purposes of taxation in statements as of January 1 had been almost wiped out by the decline in value of inventories that subsequently occurred down to, say, March. It appeared for a time as if the speculation we had feared would not go very far, because of the natural and inevitable cessation of business resulting from the cessation of war.

But after March 1, as I think can be shown from data which we have here, this speculative tendency began to develop to a very marked degree, and by gradual stages it worked up and matured into a veritable orgy of extravagance, waste, and speculation; there was, in fact, a competition to buy anything at almost any price. This culminated in the early summer of 1920.

Now, the first rumblings of a coming break appeared in March and April of 1920, in Japan, where I happened soon after to be traveling, I was there at the height of their period of liquidation and distress and had opportunity to observe on the ground exactly what was transpiring. It has frequently been said that the percussive cap which started distress in Japan was the sudden cessation of the demand for silk in the United States. I do not think that is quite accurate. The Japanese exporters had suffered the misfortune through various causes of a very wide and effective propaganda in China, boycotting Japanese goods. And I was told of vessels that were held up in Chinese ports, not being able to unload their goods; and that was also coincident with the cessation of the buying of silk in this country. This reaction extended from Japan into China, the Dutch Indies, India, and Egypt, and the same conditions prevailed generally throughout the East.

Representative SUMNERS. When you say the same conditions, do you mean the attitude of those people toward Japanese silk, or the internal conditions of the country?

Gov. STRONG. No; I am referring to the condition of trade generally. The demand for rubber, for instance, had slackened off so that on the Malay Peninsula, through which I traveled for many miles, there were miles and miles of rubber trees with no one paying any attention to them; they were not even being tapped.

And in India, other complications arose. The rupee suffered a sudden collapse with the collapse in the price of silver, and importers who had contracted for goods on the basis of the former value of the rupee, when the goods arrived found themselves in difficulties. And trade had become most stagnant in India. The conditions were similar to those which we have passed through and are passing through now in this country.

Senator LENROOT. Governor, I take it you do not wish us to understand that that was because of our break, but that the conditions manifested themselves there first?

Gov. STRONG. I think all you can say is that it started there first, and it was bound to come here at some time or other.

Senator LENROOT. Now, say, from March on, did you all the time believe that it was bound to come?

Gov. STRONG. I think we believed it was bound to come, Senator, at the bank in New York back in 1919. This is 1920 to which I am now referring; and we felt, in 1919, that the speculation was bound to topple over. And at a later point in my statement, I wish to read to you various extracts from the publications of the bank, and correspondence of the bank—public and private—which will give you, I think, exactly the point of view of the Federal reserve bank of New York during that period.

Representative SUMNERS. Then let me ask, when did your bank first begin to take measures to meet this condition?

Gov. STRONG. I should say, sir, that the first measures were taken as early as August, 1918. That statement relates to the operations of an auxiliary organization conducted by the Federal reserve bank in connection with floating the loans of the Treasury, known as the "money committee," to which you may have seen references made at different times. As I have just stated, our first signal was in August, 1918, when we saw a possibility of speculation in stocks developing and tried to control it.

Senator LENROOT. Then, Governor, do I take it that you expect to develop to the commission that your bank tried, back in 1918, to prevent further expansion?

Gov. STRONG. I do expect to do that, Senator.

Coming to the policies of the Federal reserve bank during this period of speculation and rising prices, I was just about to say, following my notes, that our policy at that time was to endeavor, by every means at our command, to arrest this development. It will be necessary, however, in order to understand our difficulties in doing so, to try to take you back to the atmosphere of those days. You will recall, as soon as the armistice was signed, there developed an insistent demand to restore business to normal conditions and relieve it from the restraints that were found necessary during the war period. The cry was "Business back to normal," and the response to that demand was, in fact, to remove those restraints. The various organizations set up in the different branches of the Government to control advancing prices and to bring about an orderly administration of the various war branches of the Government were, one by one, disbanded. The effect of lifting the restraints was, naturally, one of buoyancy. The people had economized for two and a half years, and they wanted now to enjoy themselves. And the psychology of the people during that period was a very important influence. But from an economic point of view, we must remember that while the war was over in actual combat, in finance it was far from over, because we still had ahead of us a loan which at that time we felt would be about \$6,000,000,000—the Victory loan.

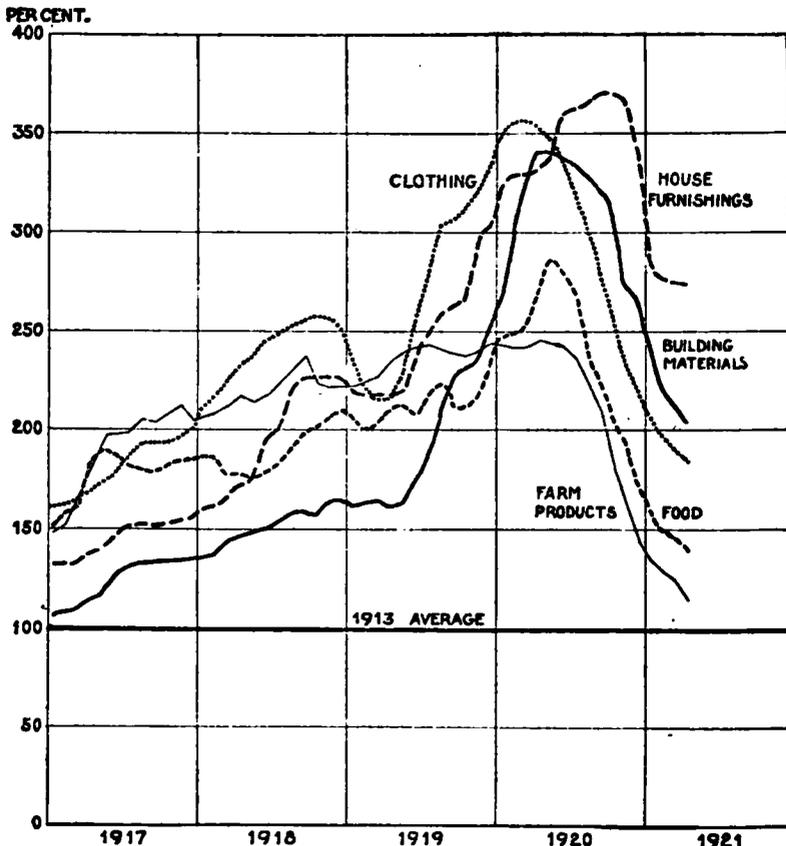
Now, the fourth period, into which the third period gradually merged, the period of declining prices and liquidation, marked the greatest decline, I believe, in values of commodities that has ever been witnessed in modern times. (See p. 498.) It commenced with silk and wool, and gradually extended to cotton, rubber, sugar, and other of the basic commodities. At first the decline was gradual, but it became greatly accelerated, until toward the end of 1920 in some commodities the price decline was almost perpendicular. It slowed down in December, and in January and February of this year the decline had been largely arrested; one should not speak too broadly on this subject, but after the turn of the year the decline was greatly arrested.

During this period the policy of the Federal reserve bank of New York was governed by a development with which I believe few people are familiar, and I would like to describe that in some detail.

Representative SUMNERS. In this period, the discussion of which you are about to enter, do you propose to describe what you did to arrest speculation, and what you did to arrest speculation afterwards?

Gov. STRONG. I am at the present time outlining the periods, and in a few words the policies of the bank, and later I expect to tell you how we exercised those policies.

When the public stopped buying and consuming goods—I am referring to the period of declining prices—as they did in the summer of 1920, it was just like closing the outlet of an elastic pipe, with water being constantly forced in at the other end. The pipe will certainly expand, and it did. When consumption stopped at the point of retail distribution, production at the point of origin still continued. The retail stores largely paid for the goods that



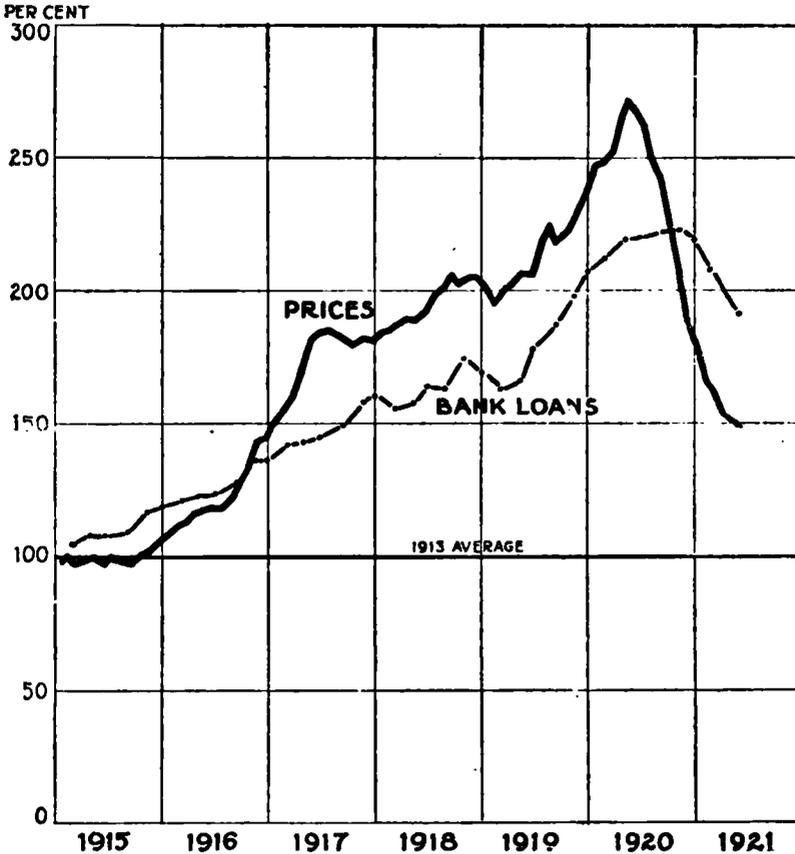
WHOLESALE PRICES OF CERTAIN GROUPS OF COMMODITIES IN THE UNITED STATES.

Source of information: Monthly Labor Review.

they had contracted for, but discontinued orders from the wholesale merchants and manufacturers for new goods. The middlemen or wholesale distributors delivered such goods as they could which they had contracted to sell, but they discontinued buying new goods, and simply took those which they had contracted to buy. It was the same way with the manufacturers and their supplies of raw material; they took the raw materials already contracted for, but they discontinued buying further new supplies of raw material from the original producers.

There were also many cases, as we know, where, probably due to inability to finance deliveries, contracts were canceled right and left. It was a very common thing, under those conditions, that goods which had been contracted for and were in process of manufacture and were not taken by the purchaser, had to be carried. So that during this period goods piled up all along the line. The outlets were closed at one end of the line, but production kept piling up.

Now, what happened as a result of that? I want to describe it, if I may, as a row of blocks standing on end, the block at one end



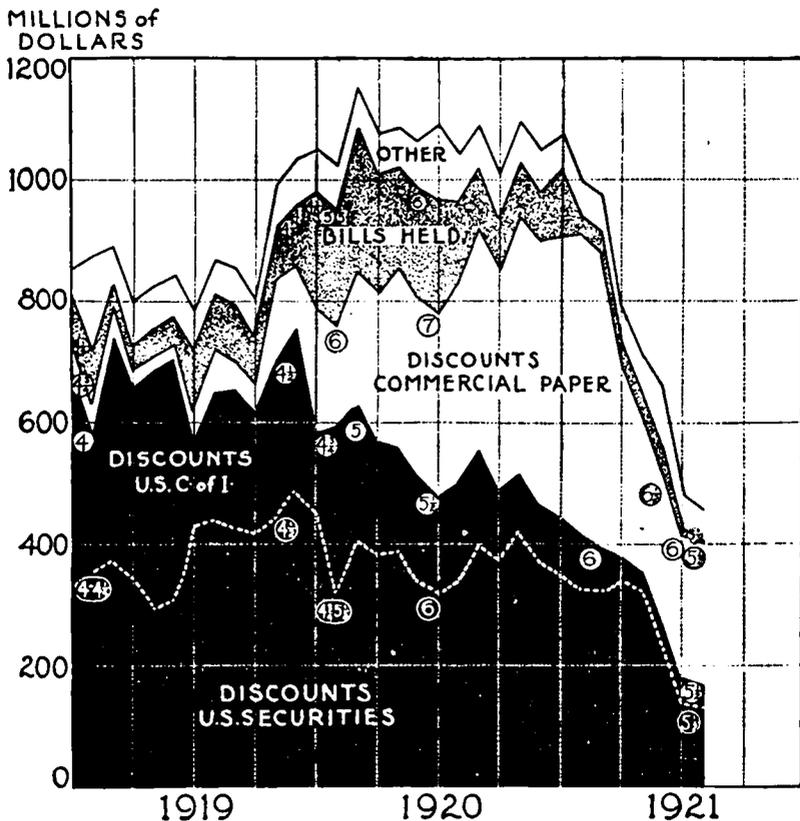
BANK LOANS AND PRICES IN THE UNITED STATES.

Volume of national bank loans compared with wholesale commodity prices. (Department of Labor Index.) Average prices in 1913=100 per cent.

Source of information: Reports of the Comptroller of the Currency, Monthly Labor Review.

representing consumption, and the block at the other end representing the production of the raw material. What would happen if a blow was struck at the block representing consumption? The blow by the ultimate consumer, at the retail end of the row, was reflected back instantly to the raw material production, and there was an immediate collapse in prices of raw materials. And that is the characteristic of periods of depression, that the first to suffer collapse in prices is the producer of the raw materials.

It was during this period of decline in prices of raw materials and of the backing up of goods when, notwithstanding the declining prices, you will find that the loans of the Federal reserve bank did not decline. (See p. 499.) The price decline was very sharp, as is shown by our charts. The curve of prices dropped quite markedly, but the volume of bank loans, as shown on the charts of the Federal reserve bank, continued to rise for some time before it began to go down; indicating, as I have attempted to describe, that the first result of this curtailment of consumption was a pressure upon the banking system for credit to carry these goods, and a decline of the



EARNING ASSETS AND RATES OF DISCOUNT OF THE FEDERAL RESERVE BANK OF NEW YORK.

Total loans and investments on the last report date of each month divided into principal types. Rate of discount for different classes of paper are shown on the dates when the rates became effective.

Source of information: Annual Reports of the Federal reserve bank of New York, weekly press statements, and circulars.

curve representing bank loans could only be expected when consumption began and debts were paid.

Now, from this chart you will observe the decline of prices. These are the wholesale prices. You notice the decline is very sharp, and the bank loans—these are national banks—the loans were maintained at these levels [indicating]; but the other chart—

Senator LENROOT (interposing). Could you indicate on that chart approximately when the policy of the Federal Reserve Board was fixed with reference to expansion?

Gov. STRONG. Yes; there is another chart which will show that, I think, a little better.

Senator LENROOT. I would like to know with relation to that peak of prices; that is what I am after.

Gov. STRONG. The policy of resistance to expansion, Senator, I should say—of course, it developed gradually as conditions seemed to make it necessary—I should say that the policy of resistance to expansion came in about at this point [indicating on chart], fairly early in 1919.

Senator LENROOT. There was positive action of the Federal Reserve Board in the spring of 1920?

Representative MILLS. In December, 1919.

Gov. STRONG. November, 1919. (This refers to rate increase and the high point of prices.)

Senator LENROOT. Was it December, 1919, the date of the high point?

Representative MILLS. December, 1919, was the date.

Gov. STRONG. No; May, 1920, high point of prices.

Senator LENROOT. Now, where would that be indicated on that chart?

Gov. STRONG. Each of these blocks, Senator, represents a year. That was the year 1920 [indicating].

Senator LENROOT. Yes; I understand.

Gov. STRONG. Now, it is important to bear in mind, however, in examining a chart of this character, that the manifestation of what was going on was different in different sections of the country, and I think it is axiomatic, for some reason which can hardly be exactly known, that the first sense of the community to detect these changes is expressed possibly in the money and the stock market; and, as I shall hope to show, in New York we had our first warning of the possibilities of the speculative development as early as August, 1918, before the war ended. But it takes a long time for that sentiment to develop and go through the various cycles of development until it reaches the apex, as shown on that chart.

Representative TEN EyCK. You are going to submit those charts for the record, are you not, Governor?

Gov. STRONG. Yes, sir; I have quite a collection of charts to submit to the commission.

Now, as to our policy during this period of declining prices. I may say it was the most difficult period that we have experienced in the reserve system, or, at least, in the Federal reserve bank in New York, filled with complications which I could describe ad nauseam to the committee. But our policy was designed to encourage the extension of needed credits—that is, by the member banks. That is where the original policy must be made effective—at the loan window of the member banks.

Representative MILLS. Now you are talking of the period beginning in August, 1920, are you, Governor?

Gov. STRONG. No, sir; I am talking about the period of declining prices which began, say, in the summer of 1920, and extended to, say, the early winter of 1920. That is the period of the vertical fall in prices. By gradual stages, of course, as developments justified it, our policy changed.

We were at first resisting expansion. It then became necessary to encourage the banks to extend credit to those who needed it, in order to meet the difficulties of overburdened inventories, to which I referred, due to this backing up of goods, and in order to enable them to fulfill existing obligations and engagements that they had entered into, not only in connection with the greater volume of business in the expansion period, but in connection with the greater volume of business at a much higher level of prices. The strain upon credit then was the most difficult thing we had to meet, because then the question of goodness of credit for the first time entered into our problem.

Senator LENROOT. Might I ask you before you go into that, Governor, to go back just a moment. I would like to ask you just this question, as to what were the results of the efforts of the Federal Reserve Board or your bank to resist expansion?

Gov. STRONG. Well, sir, it would be necessary for me to tell you what would have happened if we had not done it, and that is a very difficult thing for me to do. It is just a belief.

Senator LENROOT. It was effectual, in other words?

Gov. STRONG. It was effectual in many directions, but in many directions we were like prophets crying in the wilderness. We could not stop that rage of speculation by any means at our command, at least so it appeared at that time.

Senator LENROOT. So that result occurred beginning with the action of the raise of the discount rate in December. Was that what produced the marked effect?

Gov. STRONG. I was going to discuss that later, but let me inject here, that through all of that period our policy was necessarily affected by the necessities of the Treasury, but on the other hand, I believed then, and I believe now, that the basis, the fundamental basis of restraint upon speculation rests upon the cost of credit, and that the policy of raising our rates was necessary and justified, and without the adoption of that policy this expansion which took place would have gone to unparalleled levels.

Senator LENROOT. Then leaving out of the question for the moment the necessities of the Treasury, if this action had been taken directly following the armistice we would have been much better off? Or I may put it this way: As soon as it was apparent that this wave of speculation was on, following the armistice, if this action had been taken we would have been much better off?

Gov. STRONG. Well, sir, I wish I might answer that question directly and categorically, but it is an exceedingly difficult one to answer, Senator.

Senator LENROOT. Well, if it had the effect in December, 1919, that you say, would it not have had the same effect earlier without reaching these high levels?

Gov. STRONG. Yes; but it might have had very much more unfortunate effects in other directions.

Senator LENROOT. I was leaving out of consideration the Treasury for the moment.

Gov. STRONG. If you leave out of consideration the Treasury—and that is, of course, a most exceedingly important consideration, affecting the welfare of the country—

Senator LENROOT. Yes—

Gov. STRONG (continuing). I should say that an increase in discount rates at the period when the decline was suffered, from January to March of 1919, to which I have referred—

Senator LENROOT (interposing). Yes; that is what I mean—

Gov. STRONG (continuing). Would have been as close to an ideal 100 per cent policy of perfection as could have been adopted.

Senator LENROOT. Then, looking back—and hindsight is always better than foresight—would it not have been better to have paid a higher rate on our Treasury obligations and put in that policy back in 1919?

Gov. STRONG. Well, now, sir, you are leading me to a discussion of Treasury policies.

Senator LENROOT. Well, I do not want you to do that.

Gov. STRONG. And before answering, permit me to say this: The Federal reserve act contains, I think, three lines establishing the relations of the Treasury to the Federal reserve banks, and they are very significant. It is all there is in the act on that subject. It says that the Secretary of the Treasury may require the Federal reserve banks to act as fiscal agents of the United States and may deposit the general fund in them. That is the sole authority which the Federal reserve system has had for conducting this enormous business for the Treasury. I am glad there was no more law on the subject. It gave us freedom of action which we needed. But we are the fiscal agents for the Treasury and I hope you will understand, Senator, that desiring, as I do, to give every scrap of information to the commission that is possible in the discussion of Treasury policies, I feel that I, or the bank at least, was their agent and servant in those matters, and that those are matters that should be discussed by our principals.

Senator LENROOT. Yes; I was not asking the question in any spirit of criticism of the Treasury; I was simply asking for your judgment as to what would have happened if a different course had been followed.

Gov. STRONG. Yes. Well, I do not want to indicate to you, Senator, or to the commission, a criticism. They were confronted with difficulties of the first magnitude, and the policies arrived at, as they affect the reserve bank, were those that were arrived at by mutual understanding at the time.

The CHAIRMAN. Well, is there not still at this time the question of the effect of the flotation of the Victory loan at a higher interest rate, upon the value of not only existing industrial securities, but upon the value of the Government bonds already issued? Was there not a question of the necessity, perhaps, of refunding of the prior issues of bonds upon the higher rate if the higher rate was upheld?

Gov. STRONG. Well, of course, Mr. Chairman, I think the members of this commission must be aware, as I was made aware of the fact, that at this period when the important decision was before the Treasury as to the terms of the Victory loan, there was a very strong outcry in Congress for the protection of the interests of holders of the previous loans, Liberty loans, which had suffered a decline in the market; and without discussing the wisdom or unwisdom of any such policy, I think there was possibly a sentiment which might be regarded as crystallizing, that might have forced

a refunding of the entire war debt, which would have been a very difficult, an almost impossible task, and possibly one of great danger to the country.

That is so far afield from my own responsibilities in the matter that I hesitate to discuss it in much detail.

Representative TEN Eyck. Well, would not the public practically have demanded that, if the rate of interest had been increased?

Gov. STRONG. Well, I think that is a question of judgment. My own belief is that there would have been a very strong outcry. There was a very strong outcry. But I have a feeling—possibly because I do not live in the atmosphere of Washington—that it could have been resisted. I hesitate even to express it so strongly as that.

Let me inject one remark, however, about rates and prices of securities. It is not the rate fixed by act of Congress that determines the rate the security bears in the market. That is fixed by supply and demand. And I want to confess to my own misapprehension in the early period of Government borrowings on that score. The fact is that the rate of interest return which any obligation produces that is traded in in the market is fixed by natural laws of supply and demand, of credit, of investment securities, of the amount of free capital, and so on, and the competition between the issues of the United States Government and other securities in the market arises just the same, no matter at what rate originally issued.

If the interest rate allowed on a Government bond is too low from a market point of view, why the value depreciates, and the interest return adjusts itself by change in market value. So that whatever may be said for or against a policy of issuing low rate securities, it must be said that those matters are taken care of by natural laws, and neither by Congress nor by Secretaries of the Treasury.

Representative TEN Eyck. Well, from what you have previously stated here, Governor, about the rates of interest that were charged, I deducted that early in the war it assisted the Government in placing bonds at a low rate of interest.

Gov. STRONG. Yes, sir; they did.

Senator LENROOT. I understand your conclusion, then, Governor, is that in view of the needs of the Treasury and the policy of the Treasury the discount rate could not have been raised before it was raised, even though it had resulted, if it could have done so, in a checking of expansion earlier?

Gov. STRONG. I did not catch that, Senator.

Senator LENROOT. Then perhaps I could repeat it. In view of the needs of the Treasury and the policy of the Treasury it is your judgment that the discount rate could not have been raised earlier than it was raised?

Gov. STRONG. Not without a modification of the policies of the Treasury.

Senator LENROOT. That is what I say, in view of the policies of the Treasury.

Gov. STRONG. Yes, sir. I believe not. Boiled down to the simplest language, and rather roughly stated, in the matter of interest rate policy it really would come to a determination, in the last analysis, as to whether the Treasury's policy was determined by the Secretary

of the Treasury or by the Federal reserve system, because they were so interdependent.

Representative MILLS. I do not want to get into this discussion too much, because I know how much time we can waste on it, but you have not touched on the question of the short-time certificates at all during this period and their effect on expansion.

Gov. STRONG. No; I have not yet, but I am going to.

I am just now outlining, as I stated, the characteristics of the various periods and our policies, and later on I hope to take up the various transactions and methods and influences, and matters that had to be dealt with in the light of these periods that I am describing.

During this fourth period, of decline, as I say, it was our policy to encourage extensions of credit where required and necessary, but also to insure at the same time, by judicious increases in our rates, that the orderly liquidation of those stocks of backed-up goods should continue unabated. Absolute failure to liquidate inventories under such conditions, in my opinion, would have brought about disastrous results. All of this, I believe, will be disclosed in the statements that I will submit from the records of the bank.

Representative MILLS. May I ask a question here? Concerning this period that you have just described, did your rediscounts increase, let us say, from August to December?

Gov. STRONG. We have a chart showing that, Congressman. I will show that to you. (See p. 506.)

Representative MILLS. Do you want to show that now, or do you want to show that later?

Gov. STRONG. I think we had better show that now, Mr. Mills, while you have that in mind. I think the peak of our loan account in the Federal reserve bank of New York was reached some time in February, 1920. It got up to a very high level in the fall of 1920, but the pinnacle, so to speak, as I recall, was in February, 1920, so far as weekly figures are concerned. On one day in the fall, however, the figures actually exceeded the February weekly maximum.

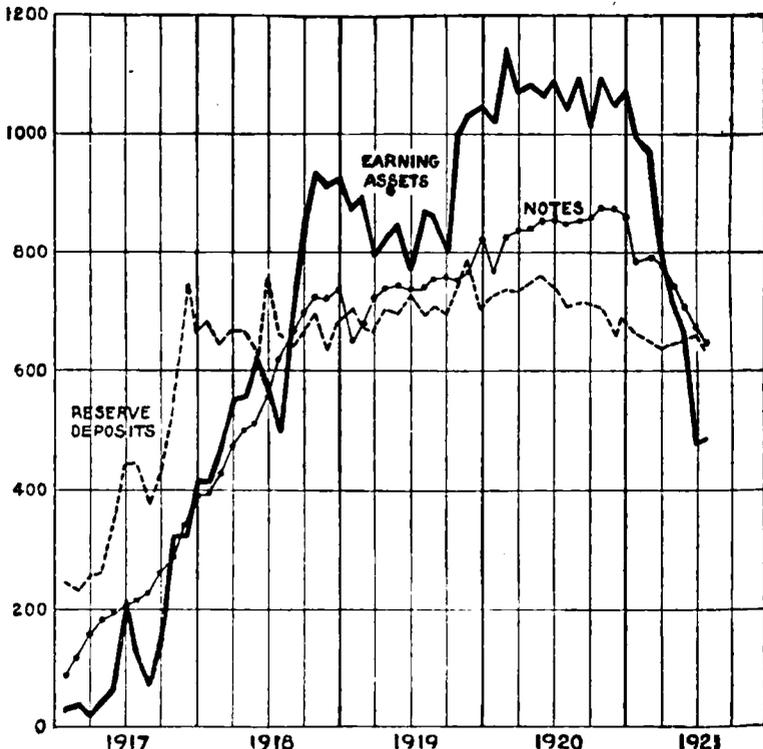
Now, the fifth and last period can be described as the debt-paying period, and the period when the readjustment of prices is taking place to a new stabilized level. It is in this period that inventories have been and are being reduced, the inventories of high-priced goods that I referred to. Debts are being paid. New goods are being produced at lower cost by reason of the reduced cost of raw material and of labor. These cheaper goods are taking the place of the old high-priced stocks in the hands of distributors that have been sold or reduced, and they are competing with the remains of the old stocks of high-priced goods that are still on hand. That is what establishes a new price level. And as a result of this competition between the new and cheap priced goods coming into the market we will have in time, and we are now establishing, a new level of prices in this country and of world prices, that is more in accordance with new world conditions of consumption and production and credit. That is the process that I referred to of readjustment of prices and of recovery.

So also it is with credit. And I want especially to draw the commission's attention to the marked similarity in the readjustment of the price level to the readjustment in the cost of credit.

Using the New York reserve bank to illustrate my point; during the period of greatest pressure for credit we found it necessary,

as you know, to advance our discount rates ultimately to the high level of 7 per cent; that is, 7 per cent for commercial paper. At that time nearly all of the member banks in New York City, and a very large number of banks in our district outside of New York City, were borrowing from us continuously in very large amounts—a very small number of them occasionally. When a bank is borrowing from the reserve bank, say, at 7 per cent, if as the result of a day's transactions it has a surplus of reserve on deposit at the reserve bank, naturally it applies that reserve to paying off what it owes. It is the same as making a 7 per cent investment of its surplus funds. On the other

MILLIONS
OF DOLLARS



EARNING ASSETS, NOTE CIRCULATION, AND MEMBER BANK RESERVE DEPOSITS, FEDERAL RESERVE BANK OF NEW YORK.

Figures plotted on last report date of each month.

Source of information: Annual reports and weekly press statements of the Federal reserve bank of New York.

hand, if it has a deficient reserve as the result of its day's business, it borrows more from us to make its reserve good.

But in this period, by gradual stages, with inventories being liquidated and debts being paid, gradually one after another of our member banks have paid off all that they owe us. They would, in fact, pay off a 7 per cent discount at the reserve bank, and especially those that were borrowing heavily, in preference to going into the market to make some other investment even at a more attractive return. That is partly due to the fact that banks do not like to owe

large sums of money, and it is partly due to the fact that they have been educated in New York to the real purposes of the Federal reserve bank. I think that they understand it pretty well. And when a surplus reserve arises they know that we expect them to repay us and not employ the money in some attractive loan.

When, therefore, a member bank gets out of debt to the reserve bank and it has a surplus reserve balance, it has to seek employment for it, so it goes into the market to lend money, and if a number of them get out of debt at the reserve bank then we have a competition to lend money. They can not get a 7 per cent investment any more by paying us off. That is what introduced the new and cheaper credit into the market that reduced the interest level below the level of our discount rate.

Now I have enlarged upon this a little bit, gentlemen, because after all it is the crux of this whole question that we are searching—the relation between market rates and the discount rates of the reserve bank, and it is a very important matter.

Representative TEN EYCK. That has an influence on the reserve bank to lower its rates then?

Gov. STRONG. It has.

Representative TEN EYCK. Is it not a fact, Gov. Strong, that a great many of the member banks did not increase their interest to their borrowers over the 6 per cent, even though the reserve bank in New York did increase to 7 per cent?

Gov. STRONG. Well, it was a very spotty development with us. The 7 per cent rate was effective rather soon in reducing the number of borrowers at the reserve bank, but the reduction in the number that went out of debt, was largely occasioned by the repayment of borrowings by the smaller banks in other parts of the district than New York City.

Representative TEN EYCK. Yes; but I mean the member banks in loaning to their customers, all of them did not necessarily increase their rate to their borrowers on commercial paper to 7 per cent?

Gov. STRONG. Oh, no; oh, no; now that is where the element of original competition between the member banks enters in. Even when the member banks are borrowing from us they are still going to take care of their customers and see that they do not go to some other bank. And to illustrate the point, Congressman, which you have in mind; the president of one of the big banks came in to our office one day when our rate was 7 per cent, and told me that they would have to increase their borrowings, I think, about \$15,000,000, paying 7 per cent. The reason for the increase was that on that day they had loaned \$18,000,000 to some of their railroad customers, which in common with other railroads during that period were having some difficulty in getting funds. As the railroads were old customers of the bank, they had loaned the money at 6 per cent.

I think it is a mistake to say, except for a very short period, possibly, when the rate was advanced, that it had the effect of generally raising interest rates in the district. I should say that the interest level in the district was pretty well raised in all directions before we came up to 7 per cent.

Representative MILLS. What was the date of the going into effect of the 7 per cent rate?

Gov. STRONG. It was June 1, 1920.

In résumé permit me to say that in credits the same process was taking place that took place in goods. Cheaper credit was coming into competition with the more expensive credit obtainable at the Federal reserve bank, and as soon as those conditions developed then we were justified in rate reductions, and I don't think we were justified in rate reductions until then. No different principle of economics applies to the price of credit than applies to the price of goods in this readjustment that I have just described.

Now, during this period, as to the policy of the reserve bank. Commencing possibly some time before December, or around that time, it was the policy of the Federal reserve bank of New York to encourage the member banks to take care of their customers. It was our policy to give a most liberal construction to the rules, to the principles, which apply to the determination of whether paper is good or not.

As you know, eligibility is one thing and goodness is another, under the terms of the reserve act, but when considering eligibility we have got to take into account goodness. We have felt that with the indorsement of the member bank upon the paper which we discount, a member bank which makes the paper good in any event by its indorsement, it would be a mistake to apply severe and technical rules in determining what paper was eligible upon the basis of goodness, at this period of difficulty in taking care of those who were struggling with big inventories. In other words, the rules which we would apply and the tests which we would apply in determining the goodness of commercial paper which were justified in a period of high prices would no longer be justified in a period of low prices.

Representative SUMNERS. Was this policy which you speak of made manifest through any general statement which you gave out, through what you had to say to the patrons of your bank, and what you did?

Gov. STRONG. The policy in regard to goodness and eligibility?

Representative SUMNERS. Yes; the general policy that you have been speaking of. You have spoken now several times with regard to the policy of the bank during different periods. I am inquiring as to whether or not that policy was set forth in a general statement or made manifest through the method of doing business?

Gov. STRONG. It has been set forth in a great variety of general statements and in reply to specific inquiries of member banks and at meetings of bankers held at the Federal reserve bank of New York, and I think has been generally understood by the banks in our district since this period developed and this difficulty arose, as the policy of the bank.

Representative SUMNERS. Have you any statement which more or less embodies the general policy of the different periods?

Gov. STRONG. I have quite a number of them here which were concurrent with this period, and which I intend later to introduce into the record, Congressman.

We endeavored to make clear to member banks individually, and to the public by general statements, that it was now safe to go on and do business, that there was ample credit available for all legitimate business, and that the need for restraints such as had been exercised when prices were rising, had now disappeared. Of course,

you will expect me, and I intend to introduce into the record a long series of quotations from the publications and correspondence of the bank which will make clear by the concurrent evidence of the period just how these policies developed.

Now, we believe that it is dangerous and no part of our function to indulge in prophecies, and yet I feel that a description of this period which I have characterized as readjustment and debt paying and recovery, will be incomplete without referring to the symptoms of recovery, because our policies are developed, to some extent, in anticipation of developments and occurrences, and I want to give you a little bit of the view, at the present time, of the management of the reserve bank, as to what is occurring.

These periods of economic disturbance and recovery, as you know, go through regular cycles which have been studied and are fairly well recognized and described by economists and writers on these subjects. In the cycle to which I am referring I have described the last period as that of recovery.

I would like to outline some of these symptoms of recovery that are beginning to be apparent to us. I am doing it deliberately, in the hope that some of those people who are just now too much influenced by an atmosphere of gloom may be helped, that it may help to dissipate this gloom, because I do not believe it is now justified.

One of the first symptoms of recovery is a tendency toward easier rates for money. Now, you will observe the long advance that has been made in that respect. I have tables of rates to introduce here, and they will show graphically what has taken place. (See pp. 564, 565.)

Another symptom of recovery is the immediate influence upon security values. The first to move are high-grade bonds. If you will look over the quotations of the bonds of the Government you will find that they have all recently advanced. If you examine the tables that I will submit showing the costs or market values of the certificates of indebtedness which are now in the market, you will find that every issue that the United States Government has got outstanding is selling at a premium in the market. We find by the reports that we get at the bank that issues of high-grade, first-class bonds are immediately taken by investors when they are offered, and the subscription books are closed as soon as they are opened, with the issues oversubscribed in many cases.

We find in such a period as this that spotty activity develops in various lines of industry, and that it is most likely to develop first in those industries that were first affected by the decline. Let us see what is happening in industry. According to figures prepared by the New York reserve bank, which allow for changes from one season to another, wool consumption, including the activity of woolen mills, in June, was 106 per cent of normal.

The CHAIRMAN. What is the normal on those figures, Governor, 1913?

Gov. STRONG. The normal has been arrived at by a statistical process which takes into account experience through many years, allowing for growth and changes from one season to another. The curve of activity in the wool industry shows that the industry has been above normal since last April.

Now, as to cotton. Cotton consumption, including activity of cotton mills, has increased steadily from 55 per cent of normal in January to 73 per cent in June. Cotton and woolen goods producers report an excellent volume of orders for next spring at prices about on a par with those prevailing for the fall season.

I would like to have you understand a little bit about the sources of these statements that I am making—you may think rashly. We get these figures from original sources wherever possible. I think we have 58 or 59 retail establishments that report directly to the bank on the activity of their business, and wholesale establishments, and industries of various kinds. We get figures also from various records of the departments of the Government. I regard our figures as reliable as they can be.

Representative SUMNERS. These retail establishments, Governor, are they distributed over the United States, or chiefly in your district?

Gov. STRONG. As to retail establishments, they are in the New York reserve district, but otherwise the figures are for the United States, unless specifically indicated to the contrary.

Now, as to the milling of wheat flour. In June it was 116 per cent of normal, and has been above normal ever since February.

Building in and around New York City appears from the index figures maintained by the New York reserve bank, which allow for price changes and seasonal variation, as 27 per cent higher than in June, 1920.

Representative SUMNERS. Is that in cost of construction or volume of construction?

Gov. STRONG. That allows for the changes of price or cost. This increase in construction largely results from the increase in residential construction, including hotels and apartment houses.

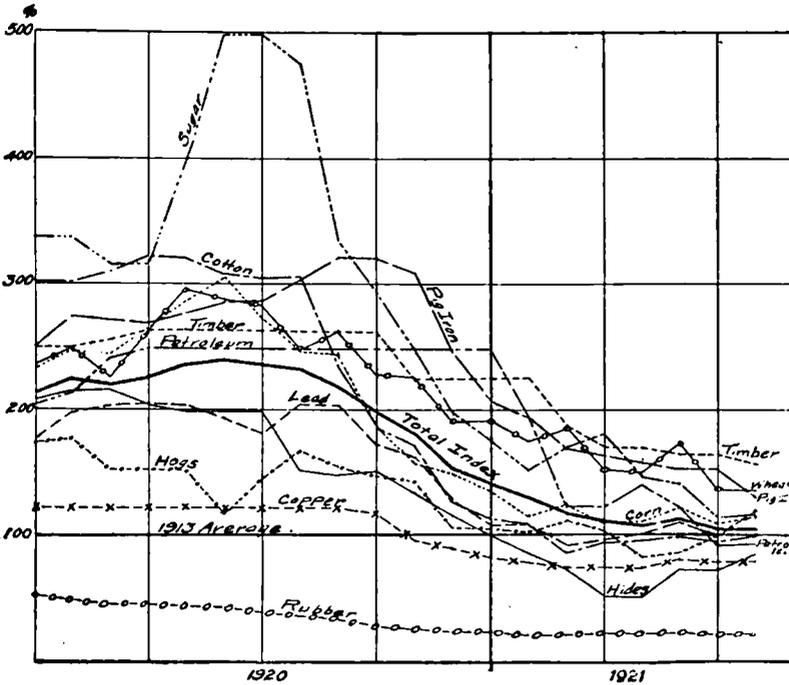
In June, also, 9 out of 14 groups of industries upon which the Department of Labor reports, showed an increase of employment over May, and 2 of the remaining 5 showed no change. These increases are largely in those industries which were the first to feel the reverse 15 months ago, and are now the first to improve.

I referred earlier in the hearing to the conditions that I have observed in the East as having some bearing upon this statement as to the industries which are first to recover. I received a call recently from an English friend who had seen, just before he sailed, a friend of mine who lives in London and is at the head of one of the largest English banks doing business in the Far East. When I was in London I had brought some account of the conditions of depression which I had observed in the East, starting there before it reached this country. My friend, the London banker, sent word to me that he was glad to say that the symptoms of recovery seemed to be starting in the region where the symptoms of depression first appeared, referring to the trade of India and China especially.

Quite characteristic of this stage in the economic cycle is the relatively low production in the steel and allied industries, which were among the last to decline last year. The index of steel production maintained by the bank was 26 per cent of normal during June. Whether the lower prices that have since been quoted have yet stimulated orders to the point of causing a rise in the index for July, it is still too early to state—our index has not been made up—but general increases in mill operations have been reported very recently.

Also, as to price of basic commodities. These are indicative of an advanced stage in the process of readjustment. An index of prices of 12 basic commodities, maintained at the bank, in the week ending July 20 was less than 4 per cent above the 1913 average of the prices of those basic commodities. It represents a decline of over 57 per cent, more than half, since May 17, 1920, when it reached its highest point. The index is computed from the wholesale prices of such raw commodities as petroleum, pig iron, copper, rubber, cotton, wheat, corn and hogs, and others.

Since last December this index has declined each week at a much slower rate on the whole than in the autumn months of 1920. And



PRICES OF TWELVE BASIC COMMODITIES IN THE UNITED STATES.

Prices of standard specifications each month and the index computed from them by the Federal reserve bank of New York. Average prices in 1913=100 per cent.

Source of information: Various trade journals, trade associations, and dealers.

since the 1st of May it has moved both up and down, showing a tendency towards stabilization.

In the eastern part of the United States the retail trade continues generally at a high level. Allowing for the lower prices now prevailing, the volume of goods now being sold by department stores in the New York district, according to figures received by the New York reserve bank, is slightly higher than at this time in 1920, and about 20 per cent higher than at this time in 1919.

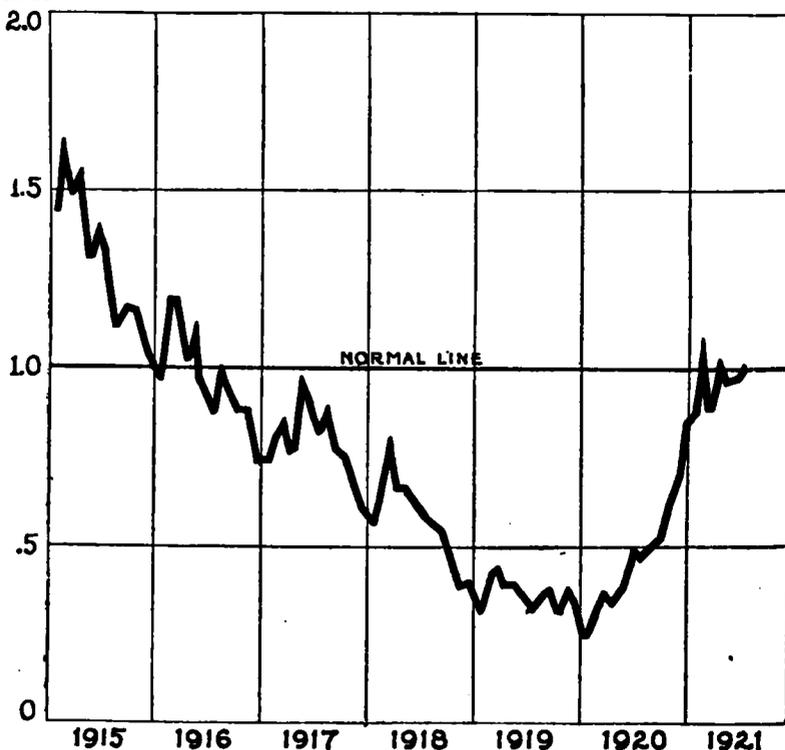
Thus, in the two extremes of domestic business—the production of basic commodities and in retail trade—conditions appear to have passed well into the later stages of readjustment. The retail prices have come down and the volume of sales is increasing.

Wholesale consumption and production are greatly increasing, and that is an evidence of this process of readjustment to some new price level.

And yet I would call your attention to the fact that throughout this process, and despite rash assertions to the contrary, business failures have at no time been proportionately as numerous as they were in 1915 and 1916.

I have here a chart published in the Monthly Review, which is published by the reserve bank, giving the curve representing business failures. It is the curve of the percentage of failures to those

PER CENT.



PERCENTAGE OF FIRMS FAILING TO FIRMS IN BUSINESS—ANNUAL RATE.

Allowance is made for seasonal variation. Since 1866 an average of about 1 per cent of the firms in business has failed each year.

Source of information: Dun's Review.

reporting; that is in numbers. The normal line, 1 per cent, is established as the result of reports which, I believe, go back to some time in the sixties. You will observe that the curve of failures in the middle of 1915, in the early days of the war, had been abnormally high. Commencing a little before midsummer of 1916, it has been below normal continuously until the early days of 1921, since when it has fluctuated slightly above and below the normal line of 1 per cent. Now this is a conclusion, but I think it is a sound one, that that curve of business failures, which is to my mind a satisfactory showing, can be attributed to the fact that the influence of the

existence of the reserve system gave courage to bankers to take care of their customers who were in difficulty with these high priced swollen inventories, and not only gave them courage to do so, but gave them the means to do so by borrowing at the Federal reserve bank.

The CHAIRMAN. Suppose the reserves of the Federal reserve bank at this period, which are represented by the top of this curve in 1920 had come to the low point instead of at the high point that they now are, what would have been the result?

Gov. STRONG. Suppose our reserves had been down to the minimum?

The CHAIRMAN. Yes; instead of pretty well up as they now are at this period when the slight fluctuation along the line of normal occurs?

Gov. STRONG. I understand your inquiry to mean, what would we have done had the curve of failures been a disastrous one, and our reserves been down to the legal minimum?

The CHAIRMAN. No; what I am getting at rather is—well, all right, go ahead and answer it in that way.

Gov. STRONG. Well, I think the management of the Federal reserve system would have had sense enough—fortunately we did not encounter that situation—but I think we would have had sense enough to do the thing which is axiomatic and necessary to the last degree in such a condition, and that is to lend freely regardless of reserve.

The CHAIRMAN. Well, certainly, if the reserve were down to a minimum at this time instead of pretty well up as there, it would have been very much more difficult to have dealt with the situation.

Gov. STRONG. It would have been much more difficult. You may recall, Mr. Chairman, that back in 1873 these same matters were the subject of inquiry in England. They had been through some difficulties, and if you are familiar with Walter Bagehot's book "Lombard Street" you will observe the principles which he enunciated then, and which have characterized the policy of the Bank of England, I believe, ever since, that at a time of strain the policy of the bank should be to lend freely, but at a high rate, if you please. That is a principle of banking which is not always understood, and possibly those who are responsible for banking policies under such conditions are charged with profiteering and all sorts of things. But the principle of a high rate is to insure that the one that needs credit gets it, and not the speculator, who is, by cheap credit, enabled to take advantage of the necessities of those who must sell goods and stock and real estate and homes in order to get credit if they can not get it at the bank.

The CHAIRMAN. Well, now, I am a little skeptical about that, and would like to have you go into that a little further and illustrate why it is that the industry that needs money gets it instead of the speculator, on the basis of lending freely at a high rate.

Gov. STRONG. Well, sir, I think it can be described best by illustration of what takes place on the New York Stock Exchange. On more than one occasion in the past we have had situations arise on the exchange of great peril. I think the most notable one in recent times was on May 9, 1901, when a tremendous perpendicular

drop took place in prices on account of the Northern Pacific corner. A money pool was organized on that day to furnish the stock exchange with money that it absolutely had to have, and the principle that applied to the lending of that money was to lend it at so high rates to those who needed it that those who did not need it would not be tempted to borrow cheap money and buy the stocks from those who were otherwise under the necessity of selling at panic prices.

Representative SUMNERS. Now, if a man is confronted with a great necessity, Governor, on the one hand, and a ruinous interest rate on the other, a very high interest rate on the other, would not that increase the pressure of the necessity for him to turn loose and sacrifice?

Gov. STRONG. Well, the kind of pressure, Congressman, to which I am referring does not last very long as a rule—what you might call panic conditions. Fortunately we were able, at least the machinery that Congress has established was able, to meet the situation without the development of anything like panic conditions, which we really have not witnessed at any time since the Federal reserve system was organized.

Representative SUMNERS. Governor, I notice here on this chart that, beginning about the first of 1920, the percentage of failures shoot up diagonally across the chart of that year very rapidly. And the criticism, I understand, of the system and of its administration, is that along about that time an unusual pressure began to be exerted upon creditors, and that pressure not only resulted in very great depression of prices, but was the cause of that movement upward in the percentage of failures. I presume you are going to discuss that in detail further?

Gov. STRONG. I will.

These comments in regard to certain symptoms that are apparent to us in New York I think are justified in completing an account of this period. It is hardly necessary to go further than to suggest that there is a further development always possible in this process of recovery, where, with rising prices in investment securities, we should witness the development of a speculation in stocks, with rising prices, and then again a speculation in commodities, with rising prices, followed in due course by speculation in real estate, with rising prices, culminating, as a rule, with the advent of the corner lot development and the delusive offerings of speculative stocks of oil and mining concerns, and so on. All of that, if they come, are still ahead of us to be dealt with.

The CHAIRMAN. Let me ask you one question: The rediscount rate in New York has been reduced. The discount rate has not been reduced in the western reserve bank districts. Now, what difference is there in the situation between the various Federal reserve districts which warrants a reduction in discount rates in New York and does not, I am assuming, justify reduction in discount rates, for instance, in Kansas City or Minneapolis?

Gov. STRONG. Well, I should say, Mr. Chairman, that there are two or three considerations. Of course I am not in any way responsible for the policies of these other reserve banks, and I think they know their business much better than I could know it, but I think it is a fact that of the great liquidation that has taken place in the loan accounts of the reserve banks, New York represents about one-half

of all of the liquidation that has taken place in the Federal reserve system.

I also believe that the expansion that took place in the western and the southern sections is still a marked characteristic of banking conditions in some of those sections, and to what extent an expanded condition continues is a very important consideration in the rate policy of a Federal reserve bank.

And still another consideration which will be referred to later in more detail, is that relating to the relation between the rate of discount of a reserve bank and the market rate for credit. I have endeavored to describe how the introduction of competition in the New York market (where it appears earlier than in the West and South), because banks are out of debt and now seeking to lend money, has had the effect of pulling down interest rates in that market. The same thing has taken place, as you know, in those districts which are more distinctly industrial and commercial than in the districts that are agricultural, where original production takes place.

Representative SUMNERS. Governor, in what sense under the plan of the Federal reserve system ought the banks of the several districts to become competitors as against the member banks and local banks, for rediscount business?

Gov. STRONG. Well, I don't conceive that they are competitors with their members. You refer to the 12 reserve banks, Congressman?

Representative SUMNERS. Yes, sir.

Gov. STRONG. They are not competitors.

Representative SUMNERS. My question was suggested by the statement that the rates which the member banks themselves were able to make in a community influenced the discount rate which the Federal reserve bank has in effect.

Gov. STRONG. You used the word "competition," which at once struck me, because in point of fact the Federal reserve bank is peculiar and different from any other bank in that it does not compete at all in any direction.

Representative SUMNERS. Then why should it be influenced by the fact that the banks in the territory are willing to rediscount paper or make loans at a low rate? Why not just let them take the business?

Gov. STRONG. I think I must explain a little about the functions of the reserve banks to answer that question. The Federal reserve banks do not go into the market and do business direct in lending money, except to the extent that they are permitted to buy bills or acceptances in the open market, and to the extent that they are permitted to deal in all security issues of the United States Government. Therefore there is no possibility of competition except in those two very limited fields between the member banks and the reserve bank. In fact, it is a very well established principle in the Federal Reserve Bank of New York, and I think in all of the reserve banks, that we should avoid competition with our member banks. In that respect the reserve bank system is distinguished from the business of any other banks of issue in the world. I know of no other which is distinctly unable to compete with the member banks. As you know, the Bank of England, to a limited extent, the Bank of France, the Reichsbank, the Bank of Japan, to some extent, and generally the banks of issue of Europe, do a regular commercial

banking business to a greater or less extent with public and with private accounts. We are not permitted to do that.

Representative SUMNERS. I understood the situation as you now explain it to be. The other part of my question, then, is: Why does the rate being made by the other banks in the district affect your rediscount rate?

Gov. STRONG. Why, the rates made by the member banks—that is, the rates made by the market, by the laws of supply and demand for credit—have a distinct bearing upon the policies of the reserve banks in fixing their rate.

Expressing it in the extreme, if we establish a rate very much below the rate which supply and demand fixes in the market for credit, it would be an invitation to the member banks to use the credit resources of the reserve system for the purpose of making a profit, and that is an invitation to an enlargement of the credit and the currency of the country, and to speculation.

On the other hand, if we maintain our rate at a level where it is not necessarily profitable for member banks to borrow from us, say at the market, or slightly above the market, then the real purpose of the Federal reserve system is disclosed, because the Federal reserve banks hold the reserves of the member banks, and when the member banks need assistance in order to meet unusual demands due to, for instance, the planting or harvesting or moving of a crop, or unusual demands upon the part of the industrial concerns of the country, they then are able, without loss, in order to meet the emergency or seasonal situation, to come to us and borrow money.

Our rates must be so adjusted, Congressman, that we do not invite expansion and speculation and all the disorders that come in the train of speculation, but on the other hand they should not be such penalty rates that the member banks can not get relief in meeting their necessary normal or seasonal requirements.

Representative SUMNERS. And then a bank which needs service can get the service without putting itself at too great a disadvantage with its competitors?

Gov. STRONG. Yes, sir.

Representative SUMNERS. My question was not prompted by any spirit of criticism, but I thought you should put in the record the explanation.

Gov. STRONG. Well, I believe the explanation will be a little clearer if I go a little further and explain the difference between the money market in the United States and the money market abroad and the functions of the reserve banks. As you know, banking abroad is not conducted as we do in this country, by the commercial banks receiving promissory notes from their customers for advances made to them. Generalizing in a very broad way, the banks of Europe, and especially of England, make advances to their customers on overdraft accounts, as you will notice in the statements of the big joint-stock banks of London; those are advances made to customers who have a regular line of overdraft, and just draw on their banker for a regular amount. It is a red-ink balance on the bank ledger.

Such a transaction does not result in the production of paper which can be discounted, say, at the Bank of England. The paper which finds its way into the Bank of England is not in point of fact

commercial paper, such as we have in this country. It is the bill of exchange. It is the document which originally is attached to shipping papers, in general covering a movement of goods from the point of production to the markets.

Lord Rothschild once was asked how he told a good bill when he had it presented for discount—in the early days the Rothschilds were the largest buyers of bills in Europe—and he said he always put his tongue to it to see whether it had a little flavor of salt. The idea was that he did not want to buy a bill that had not moved across the ocean in a vessel carrying a shipment of goods. It is that type of bill which in normal times brings the Bank of England, say, in relation to the discount market of London.

The joint-stock banks of London do not borrow from the Bank of England as a rule. The flow of credit in and out of the Bank of England, the volume of its discounts in normal times, is brought about by the discounting of bills by the big discounting houses and bill firms in London. And in this country the borrowings from the Federal reserve banks are the borrowings of those commercial banks which occupy the same relation to the business of the country that the joint-stock banks of London do who are not borrowers at the Bank of England as a rule. When they want to realize funds and build up their reserve at the Bank of England, they are much more likely to take bills out of their portfolio and go to a discount firm or bill house and just sell their bills, and then the bills are, if occasion requires, "melted," as they say, by that discount firm, at the Bank of England.

Now, that is important, Congressman, in considering this matter of rates, because in dealing with these bills of exchange in the London market you have a very stable rate to consider in connection with the bank rate. It is the pabulum of the market in London, this bill that I refer to, and it is quoted on a very narrow range of fluctuations, and the bank rate in normal times can have a relation to but one rate in the market. On the other hand, we are dealing with member banks which are lending upon commercial paper in all parts of the United States at a great variety of rates.

The contract rate in Texas, for instance, is very high. I think it is 12 per cent, is it not?

Representative SUMNERS. Ten.

Gov. STRONG. Ten per cent. Well, you will find in Texas the small country bank making a great number of loans to its customers and taking the customer's notes at 10 per cent per annum discount. There a very difficult situation arises, because the reserve bank rate may be only 6 per cent, and there is a very large margin of profit between the rate at which the member bank makes its loan to its customer and the rate at which it can discount that paper. It appears almost to be an invitation to borrow from the reserve bank in order unduly to extend the business of the member bank.

Representative TEN EyCK. Right there may I ask a question relating to the answer which you gave as regards the reason that some of the reserve banks other than the New York reserve bank have not lowered their discount rate as low as the New York reserve bank has lowered theirs; that it was due to the fact that they had expanded their credit relatively more than the New York reserve bank had expanded its credit?

Gov. STRONG. In the agricultural sections that is unquestionably so, and I have charts here that will indicate the relation between the expansion in all the different districts, Congressman. (See p. 593.)

The CHAIRMAN. Gov. Strong, it is 12.30. I think probably we had better take a recess now until 2 o'clock.

The commission will stand in recess until 2 o'clock this afternoon. (Thereupon, at 12.30 o'clock p. m., a recess was taken until 2 o'clock p. m., of the same day, Monday, August 8, 1921.)

AFTER RECESS.

The commission resumed its session at 2 o'clock p. m., pursuant to the taking of recess.

The CHAIRMAN. Gov. Strong, you may proceed.

Gov. STRONG. Mr. Chairman, the morning session concluded with an attempt to make a review of the period since the organization of the Federal reserve bank down to the present time. What I said was simply preliminary to the introduction of the material that I wish to submit to the commission.

I was asked after the morning hearing by Congressman Ten Eyck to explain just what the relation was between the customer of a member bank borrowing from the member bank and, in turn, the relation of the member bank to the Federal reserve bank. I understood that question to apply especially to the influence which the reserve bank has in relieving the need for credit. An answer to that question possibly will be a satisfactory preliminary to what I am about to say.

It is the practice of banks generally to make loans to the extent that their reserves permit, or to the extent that their required reserves, plus any additional amount of reserve which the experience of the bank shows to be necessary for it to keep, permit. The reason for that is, obviously, that a bank is organized to make money, and must make all the loans it can in order to build up its earnings. So you may say, generally speaking, that when a demand for credit arises, when customers come in to a bank to borrow more than the reserve of the member bank permits it to lend without impairment of reserve, it must of necessity go to the reserve bank in order to get more credit.

The process is this: Take a country bank during a crop-moving period. It has on its books hundreds of farmers who have been borrowing as the preparation of the soil and the making of the crop proceeded; and there comes a time toward the end of the period when, possibly because they have not been able to liquidate the crop of the previous year wholly, or possibly because the prices of all the elements that go into crop making have advanced—that is, the cost of labor and fertilizer and farm supplies and food—there comes a time when these farmer customers of the country bank find the need for credit in excess of what the reserves of the member bank enable the bank to give them.

The reserve of the member bank, or the proportion of its reserve to the amount that it can lend, depends, of course, upon the flow into the bank and out of the bank of deposits being made and withdrawn and of loans being made and repaid. Under the conditions that I have described we will assume that the farmers of that section are not only borrowing all that the bank is willing to lend them,

but they are also withdrawing their deposits, which is a very likely occurrence under such conditions. The bank goes ahead and makes the loans to meet the demand. It is a well-managed bank, and it wants to see its farmer customers make a crop. When it reaches the point where the reserve begins to go down below the point which the law requires—in other words, when the inflow of deposits and the repayment of loans is not sufficient to take care of these increasing demands—then it makes up a bundle of these farmers' notes and sends them to the reserve bank and gets a discount.

Now, you will observe that this is *ex post facto*, so to speak; the loans have been made before the discounts at the reserve bank have been made. That is especially true in the city banks, and in the smaller country banks it may be that their borrowings at the reserve bank will anticipate a demand of that sort; but as a rule I should say that a member bank will not borrow to build up its reserve until it sees the actual impairment of the reserve taking place or about to take place. Obviously the member bank must borrow under those conditions, because if it does not the impairment of its reserve required by the statute will result in the imposition of a penalty, which penalty will be a greater rate than the discount rate of the reserve bank.

So in the distribution of credit by the Federal reserve system to meet these demands—seasonal demands, war demands, or any other kind—what happens is that the reserve bank simply responds to a need. It can not anticipate it. It can not be set in motion in making credit for the relief of the situation except in response to this demand which originates with the member bank and results from a loaning condition which requires the employment of the reserve bank's credit in order to meet that demand.

I think that point is not very clear in the minds of the public. It sometimes seems as if people felt that when credit was urgently needed in, say, the agricultural section of the country, the reserve bank could go out there and dispense it. It is helpless to do so. Its only control is that which it exercises by its general influence upon its members in urging them, as it frequently does, to adopt a policy, and the influence which it exerts by its rate.

Representative SUMNERS. Governor, may I ask you a question before you proceed further? Practically speaking, what relationship is there between the state of the reserve of the member bank and its borrowing status with the Federal reserve bank, or its rediscounting status?

Gov. STRONG. Do you mean to what extent is credit extended, or do you mean in accordance with the amount of reserve?

Representative SUMNERS. What effect does the fact that the bank's reserve is getting low have upon the Federal reserve bank when it comes to consider the matter of rediscounting paper of the member bank which sends paper for rediscount?

Gov. STRONG. That, Congressman, is pretty well covered by the terms of the act itself. We start from the premise that member banks must maintain their reserves, or if they impair them they pay a penalty for impairing them, which is a rate or percentage of, I think, 2 per cent above the discount rate for commercial paper of the reserve bank.

Now, starting from that premise, the only consideration that a reserve bank, the New York reserve bank, gives to the application

of a member bank for credit, where the amount of reserve enters into consideration, is simply making this calculation as to the so-called basic line. I am coming to that in detail later, Congressman.

Representative SUMNERS. Then are you going to discuss in detail later the effect upon the availability of the rediscount privilege which the expanded condition of the bank has?

Gov. STRONG. Yes, sir.

I hope very much, Mr. Chairman, that what I am saying, and especially what I said this morning, to which it seemed to me you listened with a great deal of patience, does not appear to be pedantic, but the fact is that I very earnestly desire that these matters should be understood by the commission and that we shall make a record that will be of value to the commission. So if I am long-winded or pedantic, please call me to order.

It seems to me obvious that in all of the discussion of the policies of the reserve system they can not be understood, and the basis of the discussion can not be understood, without considering a little bit what elements of expansion of our banking system have arisen, not only because of the establishment of the Federal reserve system, but because of the conditions which arose out of the war. We have not pursued that subject to the point where I can give you more than some suggestions of what those elements are and present them for further investigation, if you care to have further investigation made, as we would be very glad to do.

It seems to me that the main elements of possible expansion, or counteracting contraction, are seven in number.

One is the increase in the stock of monetary gold in the United States, which is attributable to the war, and the transfer of such a large portion of that gold into the vaults of the reserve system.

The second consists in the modification of the reserve requirements resulting from the passage of the Federal reserve act and the subsequent modification of those reserve provisions by the amendment which, I believe, was passed in June, 1917.

The third is the inherent power of expansion in the Federal reserve system; that is, in the 12 Federal reserve banks.

The fourth is the tendency which we have discovered, and are watching, to transfer demand deposits in member banks into the class of time deposits, under which reduced requirements of reserve are permitted.

The fifth is the element of efficiency in the use of credit; that is to say, the perfection of the machine that enables a given amount of credit to perform a larger amount of work.

The sixth is the effect which the passage of the Federal reserve act has upon the reserve position of State banks which are not members of the Federal reserve system.

And to some extent, as offsetting these elements of expansion, the seventh and last is the extent to which Federal reserve notes are exported from the United States to other countries.

I would like, for the purpose of the record, if you please, to introduce this document [indicating] and to comment upon it, if you will permit me, for a minute by way of explanation.

(The document referred to is here printed in full, as follows:)

ELEMENTS IN EXPANSION.

I. THE ELEMENT OF GOLD.

A. The country's stock of gold has increased \$1,408,000,000 since January, 1915 (about 77 per cent), but the amount of gold in the Federal reserve banks has increased nine times:

Date.	Stock of gold in country.	Gold in Federal reserve banks.	Per cent of country's stock in Federal reserve banks.
Jan. 1, 1915.....	\$1, 815, 976, 319	\$241, 321, 000	13.3
July 1, 1915.....	1, 985, 539, 015	324, 185, 000	16.3
Jan. 1, 1916.....	2, 312, 444, 499	542, 413, 000	23.5
Jan. 1, 1917.....	2, 864, 841, 650	739, 236, 000	25.7
Jan. 1, 1918.....	3, 040, 439, 343	1, 674, 408, 000	55.1
Jan. 1, 1919.....	3, 080, 510, 011	2, 062, 062, 000	67.9
Jan. 1, 1920.....	2, 787, 714, 306	2, 062, 845, 000	74.0
Jan. 1, 1921.....	2, 784, 834, 427	2, 062, 786, 000	74.1
July 1, 1921.....	3, 223, 351, 644	2, 461, 931, 000	76.4

B. The reason for the gold passing into the Federal reserve system is:

1. During the war gold coin and gold certificates, which came into the reserve banks in the regular receipts of currency were retained, and the banks were encouraged to turn in gold and gold certificates so as to provide gold reserves for the necessary war expansion.

2. At present importations of gold deposited with member banks largely find their way to the reserve bank because of their utility there. To member banks gold is useless as reserve. In the Federal reserve bank it is immediately available for all financial uses—as reserve, for instant transfer, for exchange into convenient forms of currency, for withdrawal by check, etc.

C. Gold has a power of expansion proportionate to its utility as reserve money. The first step in such expansion is, and was, in banks which had the power of acting as reserve banks.

1. Before the Federal reserve system, under the national bank act, the first step in expansion was in banks in central reserve cities which were required to hold as reserves against their net demand and time deposits 25 per cent cash (gold and lawful money). Thus gold could expand four times, and \$100,000 of reserves would support \$400,000 of deposits, of which \$300,000 might be created by loans. These banks were permitted to hold a portion of the reserves of banks in reserve cities which in turn were permitted to hold as deposits a portion of the reserves of country banks. Or, country banks, if they chose, could keep a part or all of their deposited reserves with central reserve city banks. Thus a pyramiding of reserves was permitted, which will be referred to below.

2. Under the Federal reserve system, a reserve of 40 per cent of gold must be maintained against Federal reserve notes in circulation, and 35 per cent of gold and lawful money must be maintained against deposits. Thus \$100,000 of gold deposited in a reserve bank can be utilized as reserve for only \$350,000 deposited by member banks, whereas under the national bank act it would be reserve against \$400,000 deposited by reserve city or country banks. The expansion under the reserve system enters because of the smaller reserves which the banks have to maintain, and the fact that on their reserves held in the Federal reserve banks they may base a large increase of loans.

II. THE ELEMENT OF MODIFIED RESERVE REQUIREMENTS.

A. Under the national bank act banks were required to keep reserves against net demand and time deposits as follows:

	Per cent.
Central reserve cities, in vault.....	25
Reserve cities, 12½ per cent in vault, 12½ per cent on deposit in central reserve cities.....	25
Country banks, 6 per cent in vault, 9 per cent on deposit in reserve or central reserve cities.....	15

A. State banks had varying reserve requirements, in most States less than for national banks.

B. Under the Federal reserve act, effective November 16, 1914, member banks were required to keep reserves against deposits as follows:

	Central reserve cities.	Reserve cities.	Country banks.
1. Net demand deposits.	18 per cent; six-eighteenths in vault, seven-eighteenths with Federal reserve bank, balance in vault or with Federal reserve bank.	15 per cent; first 36 months, six-fifteenths in vault, thereafter five-fifteenths; first 12 months, three-fifteenths with Federal reserve bank, and for each succeeding 6 months one-fifteenth additional until six-fifteenths have been deposited; for 36 months, balance in vaults or on deposit with Federal reserve banks or national banks in reserve or central reserve cities.	12 per cent; first 36 months, five-twelfths in vault, thereafter four-twelfths; first 12 months, two-twelfths with Federal reserve banks, and for succeeding 6 months one-twelfth additional until five-twelfths have been deposited; for 36 months balance in vaults or on deposit with Federal reserve bank or national banks in reserve or central reserve cities.
2. Time deposits, to be held in the same way as reserves against demand deposits.	5 per cent.....	5 per cent.....	5 per cent.

C. Under the amendment to the Federal reserve act of June 21, 1917, these reserve requirements were further modified as follows:

	Central reserve cities.	Reserve cities.	Country banks.
1. Net demand deposits, to be held entirely on deposit with Federal reserve bank.	13 per cent.....	10 per cent.....	7 per cent.
2. Time deposits, to be held entirely on deposit with Federal reserve bank.	3 per cent.....	3 per cent.....	3 per cent.

III. THE ELEMENT OF EXPANSION IN MEMBER BANKS OF THE FEDERAL RESERVE SYSTEM.

A. The change in reserve requirements when the Federal reserve system was established is estimated to have released \$450,000,000 of funds formerly held as reserves. (Authority, First Annual Report, Federal Reserve Bank of New York.)

B. The change of requirements in June, 1917, is harder to estimate because of war conditions then prevailing; also because of the element of vault cash, which was no longer to be counted as reserve. Many banks now keep only 3 per cent of their deposits or less as vault cash.

C. Comparison between the present requirements upon members of the Federal reserve system and those upon national banks under the national bank act, however, are as follows:

1. Because of pyramided reserves—country banks to reserve city banks to central reserve city banks—the increase of \$100,000 of gold or lawful money would be the basis for an average increase of about \$800,000 in loans and deposits. (Authority, W. M. Persons, Harvard Review of Economic Statistics, January, 1920.)

2. A deposit of \$100,000 of gold or lawful money in a member bank, and by it deposited in a Federal reserve bank, will permit an increase on the average of a little more than a million dollars in loans of a member bank. This figure assumes that \$3 of notes are required for every \$2 of reserve deposits, which has been about the normal or average relation thus far. (Authority, W. M. Persons, Harvard Review of Economic Statistics.) The potential expansion in country banks is larger than in city banks because of the smaller reserve requirements, and figures out as follows for each \$100,000:

Central reserve cities, about.....	\$1,000,000
Reserve city banks, about.....	1,300,000
Country banks, about.....	1,800,000

The figure for country banks was arrived at as follows: For every \$5 of gold deposited by a member bank with a Federal reserve bank, \$3 is likely to be withdrawn in Federal reserve notes and \$2 is likely to be used as reserve against the deposits of the member bank. The \$3 of gold will act as reserve against Federal reserve notes amounting to \$7.50, because its 40 per cent reserve requirement permits it to expand two and one-half times; the \$2 of gold will act as reserve against the reserve deposits of member banks, amounting to about \$5.70, because its 35 per cent reserve requirement permits it to expand nearly three times; and that \$5.70 will act as reserve against deposits in member banks amounting to \$80, because their 7 per cent reserve requirement permits them to expand about fourteen times; making a total of about \$90, which multiplied by 20,000 (the number of times \$5 is contained in \$100,000) gives \$1,800,000.

NOTE.—For purposes of illustration the variable element of vault cash has been ignored.

D. Owing to the flexibility of the reserve system a loan by a reserve bank to a member bank adds to its reserve deposit in exactly the same way as though gold had been imported and deposited by that member bank, and it may expand upon it in just the same way. The determining factor as to how long such loans may go on is the stock of gold which the reserve bank has, and which it may itself use as the basis for its own expansion.

IV. THE ELEMENT OF TIME DEPOSITS.

A. Under the national bank act reserve requirements against time deposits were the same as against demand deposits—25 and 15 per cent. Under the Federal reserve act as amended the reserves required against time deposits are only 3 per cent. Naturally this resulted in as much shift as possible to the time classification, and also encouraged the building up of savings departments in National and State member banks. This increase has been larger outside of New York City than in it. For New York Clearing House banks the proportion of time to demand deposits increased from 4.7 to 6.2 per cent since 1914. The following table shows the change throughout the country from 1914 to 1920; the percentages are the relation that time deposits bear to individual demand deposits:

District.	1914	1915	1916	1917	1918	1919	1920
1. Boston.....	13.2	13.7	17.1	20.6	18.5	22.9	31.2
2. New York.....	5.4	8.4	11.9	12.6	11.8	17.5	22.9
3. Philadelphia.....	23.6	26.7	30.5	35.4	35.2	37.8	48.0
4. Cleveland.....	31.5	32.3	33.7	36.3	35.8	39.6	43.9
5. Richmond.....	35.8	37.5	43.1	43.1	39.2	48.0	59.9
6. Atlanta.....	29.2	29.9	32.3	31.6	33.1	34.9	50.9
7. Chicago.....	29.9	31.5	32.8	38.7	36.1	39.1	48.6
8. St. Louis.....	33.3	32.6	33.1	28.3	26.1	29.1	39.5
9. Minneapolis.....	69.5	63.1	70.9	70.5	67.1	76.2	94.9
10. Kansas City.....	26.6	24.7	24.7	26.2	26.6	26.4	33.1
11. Dallas.....	12.6	13.5	11.9	11.4	13.3	11.6	18.3
12. San Francisco.....	24.3	26.9	29.0	30.5	29.1	30.8	38.6
All.....	22.6	22.8	25.9	27.2	26.1	30.4	38.2

V. THE ELEMENT OF INCREASED EFFICIENCY OF CREDIT.

A. Federal reserve bank clearing facilities have cut down the time of collecting checks about one-half. The increase in the use of these facilities is shown in the following table for the New York reserve bank:

Date.	Average number of items handled per month.	Average amount per month.
1915.....	180,316	\$191,000,000
1916.....	570,114	430,000,000
1917.....	1,617,348	1,675,000,000
1918.....	2,945,800	3,548,000,000
1919.....	6,205,326	4,712,000,000
1920.....	7,283,035	4,610,000,000
1921 (January to May).....	7,983,226	3,424,000,000

B. Federal reserve system wire transfer facilities have permitted immediate movement of funds without cost to the transferring bank throughout the country by telegraph. The growth in the use of these facilities is shown in the following table, giving figures for the New York reserve bank:

	Number.	Amount.
1916.....	2,971	\$485,000,000
1917.....	10,302	6,788,000,000
1918.....	39,099	19,394,000,000
1919.....	82,321	18,245,000,000
1920.....	147,302	17,022,000,000

C. Physical shipment of currency has been almost eliminated between Federal reserve districts and much reduced within them.

VI. THE ELEMENT OF STATE BANK DEPOSITS WITH MEMBER BANKS, AND THEIR USE OF FEDERAL RESERVE NOTES AS RESERVES.

A. Nonmember State banks may still, as prior to the Federal reserve act, deposit a portion of their reserves in other banks, which frequently are members of the Federal reserve system. This constitutes a further element in expansion, because the reserve deposits so maintained are not in cash but in turn have only a relatively small reserve kept against them at the reserve bank.

B. No member bank, of course, can use Federal reserve notes as reserves, but nonmember State banks may so use them. This is an element of considerable additional expansion, because they are using an instrument created largely by credit to provide security for deposits which may represent a further extension of credit. It causes also an artificial expansion of the Federal reserve note circulation.

C. A partial offset to the expansion of credit caused by the use of Federal reserve notes as reserves for nonmember State banks lies in the very large exports of reserve notes during 1920. The following table shows the amount of currency, largely Federal reserve notes, which returned from abroad to New York City banks in the first four months of this year, and suggests the volume which went out in 1920:

Country.	Imports.	Exports.
Europe.....	\$35,121,251	\$105,188
Mexico and South America.....	1,773,062	1,355,000
Cuba and West Indies.....	12,257,779	9,684,500
Canada.....	2,318,662	20,000
Asia.....	687,239	.....
Africa.....	86,766	.....
Australia.....	3,690	.....
Country not reported.....	3,405,192	12,000
Total.....	55,653,641	11,176,686

It is to be noted that the shipments to Cuba in 1921 were nearly as large as the imports; in addition, however, \$22,500,000 was shipped to Cuba by the Federal reserve bank of Atlanta for the account of New York City banks. In the first quarter of 1920 at least \$40,000,000 of currency went from New York to the West Indies.

VII. SUMMARY.

A. The general mechanics of expansion have been discussed from the theoretical standpoint. The following takes into consideration the figures for June 30, 1914, and compares them with the latest available figures for all banks in the country, member and nonmember:

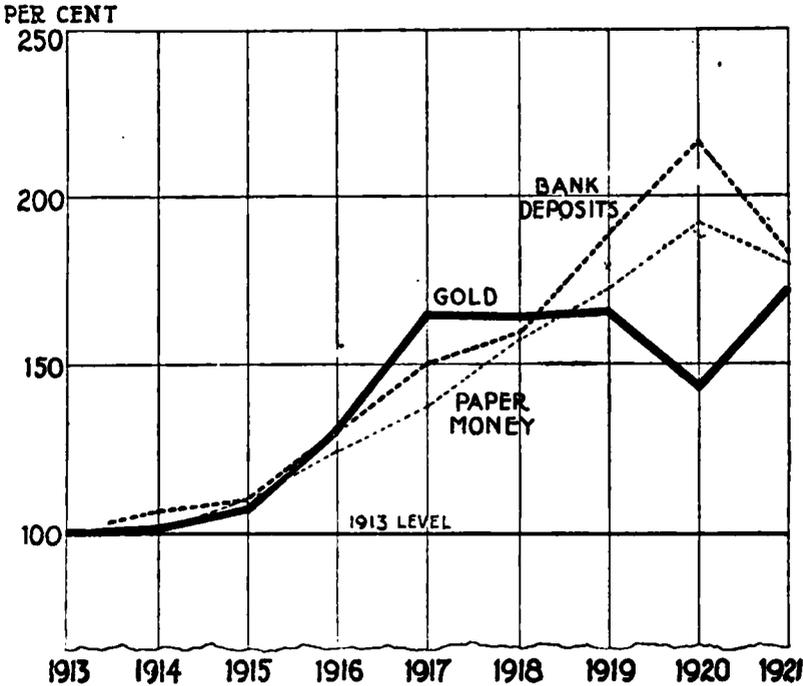
[Amounts in millions of dollars.]

	Loans and discounts of all banks.		Deposits of all banks.		Stock of monetary gold in country.		Ratio stock of gold to deposits.
	Amount.	Per cent. increase from 1914.	Amount.	Per cent. increase from 1914.	Amount.	Per cent. increase from 1914.	
June 30—							
1914.....	15,340	.....	18,588	.....	1,801	.....	10.0
1919.....	25,396	65	33,212	79	3,112	65	10.7
1920.....	31,365	104	37,830	103	2,708	43	14.0

Gov. STRONG. Since January, 1915, the country's stock of monetary gold has increased \$1,408,000,000, or 77 per cent. The figures which I have, taken from the Treasury Department reports, show that the stock of monetary gold on January 1, 1915, was \$1,816,000,000. Of that amount on that date \$241,000,000, or 13.3 per cent, was held by the Federal reserve banks.

Coming down to January 1, 1919, this stock of gold had increased to \$3,080,000,000. Of that amount \$2,092,000,000 was held by the reserve banks, being 67.9 per cent of the whole.

On July 1, 1921, the stock of monetary gold was \$3,223,000,000, of which \$2,462,000,000 was held by the Federal reserve banks, being 76.4 per cent of the whole.



STOCK OF GOLD IN THE UNITED STATES, BANK DEPOSITS, AND PAPER MONEY.

Estimated total stock of gold, total deposits of all banks, and amount of paper money in circulation on July 1 of each year. Figures for 1913=100 per cent.

Source of information: Annual reports of the Treasury Department, United States Circulation Statements, Comptroller's Reports on Condition of National Banks.

There is no ground for criticizing this development. The reason why the gold passed into the reserve system is simple. During the war the member banks were encouraged to turn it in because we needed it, or we felt we would need it—

Representative SUMNERS. How did you encourage them to do that?

Gov. STRONG. We went right to them and asked them to do it, to turn it in. To explain in a little more detail, we paid the cost of shipping it, which was a considerable consideration to them.

Representative SUMNERS. I am glad you are making those explanations, because I do not think the average American knows what is meant by buying gold, and does not understand why it is that gold is at one place at one time and gets to be at another place at another time.

Gov. STRONG. It does not move around much now, sir; it stays pretty much at one place.

Representative SUMNERS. Are there any influences now in operation tending to pull it out of your vaults?

Gov. STRONG. Well, to some extent. During the war there was a very considerable sentiment, created I think by the management of the reserve banks, that economy in gold could best be effected by depositing it in the reserve banks. We fostered that feeling, and we in a measure anticipated the possible need of that very thing by watching the experience of other countries. I was in France, as it happened, when the Bank of France made the appeal to the peasants of France, and saw their gold flowing into the bank. It was the best preparation for possible participation in the war to have that gold handy where it would serve to support an expansion if it had to come.

Representative SUMNERS. This gold that has come to America from Europe—has any considerable amount of your own notes gone to Europe in return for the gold which has come here?

Gov. STRONG. It has not gone in exchange for gold. The notes which have gone to Europe—speaking of continental Europe—are largely notes that have been taken out by travelers going abroad, those who were returning to their old homes, and who had confidence in the American currency. A very considerable part of it has been shipped to countries like Cuba and Chile and Mexico and other South American countries, for various reasons. As you know, American currency is legal tender in Cuba.

Representative MILLS. Is it the fact that the entire gold supply is held in the vaults of the Federal reserve system?

Gov. STRONG. Of the United States? No; the figures show that at the present time 76 per cent of the monetary gold is.

Representative MILLS. Has that percentage varied very materially in the last two years?

Gov. STRONG. Giving the percentages, on January 1, 1919, it was 67.9; January 1, 1920, it was 74 per cent; January 1, 1921, it was 74.1 per cent; July 1, 1921, it was 76.4 per cent. The period of great increase was from January 1, 1915, to January 1, 1919, and that included the period when we were gathering in the gold that was in bank reserves and in circulation throughout the country.

Representative SUMNERS. What proportion of the world's gold do we now hold, in your estimation?

Gov. STRONG. About 40 per cent, Congressman; possibly a shade more. The estimate that I have seen recently—and I am quoting very roughly from memory—is that the stock of monetary gold of the world is in the neighborhood of \$9,000,000,000.

Representative SUMNERS. How much more of the world's gold do we have now than we ordinarily have?

Gov. STRONG. That is a hard question to answer, also. The increase in our gold holdings has been a natural and an inevitable one. It is the result of the pressure to find American exchange to

buy things here and to pay debts here. A very significant thing has taken place the world round. Gold has drifted, or been drawn from general circulation as a result of Government mandate, or as a result of policy as in the case of this country, into the central banks. Speaking again roughly from memory, I think the Bank of England to-day holds about three times as much gold as it customarily held before the war. Even in Germany, with the enormous amounts of gold which Germany has shipped out of the country, I think the figures for the Reichsbank to-day show that they still hold nearly as much gold as they customarily did before the war.

Now, when we speak of how much we hold in excess of what we should hold, I think to answer that question we have got to examine into the possibilities and policies looking toward a return to specie payment in Europe, and that is again a question that can only be answered by the unfolding of the future. We should not hold this excessive gold in this country to any such extent as will delay the restoration of specie payment abroad, but they can not get gold from us so long as the exchanges are adverse to them, because taking out gold under the present conditions represents an absolute monetary loss to the bank or the Government which comes here and buys it and takes it away.

Representative SUMNERS. Are they going to continue to yield to the temptation to take the monetary profit by letting their gold come here? Or would you like to venture an opinion on that?

Gov. STRONG. I think, sir, it depends altogether upon the urgency with which demands are made upon them to pay debts in this country. In general, I think it is fair to say that the drift of gold to this country is latterly made up largely of the new production of gold from the mines of South Africa, Australia, and other parts of the world, and it can not help coming here so long as exchange is in its present condition. It goes where it realizes the greatest value.

Representative SUMNERS. I realize that is a little aside from the matter of inquiry.

Representative TEN EYCK. One question along that line. Under those conditions in what way would the European nations pay off their debts?

Gov. STRONG. I hope you will permit me to deal with that later, Congressman Ten Eyck. I am going to venture upon making some suggestions upon some of those matters—however, with some diffidence.

Representative SUMNERS. I hope I have not led you too far afield in my questions.

Gov. STRONG. The present importations of gold which originally come to this country consigned to the banks—in some part to us, but principally to the banks—are immediately turned over to us if they do not go into the Treasury (in which event we also get them), because gold does not count as reserve in the vaults of a member bank any more; all of their reserve must be deposited with us, and consequently it naturally comes to us.

Representative MILLS. That was one of the means you used to force the gold from the member bank into the reserve bank, was it not?

Gov. STRONG. Yes, sir; by the amendment of June, 1917. And of course when that gold is deposited in the reserve bank it becomes useful or remains useful for all purposes as monetary gold—as reserve,

as currency, as a means of settling interdistrict debts, and exchanges of the 12 reserve banks. We are also the principal source of supply of gold now for the arts and manufactures in this country. The banks that have the accounts of jewelers or other users of gold can get gold certificates from us and then take them over to the assay office and get gold bars.

Gold will support expansion in proportion to its utility as reserve money. I shall not go into an elaborate explanation of that fact, but will be glad to introduce a table into the record, if you desire me to do so, to show that under the old system before the Federal reserve act was passed, \$100,000 of gold imported into the United States and deposited in a bank in a central reserve city like New York, where the 25 per cent reserve requirements applied, in a short time would be multiplied into \$300,000 of bank loans and \$400,000 of bank deposit liabilities. By a very simple little table I could explain that, I think. That is the explanation of expansion and the power of gold under the old national banking system. (See p. 628.)

Now, under the Federal reserve act the same thing takes place, but possibly to a greater extent. Under the national bank act national banks were required to maintain reserves against net demand and time deposits in central reserve cities of 25 per cent, all in their vaults; in reserve cities, 25 per cent, one-half in their vaults and one-half on deposit in banks in central reserve cities; country banks, 15 per cent, 6 per cent in their vaults and 9 per cent in their reserve bank account. The State bank requirements for reserve varied greatly.

Under the Federal reserve act these requirements were reduced, first, to 18, 15, and 12 per cent, only a portion deposited with the reserve bank, and the balance they were permitted to keep in vault or with their old correspondents. Time deposits required 5 per cent reserve, divided between the reserve bank, the bank's own correspondent, and its own vault.

Then a further change was made June 21, 1917, when the reserve requirement of the Federal reserve act reduced this to 13 per cent in central reserve cities, 10 per cent in reserve cities, and 7 per cent in the country banks, with the reserve against time deposits 3 per cent in all classes.

Now, without attempting to produce an analysis of the effect of these changes, let me say that the change in the reserve requirements when the Federal reserve act was first established is estimated to have released \$450,000,000 of reserves. You will find such an estimate in the first annual report of the Federal reserve bank of New York. The change in the requirements in June, 1917, is most difficult to estimate and we have not calculated it. The theory of that amendment was, as I recall, that it was assumed that all member banks would be under the necessity of carrying a certain proportion of vault cash to make up pay rolls, etc., which would be about 3 per cent. Adding that 3 per cent to the new reserve requirement, it did not involve a great reduction in the reserve. Figures could be made to show what it did involve. I think probably it resulted in some reduction in the required reserve.

Representative SUMNERS. Will you later discuss the effect of that upon values and commerce?

Gov. STRONG. As a whole, yes, sir; not those specific changes.

Now, the comparison between the present requirements upon the members of the Federal reserve system and the national banks before the reserve system was established can be explained in this way. Because of pyramided reserves—that is, a given bank depositing reserves in reserve city banks and central reserve city banks, and the reserve city banks in the central reserve city banks—the theoretical increase which \$100,000 of gold or lawful money permitted, taking all types of banks, would be an increase in loans and deposits roughly of about \$800,000. The authority for this statement you will find in a study made by Prof. W. M. Persons, in the *Harvard Review of Economic Statistics* of January, 1920.

Representative MILLS. That is, under the Federal reserve system?

Gov. STRONG. Under the old system, the national bank act. Under the present system the deposit of \$100,000 of gold or lawful money in a member bank and in turn deposited, as now takes place, in a reserve bank, will permit an increase on the average of about \$1,000,000 of loans or deposits of member banks. This figure is based upon the assumption, which has held fairly well so far, that credit is expressed in the proportion of about \$3 in notes to \$2 in reserve bank deposits. This is also the result of Prof. Persons's study.

Now, the potential expansion in country banks is, of course, correspondingly larger than in city banks where the reserve requirements are higher—

Representative MILLS. Are you speaking in Prof. Persons's figures of the member banks only?

Gov. STRONG. I am speaking only of the member banks.

Representative MILLS. You are not taking into consideration what it permits once you have deposited these reserves with the Federal reserve bank?

Gov. STRONG. This is the theoretical calculation of what would be permitted under the reserve requirements of the Federal reserve act, which do not apply to State banks that are not members of the Federal reserve system and which vary very greatly, according to the States.

Representative MILLS. I am asking the question because I was under the impression that the expansion was much greater.

Gov. STRONG. I think, in fact, it would be found to be so if we could make a calculation which would include all of the banks. This being confined to the 10,000 banks in the reserve system, it is based of course upon the reserve requirements which apply to all of those banks.

To illustrate the expansion in its most extreme form—that is, the influence of \$100,000 expanding entirely upon the basis of country bank reserve percentages—we find that it works out, according to figures which we have made ourselves and which have been carefully checked and which we believe to be accurate, to be about \$1,800,000. I shall not go over the calculation here; it was made by some of our own men who make up these figures, and, I think, carefully and accurately made, and then checked by the statistician of the Federal Reserve Board. It shows that \$5 in gold will multiply to a total of

about \$90. Multiplying that by 20,000, to raise it to \$100,000, produces \$1,800,000.

Representative MILLS. Those are the figures I had in mind.

Gov. STRONG. It works out roughly this way: Central reserve cities, about \$1,000,000. Reserve city banks, about \$1,300,000. Country banks, about \$1,800,000.

Representative MILLS. But the average was very nearly fourteen times, was it not? About 14 to 15?

Gov. STRONG. Prof. Persons's figures say about eleven times, confining it to banks whose reserve requirements are those of the reserve act. With country banks I have no doubt it would be much more than that.

The CHAIRMAN. That expansion represents loans, discounts, and deposits?

Gov. STRONG. Yes, sir; both sides of the account, but this figure here which I have quoted is the figure of deposits. If put on a chart the two would correspond pretty closely.

It is a fact that under the theory of the Federal reserve system the same effect is felt upon the expansion of credit if the Federal reserve bank makes a loan of \$100,000 as would be the case if \$100,000 of gold were imported from Europe; that is to say, if a member bank puts \$100,000 of new reserve money in the shape of gold in the reserve bank, no different train of development is started than when the Federal reserve bank makes a loan, which is the equivalent of a reserve deposit for that member bank. The effect is just the same so far as expansion is concerned.

Representative MILLS. I know you do not want to go into too much detail, Governor, but it seems to me that in view of Mr. Williams's statement as to the unused credit that was available and is available to-day, it would be a good thing if you would sketch very briefly how you reach those figures.

Gov. STRONG. I am coming back to Mr. Williams's statement.

Representative MILLS. I mean on this particular point, how you reach, for instance, an average of 12 times the \$100,000 in gold. It is rather a simple calculation, is it not?

Gov. STRONG. The figures are all set out here in this document. They are all set out here on the basis of \$5.

Representative MILLS. Are you putting that in the record?

Gov. STRONG. I am putting that in the record; yes, sir.

Representative MILLS. Then I will withdraw the question.

Gov. STRONG. I did not complete my statement about the comparison between the \$100,000 of gold and the \$100,000 loan, and some of my economist friends will get after me if I do not finish it. The only difference is this, that where gold is imported and added to the reserve system you increase the base upon which this expansion is erected. Where you make a loan you are expanding your loans and deposits upon the same base, and consequently you reduce your reserve percentage in the reserve system. Assuming that the amount of gold in the reserve banks is constant, the expansion of course reduces our reserve percentage, but during this period when gold has been flowing into the reserve banks we have maintained our reserve percentage at a much higher figure than it would have been had we not had this accession of gold.

Representative SUMNERS. Let me see if I can put this myself in plain language that I can understand. When the \$100,000 is brought here and put into the vaults of the Federal reserve bank, you create a basis then for credit?

Gov. STRONG. Yes, sir.

Representative SUMNERS. Now then, when you loan that \$100,000 you put into operation the credit for which the gold constituted a basis?

Gov. STRONG. Yes, sir. We do not touch the gold; the gold goes into the vault and is locked up.

Representative SUMNERS. You leave the gold there, and send out your notes to do the same work that the gold would have done had it gone out?

Gov. STRONG. If you will permit me to give you an illustration, I will tell you exactly what happens. A manufacturer goes to a bank which is a member of the Federal reserve system to borrow \$100,000. That member bank, because of that and other transactions which result in an impairment of its reserves, goes to the reserve bank and borrows \$100,000 from us. The reserve bank gives the member bank a credit of \$100,000, and in turn the manufacturer receives a credit of \$100,000. Now, a little later the manufacturer wants to use that money, one-half of it to pay a bill and one-half of it for a pay roll. He goes to the member bank and gets \$50,000 in currency. The member bank comes to us and gets \$50,000 in Federal reserve notes. By that step \$50,000 of bank deposit currency has been converted into \$50,000 of bank note currency. That is in brief the way in which the credit of the Federal reserve system is distributed in the two forms of bank deposits and bank notes. The expansion which takes place in the credit of \$100,000 which we have extended has in a sense already taken place when we grant the credit.

But, expressing the loan that I referred to in a little different form, suppose the manufacturer borrowed \$100,000 from the member bank, and that is the only transaction which the member bank has that affects its reserve. It had no other business that day. Consequently when it gave the manufacturer a \$100,000 loan it added \$100,000 to its loans among its assets and \$100,000 to its liabilities—a deposit liability. Against that deposit liability it had to make a reserve, in the case of a New York City bank, of \$13,000. So instead of discounting the entire amount of \$100,000 with us, theoretically the member bank would come to us and borrow \$13,000, just enough to make good its reserve. And that is exactly what happens. The expansion which is afforded by the Federal reserve system follows the expansion which originates in the member banks.

Now, a last word on the power of expansion of the Federal reserve system. Of course the determining factor under the statute, aside from questions of policy as to how long the Federal reserve bank may go on making loans, the limiting and determining factor under the statute, is the amount of its reserve in proportion to the amount of its liabilities; that is, whether its reserve becomes impaired. If you will permit me to leave the discussion of gold for just a minute at this point, that is where the rate comes in. What control can be exercised over this volume of credit under such a system as we have, where we can manufacture credit just as fast as the demand arises—what control can we exercise except the control of the rate?

I mean in normal times, leaving out the influence of a great war where military necessity is an influence.

Representative MILLS. Now you have made a statement there that we can manufacture credit as fast as necessary. That is, assuming gold is available?

Gov. STRONG. We can manufacture credit, assuming that the demand for the manufacture of credit exists.

Representative MILLS. And that the gold is available?

Gov. STRONG. And that the gold is available as a base for the credit.

The point that I wish to bring out is what distinguishes the Federal reserve system in some respects from the English banking system, which I take simply as typifying almost the other extreme of a banking system which permits of the issue of bank notes. What I am going to say is not any criticism of the Federal reserve act. I think that in many ways it is much better adapted to the needs of this country than the system of the Bank of England might be. But I am not sure about it. We, unfortunately, have only had experience in the operation of the reserve system in abnormal times when the influence of the war and the postwar period overshadowed everything else. We have no means of judging how this great machine will work in normal times, and I personally would deprecate experimenting very much until we have more knowledge of how it will work in normal times. But I do want at this point to bring out in sharp contrast the two principles that apply to the making of rates by a comparison of the Federal reserve system and the Bank of England.

In the Bank of England, as you know—and I am speaking of its normal operations in time of peace—when an expanded condition arises, when business becomes active, employment is pretty general, and there is a large production of goods and a large volume of trade and possibly some speculation, increasing demands for credit arise, and that credit to some extent must be expressed in the currency of the country, which is bank notes. The proportion will vary somewhat, but assume it is \$3 of notes to \$2 of reserve deposits, as I have stated here.

Now, when demands are made upon the Bank of England for note currency those notes are issued by the banking department of the bank, and as they are paid out they directly reduce the gold, so to speak, because the notes are only issued by the issue department against gold. They directly reduce the reserve of the banking department. The Bank of England can not, under their old system, meet a demand for credit expressed in the form of notes by simply printing notes and putting commercial or banker's bills or some other kind of loans behind the notes and thereby reducing the reserve. They actually pay out their reserve money. That is reflected at once and directly and in a much greater proportion upon the reserves held by the Bank of England than a similar development is reflected in the case of the reserve system. As demands for credit arise and that credit is converted into bank notes we pay out those notes which the deposit of our commercial paper and loans secures; we increase the volume of notes, but do not pay out our reserve; we keep the reserve.

In discussing this with students of these matters I think you will find that in the last analysis it comes down to this, that in the case of a system such as that of the Bank of England action upon the bank rate becomes mandatory and imperative to a greater degree than it does in the Federal reserve system. With them it is a matter of necessity to protect their reserve. With us it is more a matter of human judgment and policy.

Representative MILLS. Is not their system much less flexible?

Gov. STRONG. Very much less flexible.

Representative MILLS. And did they not have to suspend the operation of their system right at the start of the war?

Gov. STRONG. As a matter of fact, the bank act was not suspended in England at that time, Mr. Mills.

Representative MILLS. But they got around it though?

Gov. STRONG. What they did was to create a new currency which met the demand.

Representative MILLS. It was nothing but Government paper.

Gov. STRONG. Government paper. The currency notes of England are not the same as the greenbacks which we issued during the Civil War. In the first place, they have a gold reserve behind them of 28,500,000 pounds sterling. Further than that, they put actual existing issues of Government bonds behind those notes as security.

We never did that with our greenbacks during the Civil War, and until, I think, President Cleveland's administration, we never had a gold reserve behind them. But they did put a gold reserve behind their currency notes, and they put a security behind them which consists principally of interest-bearing bonds of the British Government and of cash balances with the Bank of England, including recently Bank of England notes.

Representative TEN EyCK. Does the English system automatically contract the same as our reserve system?

Gov. STRONG. It contracts automatically; yes; and I should say more directly than ours does. When a recession in demand for credit takes place by reason of a recession in trade the tendency is for the notes to flow back into the bank and the result is a direct increase in the reserve percentage.

Representative TEN EyCK. Could the other banks keep those notes out?

Gov. STRONG. They could, but it would not be profitable for them to do so. They would be a noninterest-bearing asset in their vaults.

Representative TEN EyCK. Under our system they could not keep them out when they paid off their loans, could they?

Gov. STRONG. Under our system the contraction which takes place in such a period as this is shown graphically on this chart. [Indicating.] (See p. 534.) You will see the way our note issue is coming down. That is due to the fact that the notes are no longer needed in circulation, and we have 12 points where they come in automatically.

Representative TEN EyCK. I understand, but under the English system the notes that they issue could be kept out, could they not?

Gov. STRONG. Well, ours could be, but those matters are governed by the law of supply and demand and the desire to make a profit. People pay their debts; they do not want to keep paying interest when they have bank notes in the till.

Representative SUMNERS. Generally, for each one of your notes that is out somebody is paying interest?

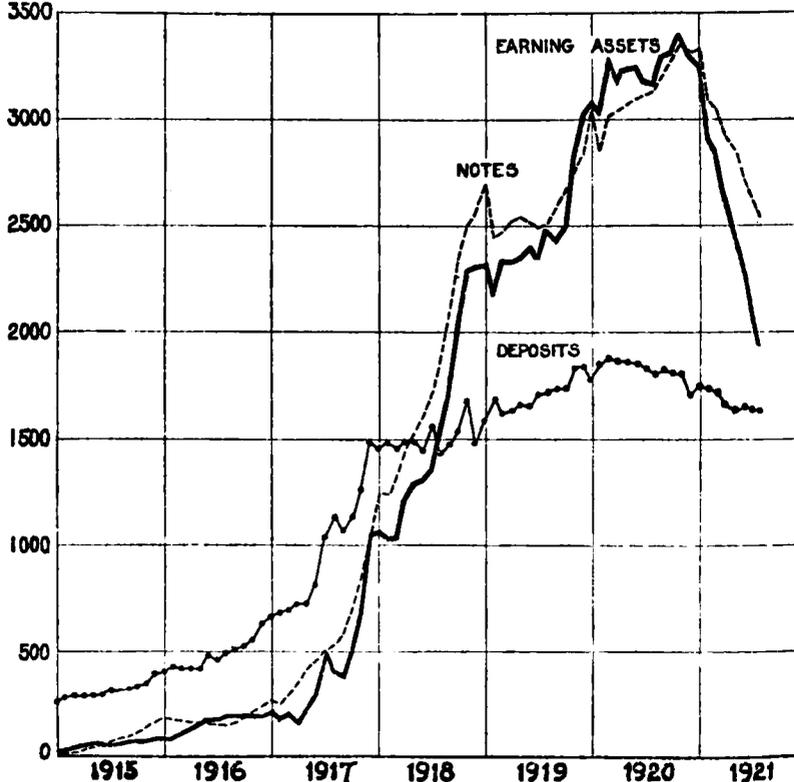
Gov. STRONG. Not absolutely, sir. Those which were issued in response to a demand for credit are of that category. Those that were issued against gold are not, and of course many of our notes are issued against gold.

Representative SUMNERS. I am speaking with regard to those that are issued in response to a demand for credit.

Gov. STRONG. Somebody is paying interest on them.

Representative SUMNERS. And do they not want to get them back as soon as they can?

MILLIONS
OF DOLLARS



EARNING ASSETS, NOTE CIRCULATION, AND MEMBER BANK RESERVE DEPOSITS, ALL FEDERAL RESERVE BANKS.

Figures plotted for the last report date of each month.

Source of information: Annual reports of the Federal Reserve Board, Federal Reserve Bulletin, and weekly press statements.

Gov. STRONG. Yes, sir; that is the fact.

Now, there is another element of expansion which has not entirely escaped observation, and it is pretty important. Whatever may be the influence that is bringing it about—probably the influence of profit, again—there is a very marked tendency among the member banks to bring about a change in the classification of their deposits so that what might ordinarily be considered as demand deposits,

requiring reserves of 13, 10, or 7 per cent, according to the classification of the bank (whether central reserve, or reserve city or country bank), are being transferred to time deposits, probably savings deposits, in many cases, which only require a 3 per cent reserve. I have tables here prepared for the years 1914 to 1920, divided by Federal reserve districts, expressed in percentages, showing the relation that time deposits bear to individual demand deposits. Let me point out the extent to which these have been increasing. (See p. 523.)

In 1914, in all Federal reserve districts, the proportion of time deposits to individual demand deposits was 22.6 per cent. By 1920 the proportion had risen to 38.2 per cent. That is a considerable element of expansion. It means that an increasing proportion of the deposits of the member banks now require only a 3 per cent reserve instead of 13, 10, or 7, according to the class of bank in which the deposits were made.

Representative SUMNERS. Governor, from the standpoint of good banking, is there any considerable difference between the reserve requirement for time deposits and those that are required for bank deposits? Do I make myself clear?

Gov. STRONG. I think so.

Representative SUMNERS. Is 3 per cent reserve for time deposits as safe as 13 per cent for demand deposits?

Gov. STRONG. It is difficult to answer as to banks in the West; I have not had enough experience there. But, as you know, most banks throughout the rural sections of the country have savings departments of some sort or other. They issue little pass books containing a contract in one form or another which requires a 30 days' notice for the withdrawal of the deposit. That is one large class of deposits of the character I am referring to. Another class are the time certificates of deposit which are issued for fixed periods of 30, 60, or 90 days, or for a period requiring notice of 30 days or more. They are issued principally by the larger banks in the big cities to people who have money awaiting investment.

The requirement of 3 per cent reserve in some cases, I think, might be adequate and in others insufficient, and the determination of whether it was adequate or not would depend entirely upon the kind of investment that is made of that deposit. Let us suppose, for instance, that there are two banks in the same town doing exactly the same kind of business and of the same volume. Suppose that one bank has the entire amount of these savings deposits invested in bills or other paper eligible at the Federal reserve bank, and that the other bank has its savings deposits entirely invested in mortgages on real estate. The first bank would be in a position to meet any demand by the depositors for currency by going to the Federal reserve bank and discounting that paper. The other bank which has those deposits invested in mortgages would, of course, require more time in order to get advances or to convert those mortgages in order to meet withdrawals by the depositors.

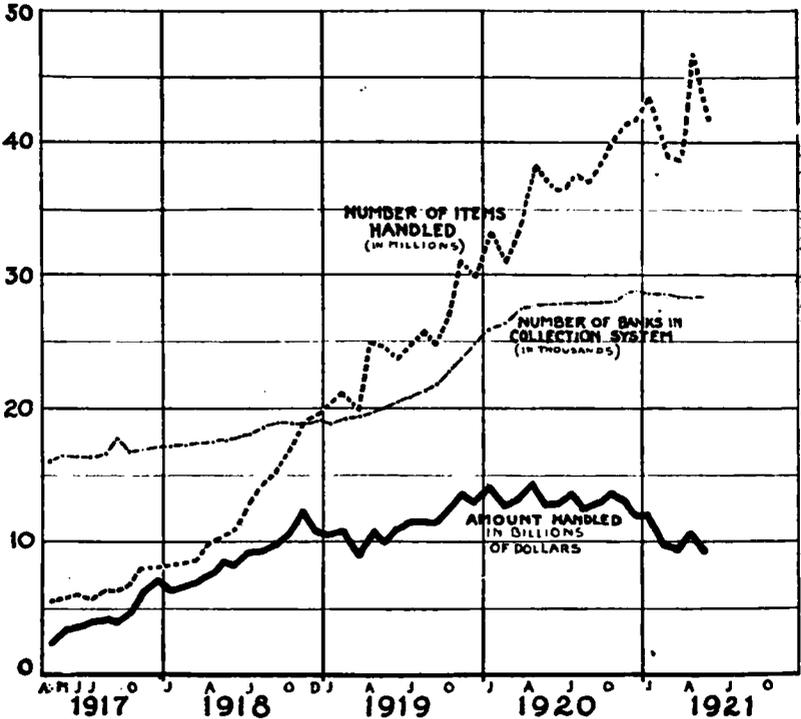
I introduce that simply by way of illustration, not to comment upon the wisdom or unwisdom of making one or another kind of investment. I am drawing the commission's attention to that development because I understood some discussion on these elements of expansion would be of value.

Now, there is the element of increased efficiency of credit. That is a rather abstruse matter, but I can point out at least two functions

of the reserve system which certainly are developing greater efficiency in the employment of credit.

Take our check collection department. The Federal reserve bank of New York, as with all other reserve banks, has probably reduced the time that it takes to collect checks and get them settled and transferred to the reserve balance of the bank which owns those checks, by pretty nearly one-half. That certainly is making credit operate more efficiently.

To illustrate the growth of that, in 1915 the average number of checks collected per month by the Federal reserve bank of New York was 180,000, and the monthly average amount was \$191,000,000. In



GROWTH OF THE CHECK COLLECTION SYSTEM OF THE FEDERAL RESERVE BANKS.

Number of items handled each month by the banks, number of banks in the collection system, and amount handled each month.

Source of information: Annual reports of the Federal Reserve Board and the Federal Reserve Bulletin.

1918 the average number of checks handled per month was 2,945,000, and the average amount of the checks, \$3,548,000,000.

In the year 1921 the average number of checks handled each month has been 7,993,000, and the average amount of checks per month, \$3,424,000,000.

Now, if we assume that shortening the time of collection makes the employment of credit more efficient, you can see the tremendous influence in the growth of this collection system which reduces the time to collect checks. It does have the effect of taking out of the reserve of our banking system a certain amount of checks which are in circulation uncollected and which formerly counted as a reserve.

Here is another item. As you know, the Federal reserve system has its own leased telegraph wires connecting all the reserve banks and their branches, and over this system of wires we make transfers of funds for member banks. That is an instantaneous payment instead of payment by check. In 1916 the number of wire transfers of that character that we made was 2,971 for the year, of an aggregate amount of \$485,000,000. In the year 1920—I am speaking simply of the reserve bank of New York—we made 147,302 such transfers, in the total amount involved of \$17,022,000,000.

Another element—I do not know whether it is an important one; I think it is probably very slight—is that we have eliminated to a very large extent shipments of currency throughout the country. Currency is furnished in the respective districts by the reserve banks, and shipped directly to the member banks, and the great tide of currency that used to flow back and forth during the crop-moving period has been almost eliminated.

A sixth element of expansion is that relating to the nonmember State banks. As I shall introduce this memorandum into the record in full I shall only point out this fact, that whereas Federal reserve notes can not be used as vault reserve by member banks—they never were allowed to use them as vault reserve, and there is now no requirement for vault reserve—the only point where Federal reserve notes can serve as an expanding element is where they are used by nonmember State banks as reserve in their own vaults. Of course, that does create a new element of expansion. When you consider that of the 30,000 banks in the United States 10,000 are members of the reserve system, roughly speaking, and 20,000 are not, and that those 20,000 represent something like 36 or 38 per cent of the banking resources of the country, you will see there is a considerable possibility of expansion there.

Representative SUMNERS. Speaking of expansion, may I ask you a question on that point? Suppose that 10,000,000 men in the United States have the habit of carrying around with them \$10 apiece, and they all change that habit and reduce the amount to \$5. What effect would that have?

Gov. STRONG. It would very much reduce the amount of hand to hand currency in the United States.

Representative SUMNERS. I understand, but would it release any currency for the general credit and trade purposes of the country?

Gov. STRONG. It would depend again upon the rate policy of the reserve banks. It would have the effect of increasing our reserve percentage, as would be quite obvious. If that change of habit on the part of 10,000,000 people resulted in \$50,000,000 of our notes being deposited in the reserve banks, as being no longer needed in circulation, the reduction of \$50,000,000 in liabilities by the reserve banks would increase our reserve percentage. It would increase our potential lending power. Whether it would be a relief or not in case credit was needed would depend upon our rate policy very largely; that is, upon whether it was made available.

I shall only call attention, in concluding this description of the note issue, to the fact that there has been considerable exportation of our note issue to other countries. I can not tell exactly how much. We sent a questionnaire on this subject to the New York City banks some time ago, and they reported that their records for four months beginning January 1, 1921, showed that there had been returned to

them from abroad a total of \$55,653,641, and that they had shipped abroad \$11,176,668. In addition to that, however, there was one shipment of \$22,500,000 that was sent to Cuba for the account of the New York City banks, and in the first quarter of 1920 at least \$40,000,000 of currency went from New York to the West Indies.

Now, a summary of the expansion of credits expressed in figures: In 1914, the amount of loans and discounts of all banks in the United States was \$15,340,000,000; the amount of deposits in all banks of the United States was \$18,588,000,000. And the stock of monetary gold in the United States was \$1,891,000,000. I should state that the stock of monetary gold bore the relation of one to ten of bank deposits in 1914.

Coming now to 1920, the amount of all loans and discounts of all banks on June 30—these figures here are \$31,365,000,000, an increase of 104 per cent over 1914. The amount of deposits of all banks on that date was \$37,830,000,000, an increase of 103 per cent. The stock of monetary gold was \$2,708,000,000, an increase of 43 per cent; and the stock of monetary gold compared with bank deposits was in proportion of 1 to 14, as against 1 to 10 six years earlier.

These figures have not been worked out for 1921, because the combined report of national and State banks is not yet available.

The CHAIRMAN. Do your figures show what the rate of increase of the banks was during that period? My recollection is that it was about 8 per cent.

Gov. STRONG. My recollection is that the rate of increase was, in normal times, about 6 per cent, Mr. Chairman. Of course, it has been tremendously more than that since the war started.

That statement has been made, in regard to the possibility of expansion, in order to get a better understanding, as I think is necessary, of the relation of expansion to the statement that I am about to make.

I would like to explain, if you please, what the New York money market is and its relation to our rates.

There are four or five important rates, so to speak, in New York which have a bearing upon the rates adopted by the Federal reserve bank of New York. I may review them briefly. The first of these is the rate at which commercial paper is sold in the market. A great many large borrowing concerns in the United States which have regular banking accounts where they can borrow money, find it desirable and possibly economical to sell their notes through brokers who make a specialty of dealing in such paper, and distributing them to banks that have surplus funds for investment. This paper is distributed throughout the United States generally, and is, to some extent, purchased by the larger New York City banks.

That is a rate for a commodity in the market which has an influence upon our rate, or should have an influence upon our rate, because it is one of those securities in which banks can invest their funds at a profit in case they are willing to borrow from us at a lower rate; they can do so if they are willing to do it. And it has a further effect on our rate—this commercial-paper market, so to speak, has an influence upon the New York market in this respect, that most of these large borrowers who sell their paper through brokers have bank accounts or connections in New York where they can borrow money direct at times when they can not sell their paper. And it has been the case recently that country banks and banks generally have

discontinued buying this paper because the demands of their customers have been so great that it left them no surplus money to invest in that way. Then these concerns which ordinarily borrowed on commercial paper had to go to their own banks and borrow money, and when they do go to their banks to borrow money, that indicates that the commercial-paper market is "shut up," as it sometimes is; rates then tighten up at once. And that has been one of the characteristics of this recent period.

Representative TEN Eyck. That paper is not discountable with the Federal reserve bank?

Gov. STRONG. Oh, yes; the great bulk of it is discountable with the Federal reserve bank. This paper is paper that conforms to the definitions of eligible paper in most cases.

And in this connection I want again to emphasize, as it comes into this line of discussion, the fact that there is practically no such paper in existence in the London money market. For instance, borrowings of that kind are made in England on overdraft account, and the habit of issuing commercial paper and selling it through brokers has not developed.

Now, another element in the New York money market is the bankers' bill or acceptance. That market has grown in importance. These bills represent, in greater part, the import and export of materials to and from this country and are such bills as I have referred to as being common in the London money market. Some of them are issued for the purpose of carrying commodities in storage. They are a commodity in the New York money market, and the rates for them are quoted.

Representative SUMNERS. Will you explain briefly for the record what a bill of acceptance is?

Gov. STRONG. One type is a bill that is drawn by an exporter of jute from India on a New York bank under a credit granted by the New York bank to an American importer, and it originally comes from India to New York with the documents attached—that is, the bill of lading, and the insurance papers, and so on. It is presented at the New York bank and the New York bank accepts it. It may be paid in 30 days, or 60 days, or 90 days.

Representative SUMNERS. It is akin to what we call in the interior a bill of lading?

Gov. STRONG. They are similar. It represents a movement of commodities. The rate applying to these bills is of course a rate which we have to regard in fixing our rate in New York.

Third, and for the moment a very important rate, is the rate at which the Government is borrowing on short certificates of indebtedness. But since about April or May of 1920, it has been more the market rate for the Treasury certificates of indebtedness, as distinguished from the bearing rate, because they are now actively traded in in the market, and sell on an interest basis, and as these may be used as collateral by the member banks at the Federal reserve bank, that rate also has an influence upon our rate.

A fourth rate which has much less influence than formerly, is the rate borne by the stock exchange loans. And there has been so much misconception of this stock exchange call rate that later in my statement, or perhaps now, I would like to read into the record, if you will permit me, a brief portion of an article prepared by Mr. George E. Roberts, I believe, formerly Director of the Mint, and now

connected with the National City Bank of New York, on call rates, which appeared in the publication of that bank some time ago. Quoting from a report of the former Comptroller of the Currency, which says [reading]:

The reports of all national banks of the United States as of June 30, 1920, as recently analyzed, show an enormous expansion in their holdings of mercantile paper and of discounts made on the strength of one or more indorsements, and in loans made upon warehouse receipts, etc., and a marked reduction in money loaned on bonds and stocks.

I was under the impression that the comptroller thought loans on stocks and bonds had increased, but apparently he said they had decreased. Commenting upon this, Mr. Roberts says [reading]:

This describes the change which the bankers accomplished during the year.

The date of this article is November, 1920 [reading]:

How was this withdrawal of funds from stock exchange use conducted? There are two ways of reducing the volume of loans: One is by peremptory action, refusing to renew, requiring debtors to repay forthwith; the other is by raising the interest rate. The former is a violent method liable to cause serious disturbance. The latter gives the borrower time to adopt a policy and make new arrangements. It was in the public interest that less capital should be employed in the call market and it was necessary that borrowers should adapt their affairs to this policy, but it was advantageous to them to be allowed to borrow from day to day even on high rates until they had adjusted themselves to the change. If they paid 25 per cent, they paid one three hundred and sixty-fifth of 25 per cent for one day, and were under no obligations to borrow for a day longer than they wanted to.

A reduction of the amount of money available inevitably causes a rise of rates unless the demand falls off. The borrowers themselves advance the rates by bidding to attract funds to take the place of what has been withdrawn.

A conference of farmers in session at Washington is reported to have passed a resolution condemning the New York banks for lending at such high rates because the effect was to attract money from the country where it was needed for loans to farmers. They did not understand that it was the withdrawal of funds for that purpose which made the high rates, or that if the New York banks had refused to lend at the rates named the rates would have gone still higher and the temptation to country bankers have been thereby increased.

The "renewal" rate upon call loans is the rate at which loans stand over to the next day, and is the rate which most of the call loans bear at any time. We give below the average renewal rate for each month beginning with October, 1919, and for comparison give another column showing average rates for 90-day loans on mixed collateral over the same period. There is no fixed rate on time loans corresponding to the renewal rate, but we have taken averages which are approximately correct. Attention is invited to the fact that from October to February, while loans were being reduced in volume, the call rate ruled above the time rate, and that since February the call rate has been below the time rate.

Now, these call renewal rates during these months are significant, particularly in view of the claim that these high rates have lured the money from the country to New York. The table is as follows [reading]:

Average rates of interest.

	Call loans, renewal rate.	Time loans, mixed collateral.		Call loans, renewal rate.	Time loans, mixed collateral.
October, 1919.....	7.42	5.98	May, 1920.....	7.09	8.00
November, 1919.....	10.43	6.30	June, 1920.....	7.50	8.00
December, 1919.....	8.09	6.30	July, 1920.....	8.39	8.35
January, 1920.....	8.61	6.88	August, 1920.....	7.26	8.70
February, 1920.....	9.86	7.98	September, 1920.....	7.06	8.47
March, 1920.....	8.13	8.48	October (22 days).....	7.52	7.79
April, 1920.....	7.43	8.33			

You will note that in February, 1920, the call-loan renewal rate was 9.86, and in March, 1920, it was 8.13, and from then until July, 1920, it never got as high as 8 per cent; in July, 1920, it was 8.39. For the 22 days in October before this publication was made it was 7.52. Now, those are the average rates, and during that entire period the average rate was 7.79.

I would also like to read a brief extract from the Wall Street Journal of July 29, 1921. [Reading:]

LOOKING BACK A FEW YEARS.

Wall Street should be thankful for the elasticity of the Federal reserve banking system. Much complaint was heard the country over anent the seemingly severe money rates following the end of the war or when speculation was rife and bank loans at their peak. Such critics should look back upon the rates charged Wall Street operators in the old days, before the Federal reserve system. In 1890 money loaned as high as 186 per cent; in 1892, 40 per cent; in 1893, 74 per cent; 1895, 100 per cent; 1896, 127 per cent; 1899, 186 per cent; 1901, 75 per cent; 1905, 125 per cent; 1906, 60 per cent; and in 1907, 125 per cent. In those days it was not uncommon for call-money rates to stiffen alarmingly toward the close of any one year, due to preparation for first-of-the-year bank requirements. Statistics show that most of the stiffness occurred at that time. However, in face of the gigantic World War, with the accompanying speculation and tight credit, under the Federal reserve system the highest rate for call money was 30 per cent, and that rate prevailed on one day only. Never before in the history of the country have call-money rates been kept on a more even keel, the disturbances created by the European conflict notwithstanding. The high rates in the old days were also the result of the Northern Pacific panic and the so-called tight-money panic. The country "weathered" those periods. How easy it should be under the new system to restore credit normality.

Those are not average rates, but high rates.

The CHAIRMAN. Those rates would not last but a day or two?

Gov. STRONG. For a few days. There were periods, in 1907, when they lasted quite a few days. I have not the average rates, so the only fair comparison is the comparison of the high rate which occurred in December, 1919, which was 30 per cent for only one day.

Representative SUMNERS. I understand the difficulty is in controlling these rates when somebody is willing to pay them, and somebody else has the money to loan; that, however, if extended for some time would have the effect of drawing money from other uses into that use?

Gov. STRONG. Well, sir, I wish I might give the commission a complete demonstration of what motives are at work. We can show what the figures are, but what the motives are that actuate those movements, I can only explain generally from my own experience; what I believe is a fair statement of the influences that have operated in these high call-money market rates of New York is something like this: You will find a good many studies on that subject in the Aldrich monetary commission report, and also in Prof. Kemmerer's study on that matter. This country being so largely agricultural, between the active seasons of planting and harvesting almost inevitably there develop midseason periods when the banks in the West have considerable sums of money which they can not loan. Because the bankers know the demand will come for the employment of these funds in planting and harvesting, that money seeks employment in the central money markets to earn interest during those periods of idleness. The interest allowed on New York Stock Exchange loans, when that flow of money is considerable, is usually very low. I, myself, remember when you could not loan money for 1 per cent. Then, when the money was withdrawn, as it was in the fall,

and we came into the period of low reserves of the New York banks, a different influence began to work. The money that went to the West, went anyway.

Those banks had good demand for it and at good rates, but as money moved up on the stock exchange in response to that withdrawal, a good many banks which kept money in New York for one purpose or another, and always did keep some money there, would write to their correspondents in New York to lend more of that money in New York, and I have always doubted whether the high rate was an attraction of money to New York, or whether the attraction had not been, on the other hand, to withdraw money from New York for use in the interior.

Now, I have some charts here which I think will show how this matter of the withdrawal of money will work out. (See pp. 545 and 546.)

Representative SUMNERS. Do we understand from your statement that the period of time at which money may probably be loaned at these high rates of interest is not sufficiently long, and the demand is not sufficiently certain for money to be turned away from the more permanent uses at lower rates to which it may be applied?

Gov. STRONG. Well, I will not attempt to deny that the New York money market—this call-money market—when rates are high, may not attract some money to New York. In fact, I think it does. If it does, it does no more than the natural law of supply and demand prescribes. This commodity goes to the point where it brings the biggest price.

Representative SUMNERS. And that is the very reason why it is insisted by many people that it does have that effect; that it goes there where there is a more profitable demand.

Gov. STRONG. Well, there are other influences at work now which make for higher rates in New York, which are the result of the Federal reserve system. And while it is a little out of place, and while I may be called upon to repeat, which I do not want to do, some things in this discussion, it seems I should mention them here. The influences which have been at work since April or May, 1917, present an entirely different situation in the call-money market in New York. The banks of New York City do not want to loan money on call in the New York Stock Exchange.

Representative SUMNERS. At these high rates?

Gov. STRONG. At any rate.

Representative SUMNERS. I wish you would make that very clear.

Gov. STRONG. I will attempt to do so.

Representative SUMNERS. I think you will need to do it.

Gov. STRONG. I have got the records here, Congressman, that are very convincing on that score. During this period of the war, when we were called upon by the Government to do an immense amount of financing for the Government, we were employing all our facilities to that end. The New York Stock Exchange loans can not be used to employ our facilities in that manner, and even if the New York Stock Exchange loans did offer higher rates for money, it would be much better to have the assets of a banking concern in the form in which they could be converted instantly at the Federal reserve bank. As I shall show you later, in order to maintain a stable market in New York; in order to avoid what we call a runaway money market,

required us at times literally to beg the New York banks to make loans on the stock exchange. And when I come to this so-called "money committee," the committee of which I was chairman, I will undertake to describe how that was done.

Representative SUMNERS. Did you undertake to use any greater coercion than the power of your persuasion?

Gov. STRONG. Well, sir, we brought about those arrangements by organization, rather than by persuasion; by getting the banks together, and organizing them and getting them to take care of the New York money market. It was a matter that was handled by us, and although I confess there is nothing in the Federal reserve act that suggests that we have anything to do with the call money market, yet, as fiscal agents of the Government, we were called upon to take care of those loans. When there were these calls for money from the New York Stock Exchange money market, then the rates for such loans would go kiting up, and seriously interfere with the successful issue of the securities on which the Treasury was trying to borrow money.

Representative SUMNERS. In other words, a person would not buy a Government certificate on a low rate of interest when he could buy a certificate at a higher rate on the stock exchange?

Gov. STRONG. Well, even if he was willing to buy them, it had a disconcerting influence to have a tight money market when the Government was attempting to borrow these large sums.

Representative SUMNERS. Would it not have the effect of a deterrent upon a man, having a choice of investment in a low interest-bearing security, or having a high rate of interest by using his money on the New York Stock Exchange?

Gov. STRONG. It would if the security was the same, but it would not if the value of the security was considered. It would not have that effect if the banks distinguished in the value of the obligation; that is, the value of the Government obligation and the value of the stock exchange obligation. And they did. These high rates were the result of distinguishing between these two kinds of obligations or investments. They preferred and required a security which could be discounted at the Federal reserve bank.

Representative SUMNERS. I was speaking generally; not of any particular class of financial institution; viewing the situation broadly and candidly, it would seem to me that the Government security would have a much less chance of selling at a time when the interest rate was extraordinarily high on loans on the New York Stock Exchange, as against—

Gov. STRONG (interposing). That is exactly what we all felt; that it militated against the sale of securities.

Representative SUMNERS. Now, if it would militate against the sale of these securities by drawing money away from the securities, it would also militate against the country by drawing money from the country sections for the same reason.

Gov. STRONG. Well, I am rather inclined to the view, Congressman, that the New York call-money market was not a substantial influence of restraint in the placing of the Government securities, except that it is undoubtedly a fact, I believe, that the existence of very high rates of interest on the stock exchange creates an opinion in the minds of the public, which may be misleading, that money is tight. I think it does have that effect.

Representative SUMNERS. And interest rates will be higher.

Gov. STRONG. Please remember that at one period we were placing short-time loans for the Treasury through the 12 reserve banks in a volume every month that exceeded the total amount of all the loans on the New York Stock Exchange by a very large amount, and the influence toward diversion of funds from investment in the Government obligations to investment in loans on the stock exchange must have been very slight at that time, because the volume of stock-exchange loans was so small in proportion to the Government's borrowings.

Our desire was not only to control the New York Stock Exchange loan account in order to prevent high rates per se, but for another important reason: The placing of these numerous loans by the Government necessitated a great shifting of investments, securities, stocks, and bonds, and a very important thing in the Government program was not only to preserve the value of these securities, and to have a place or market maintained where securities could be instantly sold, but in order to preserve the value of securities as collateral. People were borrowing money on all sorts of things in order to buy Government securities. I think we all regarded the maintenance of the stability of the security market as a very important element in the program of the Government.

Representative SUMNERS. Have you any statistics or facts showing the proportionate amount of money used on the New York Stock Exchange—

Gov. STRONG (interposing). At a later period, Congressman, in what I am proposing to say, I want to go more fully, if I may, into the methods we employed.

Representative SUMNERS. Very well.

Gov. STRONG. But I will answer your question, and say that since September, 1918, under promise of confidence, which, of course, we respect, every member of the New York Stock Exchange has reported every day the exact amount of his loans that day. It is reported to a committee of the stock exchange, and is reported to me at the bank. And we have tables of that account from the early fall of 1918 to date. Those figures are confidential, and I am sure the commission will not ask me to produce them here. On the other hand, we have similar reports from the lenders. I will explain the reason for that later. All the big banks in New York make reports to us of lendings on the New York Stock Exchange, and tables have been made of those that have been reported, which I feel at liberty to produce, if the commission desires. They will show what the banks have reported, but they will not be exactly accurate. The only accurate report would be the one from the borrowers. We can not get all the lenders to report; there are private bankers that make loans that do not report; but the difference will not be material.

Representative SUMNERS. Would you be violating a confidence if you were to indicate to the commission what relationship the figures show, say, between the rate of interest and the volume of loans?

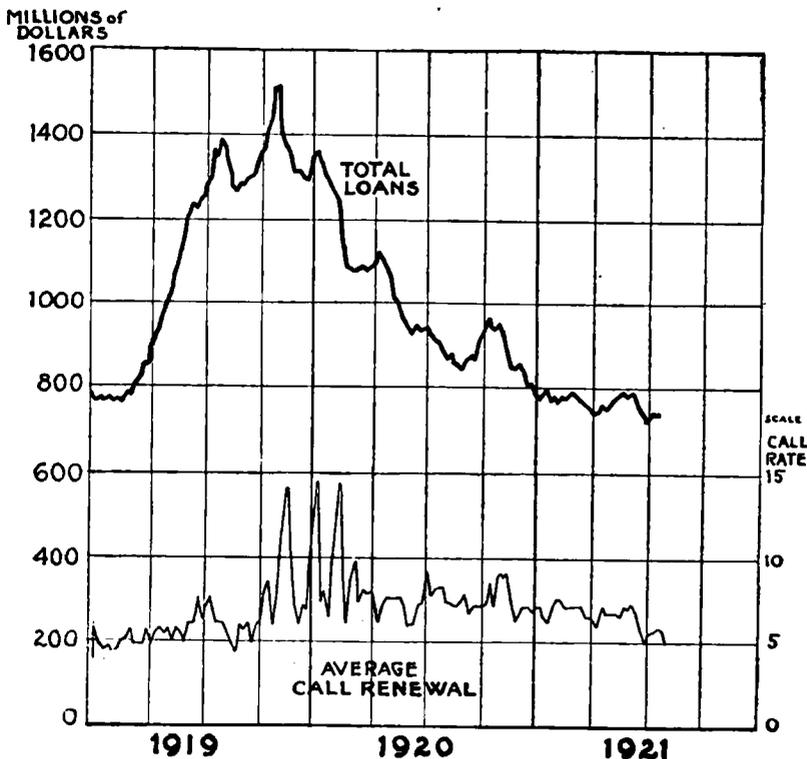
Gov. STRONG. I have a chart of that here. (See pp. 545 and 546.)

Representative SUMNERS. Governor, I see we have a chart prepared for the commission on that subject, and I will not take your time now. I will withdraw that question.

Gov. STRONG. It may be that you have the very chart to which I referred.

Representative SUMNERS. Let the record show that I withdraw my question.

Gov. STRONG. Well, the important thing which is shown on the chart which I will come to—the papers are arranged in the order in which I had expected to make these remarks—the important thing that is disclosed in this chart is this: That immediately following a period of declining volume in the total of loans on the New York Stock Exchange, the call rate went up; that development is



STREET LOANS OF NEW YORK CITY BANKS AND THE CALL LOAN RATE.

Total street loans of 52 New York City daily reporting banks outstanding each week and the average call loan renewal rate each week.

Source of information: Daily reports to the Federal reserve bank of New York.

almost constant throughout the period shown on this chart, and shows the relation between the volume of loans and the call-money rate.

The CHAIRMAN. Well, as a matter of fact, since October, 1919, during all of this period when the volume of loans and discounts was going up, the amount of call money available on the New York market had been going down; is that not true?

Gov. STRONG. Well, the peak of the loan account was in November.

The CHAIRMAN. 1919?

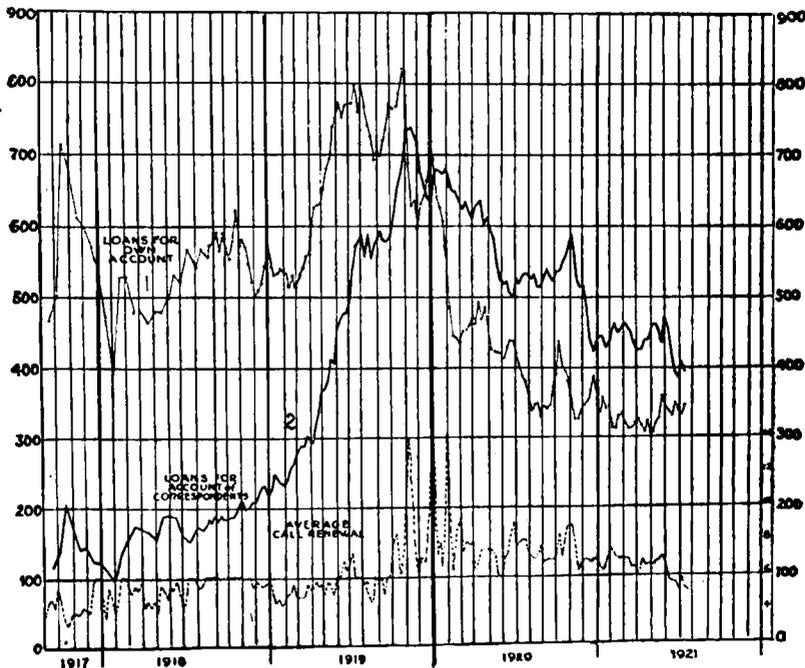
Gov. STRONG. 1919; and it has gone down from that peak constantly, with slight variations, so that now it is substantially one-half the volume that it was in November, 1919.

Representative TEN EYCK. I brought to the attention of the commission an article I saw in the Wall Street Journal of August 3, which stated that brokers' loans were \$1,750,000,000 on July 31, 1919, and on August 2, 1921, were \$500,000,000.

Gov. STRONG. The figures which I quoted from the report of the banks show that the peak in the loan account on the stock exchange was reached in November, 1919, when it reached a little over \$1,500,000,000.

Representative TEN EYCK. And now it is about \$500,000,000?

Gov. STRONG. Now it is about \$730,000,000. But continuing, if I may, this comment about the call-money market, I would like to have you consider our relation with the market more from the stand-



STREET LOANS OF NEW YORK CITY BANKS FOR THEIR OWN ACCOUNT AND FOR THE ACCOUNT OF CORRESPONDENTS AND THE CALL LOAN RATE.

Outstanding street loans of 52 large banks for their own account and for the account of correspondents each week compared with the average call loan renewal rate.

Source of information: For loans, daily reports to the Federal reserve bank of New York; for call rates, the New York Times.

point of our view of what was to be accomplished. It was desired to accomplish three things: To maintain stable rates and low rates, if we could; second, to maintain a good market for securities, which was dependent upon an adequate supply of funds; and, third, to maintain the integrity of those securities as collateral for banking loans.

Now, I have not had charts prepared for the earlier periods before these reports were coming to us. But, according to my memory, I think it will be found that during the entire period of financing for the Government, until about August—I am not sure of that date—

but until about August or September, 1918, I think the call rate never got above 6 per cent; and I do not think the volume of loans increased in that period. On the other hand, we did not have any very sharp declines in the stock market. And what measures were taken, which I will later describe, and with which the Treasury Department was thoroughly familiar and approved of, were taken to accomplish those three objects, and they were successful.

Representative TEN EYCK. Just one question there: What would happen if this particular branch of loans was stopped at any particular time in the call money market—I would like to hear what you believe would happen, not only in the market itself, but what effect it would have on the entire country, as regards discounts and loans, and so on?

Gov. STRONG. We do not make loans on the stock exchange.

Representative TEN EYCK. What effect would that have on the entire country; it would be felt by the reserve bank through the member banks?

Gov. STRONG. In case loans on the stock exchange were discontinued?

Representative TEN EYCK. Yes; call loans.

Gov. STRONG. Under conditions where the demand existed and could not be satisfied?

Representative TEN EYCK. Yes.

Gov. STRONG. Well, we would have first, I suppose, a very sharp decline in the values of securities, and we would have a sharp ascent in interest rates; I could not prophesy how high they might go. I suppose a reflection from that—a reaction from it—would be what always occurs under those conditions; people would see bargains in securities and come to buy them. That would afford some relief. It would also result in institutions loaning money on the stock exchange, and the—

Representative TEN EYCK (interposing). And it would reach the reserve bank through their member banks in putting up more collateral on discounts?

Gov. STRONG. Oh, no; no.

Representative TEN EYCK. No; I see. It would not have any effect on your banks, but on other banks who took that class of security?

Gov. STRONG. If security values declined, the banks would call for more margin, but it would not affect us.

Representative SUMNERS. Neither you nor your whole system has any direct connection with the call system at all?

Gov. STRONG. Not at all. I have covered four types of loans with which the Federal reserve bank is concerned more or less in adopting a rate policy.

Fifth, and a very important class, are the loans made by banks to their customers. That is a more difficult type of loan for us to keep track of in determining rate policies. But for a long time past now we have adopted the policy of asking the member banks to report to us at what rates they are making such loans; and I have brought with me, and submit for insertion into the record, if you care to have it there, a set of these reports for various weeks from August, 1918, October, 1919, October, 1920, January, 1921,

and June, 1921, simply as exhibits. We get them every week, and we take typical banks—five or six banks—and rotate; we do not require all the banks to report every week. This is more for the purpose of getting a good picture of what the going rate is to the customers of the banks in New York than it is to inquire into their particular affairs and loans, which we think is their business. If these would be of interest to the commission, I will submit them for the record.

The CHAIRMAN. Without objection, they may be inserted in the record.

(The reports referred to are here printed in full, as follows:)

Report of discount and interest rates as shown by actual transactions of five banks of New York City.

THIRTY-DAY PERIOD ENDING AUG. 15, 1918.

	High.	Low.	Customary.
1. Rates of discount charged to customers for prime commercial paper, such as is now eligible under the Federal reserve act:			
(a) Running 30, 60, or 90 days.....	6	5	5½-6
(b) Running 4 to 6 months.....	6	5½	6
2. Rates for prime commercial paper purchased in the open market:			
(a) Running 30 to 90 days.....	6	5½	6
(b) Running 4 to 6 months.....	6	5½	6
3. Rates charged on loans to other banks, bills payable.....	6	4½	5½
4. Rates for bankers' acceptances of 60 to 90 days maturities:			
(a) Indorsed.....	6	4½	4½
(b) Unindorsed.....	5	4½	4½
5. Rates for demand paper: (a) Secured by prime stock exchange collateral or other current collateral.....	6½	4	6
6. Rates for time paper secured by collateral mentioned in 5 (a):			
(a) Running 3 months.....	6	4½	6
(b) Running 3 to 6 months.....	6	4½	6
7. Rates for ordinary commercial loans running 30, 60, or 90 days, secured by Liberty bonds and certificates of indebtedness (not including loans to enable purchase of bonds).....			

THIRTY-DAY PERIOD ENDING OCT. 15, 1919.

1. Rates of discount charged to customers for prime commercial paper, such as is now eligible under the Federal reserve act:			
(a) Running 30, 60, or 90 days.....	6	5	5½-5½
(b) Running 4 to 6 months.....	6	5	5½-6
2. Rates for prime commercial paper purchased in the open market:			
(a) Running 30 to 90 days.....	5½	5	5½-5½
(b) Running 4 to 6 months.....	5½	5	5½-5½
3. Rates charged on loans to other banks, not including loans secured by Government collateral.....	6	4½	5
4. Rates for bankers' acceptances of 60 to 90 days maturities:			
(a) Indorsed.....	5	4½	4½-4½
(b) Unindorsed.....	6	4½	4½
5. Rates for demand paper:			
(a) Secured by prime stock exchange collateral or other current collateral.....	15	4	6
(b) Secured by prime bankers' acceptances.....	6	4½	4½
6. Rates for time paper secured by collateral mentioned in 5 (a):			
(a) Running 3 months.....	6	4½	6
(b) Running 3 to 6 months.....	6	5	6
7. Rates for ordinary commercial loans running 30, 60, or 90 days secured by Liberty bonds and certificates of indebtedness (not including loans to enable purchase of bonds).....	5½	4½	4½-5

Report of discount and interest rates as shown by actual transactions of five banks of New York City—Continued.

THIRTY-DAY PERIOD ENDING OCT. 15, 1920.

	High.	Low.	Customary.
1. Rates of discount charged to customers for prime commercial paper, such as is now eligible under the Federal reserve act:			
(a) Running 30, 60, or 90 days.....	8	6	7
(b) Running 4 to 6 months.....	8	6	7
2. Rates for prime commercial paper purchased in the open market:			
(a) Running 30 to 90 days.....	8	8	8
(b) Running 4 to 6 months.....	8	6	8
3. Rates charged on loans to other banks, not including loans secured by Government collateral.....	7½	6	7
4. Rates for bankers' acceptances of 60 to 90 days maturities:			
(a) Indorsed.....	7½	5½	6½
(b) Unindorsed.....	8	5½	6½
5. Rates for demand paper:			
(a) Secured by prime stock exchange collateral or other current collateral.....	10	6	7
(b) Secured by prime bankers' acceptances.....	7	5½	6
6. Rates for time paper secured by collateral mentioned in 5 (a):			
(a) Running 3 months.....	7	6	6
(b) Running 3 to 6 months.....	7	6	6
7. Rates for ordinary commercial loans running 30, 60, or 90 days, secured by Liberty bonds and certificates of indebtedness (not including loans to enable purchase of bonds).....	6½	4½	6

THIRTY-DAY PERIOD ENDING JAN. 15, 1921.

1. Rates of discount charged to customers for prime commercial paper, such as is now eligible under the Federal reserve act:			
(a) Running 30, 60, or 90 days.....	8	6	7
(b) Running 4 to 6 months.....	8	6	7
2. Rates for prime commercial paper purchased in the open market:			
(a) Running 30 to 90 days.....			
(b) Running 4 to 6 months.....			
3. Rates charged on loans to other banks, not including loans secured by Government collateral.....	8	5½	7
4. Rates for bankers' acceptances of 60 to 90 days maturities:			
(a) Indorsed.....	7	5½	6-7
(b) Unindorsed.....	7½	5½	6-7½
5. Rates for demand paper:			
(a) Secured by prime stock-exchange collateral or other current collateral.....	9	4	6-7
(b) Secured by prime bankers' acceptances.....	7	6	6
6. Rates for time paper secured by collateral mentioned in 5 (a):			
(a) Running 3 months.....	8	5	6-7
(b) Running 3 to 6 months.....	7	6	6-7
7. Rates for ordinary commercial loans running 30, 60, or 90 days, secured by Liberty bonds and certificates of indebtedness (not including loans to enable purchase of bonds).....	7	4½	6-7

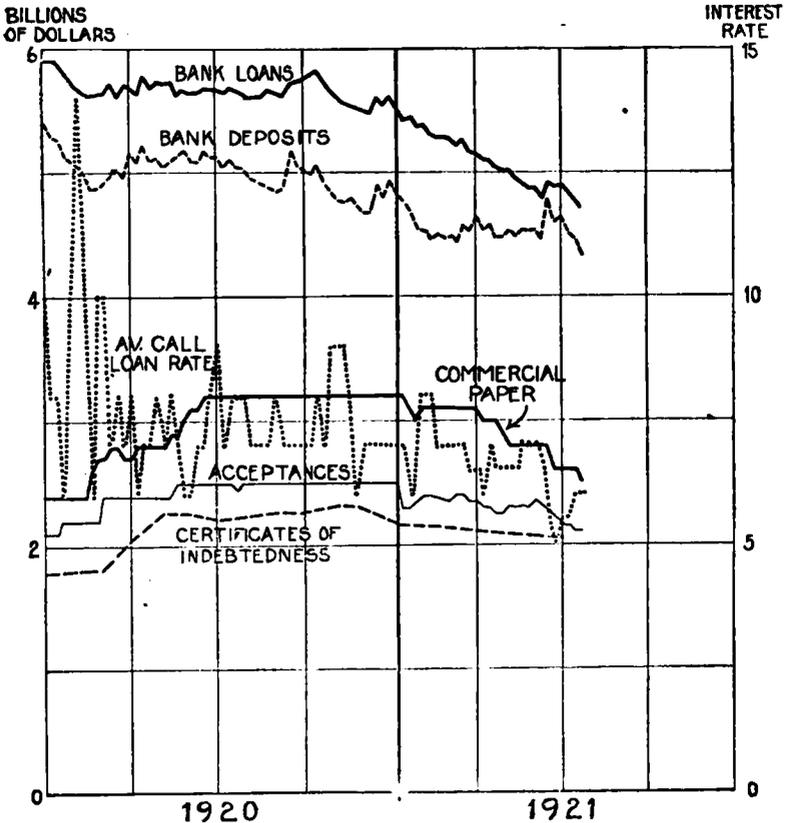
THIRTY-DAY PERIOD ENDING JUNE 15, 1921.

1. Rates of discount charged to customers for prime commercial paper, such as is now eligible under the Federal reserve act:			
(a) Running 30, 60, or 90 days.....	8	6	6-7
(b) Running 4 to 6 months.....	8	6	6-7
2. Rates for prime commercial paper purchased in the open market:			
(a) Running 30 to 90 days.....			
(b) Running 4 to 6 months.....	8	8	8
3. Rates charged on loans to other banks, not including loans secured by Government collateral.....	8	5½	6-7
4. Rates for bankers' acceptances of 60 to 90 days maturities:			
(a) Indorsed.....	7	5½	5½-6½
(b) Unindorsed.....	6½	5½	6
5. Rates for demand paper:			
(a) Secured by prime stock exchange collateral or other current collateral.....	8	4	6-7
(b) Secured by prime bankers' acceptances.....	6	4½	6
6. Rates for time paper secured by collateral mentioned in 5 (a):			
(a) Running 3 months.....	8	4½	6
(b) Running 3 to 6 months.....	7	5	6
7. Rates for ordinary commercial loans running 30, 60, or 90 days, secured by Liberty bonds and certificates of indebtedness (not including loans to enable purchase of bonds).....	7	5	6

Gov. STRONG. Now, in connection with this statement, there are various documents which I have with me which should also be submitted for the record, Mr. Chairman, if you feel it should be burdened to that extent, because they give what I believe are accurate tables of rates and charts expressing rates.

The CHAIRMAN. We can put them into the report, and would be very glad to have them.

Gov. STRONG. Well, I will submit these tables and charts for such disposition as you care to make of them. The first is a chart giving



LOANS AND DEPOSITS OF NEW YORK CITY REPORTING BANKS AND INTEREST RATES IN NEW YORK CITY.

Prevailing selling rate each week of prime 4 to 6 months commercial paper, prime 60 to 90 day bankers' acceptances and United States certificates of indebtedness maturing 6 to 9 months, prevailing call loan renewal rate and prevailing rate on time loans on industrial collateral.

Source of information: For interest rates, reports of dealers to Federal reserve bank of New York, Commercial and Financial Chronicle, and New York Times; for bank figures, weekly press statements.

the bank loans and deposits of the New York City reporting banks, which comprise about 70 of the largest banks of the city for the years 1920 and 1921, which compare with the call-loan rate, the rate for commercial paper, the rate for acceptances, and the rate for certificates of indebtedness; a table showing the rates for certificates of indebtedness from the first issue down to the present time; a state-

ment describing the operations of the Federal reserve bank of New York in placing certificates of indebtedness for the Treasury, with a table showing all of the issues, without regard to market values.

Market on certificates of indebtedness, April, 1917, to July 29, 1921.

Issue.		Interest rate.	Market price.		Total amount issued.
Dated.	Due.		Date	Basis.	
		<i>Per cent.</i>		<i>Per cent.</i>	
Apr. 25, 1917	June 30, 1917	3		(1)	\$268, 205, 000
May 10, 1917	July 17, 1917	3		(1)	200, 000, 000
May 25, 1917	July 30, 1917	3 $\frac{1}{2}$		(1)	200, 000, 000
June 8, 1917	.....do.....	3 $\frac{1}{2}$		(1)	200, 000, 000
Aug. 9, 1917	Nov. 15, 1917	3 $\frac{1}{2}$		(1)	300, 000, 000
Aug. 28, 1917	Nov. 30, 1917	3 $\frac{1}{2}$		(1)	250, 000, 000
Sept. 17, 1917	Dec. 15, 1917	3 $\frac{1}{2}$		(1)	300, 000, 000
Sept. 26, 1917	.....do.....	4		(1)	400, 000, 000
Oct. 18, 1917	Nov. 22, 1917	4		(1)	385, 197, 000
Oct. 24, 1917	Dec. 15, 1917	4		(1)	685, 296, 000
Nov. 30, 1917	June 25, 1918	4		(1)	691, 872, 000
Jan. 2, 1918	.....do.....	4		(1)	491, 822, 500
Jan. 22, 1918	Apr. 22, 1918	4		(1)	400, 000, 000
Feb. 8, 1918	May 9, 1918	4		(1)	600, 000, 000
Feb. 15, 1918	June 25, 1918	4		(1)	74, 100, 000
Feb. 27, 1918	May 28, 1918	4 $\frac{1}{2}$		(1)	600, 000, 000
Mar. 20, 1918	June 18, 1918	4 $\frac{1}{2}$		(1)	543, 032, 500
Mar. 15, 1918	June 25, 1918	4		(1)	110, 962, 000
Apr. 10, 1918	July 9, 1918	4		(1)	551, 226, 600
Apr. 22, 1918	July 18, 1918	4 $\frac{1}{2}$		(1)	517, 826, 500
Apr. 15, 1918	June 25, 1918	4		(1)	71, 880, 000
May 15, 1918	.....do.....	4		(1)	183, 767, 000
June 25, 1918	Oct. 24, 1918	4		(1)	839, 646, 500
July 9, 1918	Nov. 7, 1918	4 $\frac{1}{2}$		(1)	753, 938, 000
July 23, 1918	Nov. 21, 1918	4 $\frac{1}{2}$		(1)	584, 750, 500
Aug. 6, 1918	Dec. 5, 1918	4 $\frac{1}{2}$		(1)	575, 706, 500
Aug. 20, 1918	July 15, 1919	4		(1)	157, 552, 500
Sept. 3, 1918	Jan. 2, 1919	4 $\frac{1}{2}$		(1)	639, 493, 000
Sept. 17, 1918	Jan. 16, 1919	4 $\frac{1}{2}$		(1)	625, 216, 500
Oct. 1, 1918	Jan. 30, 1919	4 $\frac{1}{2}$		(1)	641, 069, 000
Nov. 7, 1918	Mar. 15, 1919	4 $\frac{1}{2}$		(1)	794, 172, 500
Dec. 5, 1918	May 6, 1919	4 $\frac{1}{2}$		(1)	613, 438, 000
Dec. 19, 1918	May 20, 1919	4 $\frac{1}{2}$		(1)	572, 494, 000
Jan. 2, 1919	June 3, 1919	4 $\frac{1}{2}$		(1)	751, 684, 500
Jan. 16, 1919	June 17, 1919	4 $\frac{1}{2}$		(1)	600, 101, 500
Do.....	.....do.....	4 $\frac{1}{2}$		(1)	392, 381, 000
Jan. 30, 1919	July 1, 1919	4 $\frac{1}{2}$		(1)	687, 381, 500
Feb. 13, 1919	July 15, 1919	4 $\frac{1}{2}$		(1)	620, 578, 500
Feb. 27, 1919	July 29, 1919	4 $\frac{1}{2}$		(1)	532, 381, 500
Mar. 13, 1919	Aug. 12, 1919	4 $\frac{1}{2}$		(1)	542, 197, 000
Mar. 15, 1919	June 16, 1919	4 $\frac{1}{2}$		(1)	407, 918, 500
Apr. 10, 1919	Sept. 9, 1919	4 $\frac{1}{2}$		(1)	646, 025, 000
May 1, 1919	Oct. 7, 1919	4 $\frac{1}{2}$		(1)	591, 308, 000
June 3, 1919	Sept. 15, 1919	4 $\frac{1}{2}$		(1)	526, 139, 500
Do.....	Dec. 15, 1919	4 $\frac{1}{2}$		(1)	238, 711, 500
July 1, 1919	Sept. 15, 1919	4 $\frac{1}{2}$		(1)	326, 468, 000
Do.....	Dec. 15, 1919	4 $\frac{1}{2}$		(1)	511, 444, 000
July 15, 1919	Mar. 15, 1920	4 $\frac{1}{2}$		(1)	323, 074, 500
Aug. 1, 1919	Jan. 2, 1920	4 $\frac{1}{2}$		(1)	533, 801, 500
Aug. 15, 1919	Jan. 15, 1920	4 $\frac{1}{2}$		(1)	532, 152, 000
Sept. 2, 1919	Feb. 2, 1920	4 $\frac{1}{2}$		(1)	573, 841, 500
Sept. 15, 1919	Mar. 15, 1920	4 $\frac{1}{2}$		(1)	101, 131, 500
Do.....	Sept. 15, 1920	4 $\frac{1}{2}$		(1)	657, 469, 000
			September, 1919	(1)	
			November, 1919	(1)	
			December, 1919	(1)	
			January, 1920	(1)	
			February, 1920	(1)	
			March, 1920	(1)	
			April, 1920	(1)	
			May, 1920	5 $\frac{1}{2}$	
			June, 1920	5 $\frac{1}{2}$	
			July, 1920	5 $\frac{1}{2}$	
			August, 1920	5 $\frac{1}{2}$	
Dec. 1, 1919	Feb. 16, 1920	4 $\frac{1}{2}$		(1)	162, 178, 500
Do.....	Mar. 15, 1920	4 $\frac{1}{2}$		(1)	260, 322, 000
Dec. 15, 1919	June 15, 1920	4 $\frac{1}{2}$		(1)	728, 130, 000
			December, 1919	(1)	
			January, 1920	(1)	
			February, 1920	(1)	
			March, 1920	(1)	
			April, 1920	(1)	
			May, 1920	5 $\frac{1}{2}$	

¹ Par

Market on certificates of indebtedness, April, 1917, to July 29, 1921—Continued.

Issue.		Interest rate.	Market price.		Total amount issued.
Dated.	Due.		Date.	Basis.	
Jan. 2, 1920	Dec. 15, 1920	Per cent. 4½	February, 1920.....	Per cent. (1)	\$703,026,000
			March, 1920.....	(1)	
			April, 1920.....	(1)	
			May, 1920.....	5½	
			June, 1920.....	5½	
			July, 1920.....	5½	
			August, 1920.....	5½	
			September, 1920.....	5½	
			October, 1920.....	5½	
			November, 1920.....	5½	
			December, 1920.....	5½	
Feb. 2, 1920	Mar. 15, 1920	4½	January, 1921.....	(1)	304,877,000
			February, 1921.....	(1)	
Mar. 15, 1920	Mar. 15, 1921	4½	March, 1921.....	(1)	201,370,500
			April, 1921.....	(1)	
			May, 1921.....	6	
			June, 1921.....	6	
			July, 1921.....	6	
			August, 1921.....	6	
			September, 1921.....	6	
			October, 1921.....	5½	
			November, 1921.....	5½	
			December, 1921.....	5½	
			January, 1922.....	5½	
			February, 1922.....	5½	
			March, 1922.....	5½	
			April, 1922.....	5½	
			May, 1922.....	5½	
			June, 1922.....	5½	
			July, 1922.....	5½	
Apr. 1, 1920	July 1, 1920	4½	August, 1922.....	(1)	200,669,500
			September, 1922.....	(1)	
Apr. 15, 1920	July 15, 1920	5	October, 1922.....	5½	83,903,000
			November, 1922.....	5½	
Do.....	Oct. 15, 1920	5½	December, 1922.....	5½	170,633,500
			January, 1923.....	5½	
			February, 1923.....	5½	
			March, 1923.....	5½	
			April, 1923.....	5½	
			May, 1923.....	5½	
			June, 1923.....	5½	
			July, 1923.....	5½	
			August, 1923.....	5½	
			September, 1923.....	5½	
May 17, 1920	Nov. 15, 1920	5½	October, 1923.....	5½	102,863,000
			November, 1923.....	5½	
			December, 1923.....	5½	
			January, 1924.....	5½	
			February, 1924.....	5½	
			March, 1924.....	5½	
			April, 1924.....	5½	
			May, 1924.....	5½	
			June, 1924.....	5½	
			July, 1924.....	5½	
August, 1924.....	5½				
June 15, 1920	Jan. 3, 1921	5½	September, 1924.....	5½	176,604,000
			October, 1924.....	5½	
			November, 1924.....	5½	
			December, 1924.....	5½	
			January, 1925.....	5½	
			February, 1925.....	5½	
			March, 1925.....	5½	
			April, 1925.....	5½	
			May, 1925.....	5½	
			June, 1925.....	5½	
July, 1925.....	5½				
Do.....	June 15, 1921	6	August, 1925.....	(1)	242,517,000
			September, 1925.....	(1)	
			October, 1925.....	(1)	
			November, 1925.....	(1)	
			December, 1925.....	(1)	
			January, 1926.....	(1)	
			February, 1926.....	(1)	
			March, 1926.....	(1)	
			April, 1926.....	(1)	
			May, 1926.....	(1)	
			June, 1926.....	(1)	
			July, 1926.....	(1)	
			August, 1926.....	(1)	
			September, 1926.....	(1)	
			October, 1926.....	(1)	
			November, 1926.....	(1)	
			December, 1926.....	(1)	
July 15, 1920	Jan. 15, 1921	5½	January, 1927.....	5.10	126,783,500
			February, 1927.....	5.15	
			March, 1927.....	4.65	
			April, 1927.....	4.37	
			May, 1927.....	(1)	
			June, 1927.....	(1)	
			July, 1927.....	(1)	
			August, 1927.....	(1)	
			September, 1927.....	(1)	
			October, 1927.....	(1)	
November, 1927.....	(1)				
Do.....	Mar. 15, 1921	5½	December, 1927.....	(1)	74,278,000
			January, 1928.....	(1)	
			February, 1928.....	(1)	
			March, 1928.....	(1)	
			April, 1928.....	(1)	
			May, 1928.....	(1)	
			June, 1928.....	(1)	
			July, 1928.....	(1)	
			August, 1928.....	(1)	
			September, 1928.....	(1)	
October, 1928.....	(1)				
Aug. 16, 1920	Aug. 16, 1921	6	November, 1928.....	(1)	157,654,800
			December, 1928.....	(1)	
			January, 1929.....	(1)	
			February, 1929.....	(1)	
			March, 1929.....	(1)	
			April, 1929.....	(1)	
			May, 1929.....	(1)	
			June, 1929.....	(1)	
			July, 1929.....	(1)	
			August, 1929.....	(1)	
September, 1929.....	(1)				
October, 1929.....	(1)				
November, 1929.....	(1)				
December, 1929.....	(1)				
January, 1930.....	(1)				
February, 1930.....	(1)				
March, 1930.....	(1)				
April, 1930.....	(1)				
May, 1930.....	(1)				
June, 1930.....	(1)				
July, 1930.....	(1)				
August, 1930.....	(1)				
September, 1930.....	(1)				
October, 1930.....	(1)				
November, 1930.....	(1)				
December, 1930.....	(1)				
January, 1931.....	(1)				
February, 1931.....	(1)				
March, 1931.....	(1)				
April, 1931.....	(1)				
May, 1931.....	(1)				
June, 1931.....	(1)				
July, 1931.....	(1)				
August, 1931.....	(1)				
September, 1931.....	(1)				
October, 1931.....	(1)				
November, 1931.....	(1)				
December, 1931.....	(1)				
January, 1932.....	(1)				
February, 1932.....	(1)				
March, 1932.....	(1)				
April, 1932.....	(1)				
May, 1932.....	(1)				
June, 1932.....	(1)				
July, 1932.....	(1)				
August, 1932.....	(1)				
September, 1932.....	(1)				
October, 1932.....	(1)				
November, 1932.....	(1)				
December, 1932.....	(1)				
January, 1933.....	(1)				
February, 1933.....	(1)				
March, 1933.....	(1)				
April, 1933.....	(1)				
May, 1933.....	(1)				
June, 1933.....	(1)				
July, 1933.....	(1)				
August, 1933.....	(1)				
September, 1933.....	(1)				
October, 1933.....	(1)				
November, 1933.....	(1)				
December, 1933.....	(1)				
January, 1934.....	(1)				
February, 1934.....	(1)				
March, 1934.....	(1)				
April, 1934.....	(1)				
May, 1934.....	(1)				
June, 1934.....	(1)				
July, 1934.....	(1)				
August, 1934.....	(1)				
September, 1934.....	(1)				
October, 1934.....	(1)				
November, 1934.....	(1)				
December, 1934.....	(1)				
January, 1935.....	(1)				
February, 1935.....	(1)				
March, 1935.....	(1)				
April, 1935.....	(1)				
May, 1935.....	(1)				
June, 1935.....	(1)				
July, 1935.....	(1)				
August, 1935.....	(1)				
September, 1935.....	(1)				
October, 1935.....	(1)				
November, 1935.....	(1)				
December, 1935.....	(1)				
January, 1936.....	(1)				
February, 1936.....	(1)				
March, 1936.....	(1)				
April, 1936.....	(1)				
May, 1936.....	(1)				
June, 1936.....	(1)				
July, 1936.....	(1)				
August, 1936.....	(1)				
September, 1936.....	(1)				
October, 1936.....	(1)				
November, 1936.....	(1)				
December, 1936.....	(1)				
January, 1937.....	(1)				
February, 1937.....	(1)				
March, 1937.....	(1)				
April, 1937.....	(1)				
May, 1937.....	(1)				
June, 1937.....	(1)				
July, 1937.....	(1)				
August, 1937.....	(1)				
September, 1937.....	(1)				
October, 1937.....	(1)				
November, 1937.....	(1)				
December, 1937.....	(1)				
January, 1938.....	(1)				
February, 1938.....	(1)				
March, 1938.....	(1)				
April, 1938.....	(1)				
May, 1938.....	(1)				
June, 1938.....	(1)				
July, 1938.....	(1)				
August, 1938.....	(1)				
September, 1938.....	(1)				
October, 1938.....	(1)				
November, 1938.....	(1)				
December, 1938.....	(1)				
January, 1939.....	(1)				
February, 1939.....	(1)				
March, 1939.....	(1)				
April, 1939.....	(1)				
May, 1939.....	(1)				
June, 1939.....	(1)				
July, 1939.....	(1)				
August, 1939.....	(1)				
September, 1939.....	(1)				
October, 1939.....	(1)				
November, 1939.....	(1)				
December, 1939.....	(1)				
January, 1940.....	(1)				
February, 1940.....	(1)				
March, 1940.....	(1)				
April, 1940.....	(1)				
May, 1940.....	(1)				
June, 1940.....	(1)				
July, 1940.....	(1)				
August, 1940.....	(1)				
September, 1940.....	(1)				
October, 1940.....	(1)				
November, 1940.....	(1)				
December, 1940.....	(1)				
January, 1941.....	(1)				
February, 1941.....	(1)				
March, 1941.....	(1)				
April, 1941.....	(1)				
May, 1941.....	(1)				
June, 1941.....	(1)				
July, 1941.....	(1)				
August, 1941.....	(1)				
September, 1941.....	(1)				
October, 1941.....	(1)				
November, 1941.....	(1)				
December, 1941.....	(1)				
January, 1942.....	(1)				
February, 1942.....	(1)				
March, 1942.....	(1)				
April, 1942.....	(1)				
May, 1942.....	(1)				
June, 1942.....	(1)				
July, 1942.....	(1)				
August, 1942.....	(1)				
September, 1942.....	(1)				
October, 1942.....	(1)				
November, 1942.....	(1)				
December, 1942.....	(1)				
January, 1943.....	(1)				
February, 1943.....	(1)				
March, 1943.....	(1)				
April, 1943.....	(1)				
May, 1943.....	(1)				
June, 1943.....	(1)				
July, 1943.....	(1)				
August, 1943.....	(1)				
September, 1943.....	(1)				
October, 1943.....	(1)				
November, 1943.....	(1)				
December, 1943.....	(1)				
January, 1944.....	(1)				
February, 1944.....	(1)				
March, 1944.....	(1)				
April, 1944.....	(1)				
May, 1944.....	(1)				
June, 1944.....	(1)				
July, 1944.....	(1)				
August, 1944.....	(1)				
September, 1944.....	(1)				
October, 1944.....	(1)				
November, 1944.....	(1)				
December, 1944.....	(1)				
January, 1945.....	(1)				
February, 1945.....	(1)				
March, 1945.....	(1)				
April, 1945.....	(1)				
May, 1945.....	(1)				
June, 1945.....	(1)				
July, 1945.....	(1)				
August, 1945.....	(1)				
September, 1945.....	(1)				
October, 1945.....	(1)				
November, 1945.....	(1)				
December, 1945.....	(1)				
January, 1946.....	(1)				
February, 1946.....	(1)				
March, 1946.....	(1)				
April, 1946.....	(1)				
May, 1946.....	(1)				
June, 1946.....	(1)				
July, 1946.....	(1)				
August, 1946.....	(1)				
September, 1946.....	(1)				
October, 1946.....	(1)				
November, 1946.....	(1)				
December, 1946.....	(1)				
January, 1947.....	(1)				
February, 1947.....	(1)				
March, 1947.....	(1)				
April, 1947.....	(1)				
May, 1947.....	(1)				
June, 1947.....	(1)				
July, 1947.....	(1)				
August, 1947.....	(1)				
September, 1947.....	(1)				
October, 1947.....	(1)				
November, 1947.....	(1)				
December, 1947.....	(1)				
January, 1948.....	(1)				
February, 1948.....	(1)				
March, 1948.....	(1)				
April, 1948.....	(1)				
May, 1948.....	(1)				
June, 1948.....	(1)				
July, 1948.....	(1)				
August, 1948.....	(1)				
September, 1948.....	(1)				
October, 1948.....	(1)				
November, 1948.....	(1)				
December, 1948.....	(1)				
January, 1949.....	(1)				
February, 1949.....	(1)				
March, 1949.....	(1)				
April, 1949.....	(1)				
May, 1949.....	(1)				
June, 1949.....	(1)				
July, 1949.....	(1)				
August, 1949.....	(1)				
September, 1949.....	(1)				
October, 1949.....	(1)				
November, 1949.....	(1)				
December, 1949.....	(1)				
January, 1950.....	(1)				
February, 1950.....	(1)				
March, 1950.....	(1)				
April, 1950.....	(1)				
May, 1950.....	(1)				
June, 1950.....	(1)				
July, 1950.....	(1)				
August, 1950.....	(1)				
September, 1950.....	(1)				
October, 1950.....	(1)				
November, 1950.....	(1)				
December, 1950.....	(1)				
January, 1951.....	(1)				
February, 1951.....	(1)				
March, 1951.....	(1)				
April, 1951.....	(1)				
May, 1951.....	(1)				
June, 1951.....	(1)				
July, 1951.....	(1)				
August, 1951.....	(1)				
September, 1951.....	(1)				
October, 1951.....	(1)				
November, 1951.....	(1)				
December, 1951.....	(1)				
January, 1952.....	(1)				
February, 1952.....	(1)				
March, 1952.....	(1)				
April, 1952.....	(1)				
May, 1952.....	(1)				
June, 1952.....	(1)				
July, 1952.....	(1)				
August, 1952.....	(1)				
September, 1952.....	(1)				
October, 1952.....	(1)				
November, 1952.....	(1)				
December, 1952.....	(1)				
January, 1953.....	(1)				
February, 1953.....	(1)				
March, 1953.....	(1)				
April, 1953.....	(1)				
May, 1953					

Market on certificates of indebtedness, April, 1917, to July 29, 1921—Continued.

Issue.		Interest rate.	Market price.		Total amount issued.
Dated.	Due.		Date.	Basis.	
Aug. 16, 1920	Aug. 16, 1921	6	March, 1921.....	5.45	
			April, 1921.....	5.15	
			May, 1921.....	5.10	
			June, 1921.....	4.80	
			July, 1921.....	4.30	
			October, 1920.....	54	
			November, 1920.....	54	
Sept. 15, 1920	Mar. 15, 1921	54	December, 1920.....	54	\$106,626,500
			January, 1921.....	54	
			February, 1921.....	4.60	
			November, 1920.....	54	
Oct. 15, 1920do.....	54	December, 1920.....	54	124,252,500
			January, 1921.....	54	
			February, 1921.....	4.60	
Sept. 15, 1920	Sept. 15, 1921	6	October, 1920.....	6	341,969,500
			November, 1920.....	6	
			December, 1920.....	6	
			January, 1921.....	54	
			February, 1921.....	5.40	
			March, 1921.....	5.45	
			April, 1921.....	5.15	
			May, 1921.....	5.18	
			June, 1921.....	4.95	
			July 29, 1921.....	4.15	
Nov. 15, 1920	May 16, 1921	54	December, 1920.....	54	232,124,000
			January, 1921.....	54	
			February, 1921.....	5.10	
			March, 1921.....	5.10	
			April, 1921.....	4.50	
Dec. 15, 1920	June 15, 1921	54	January, 1921.....	54	188,123,000
			February, 1921.....	5.50	
			March, 1921.....	5.15	
			April, 1921.....	4.65	
			May, 1921.....	4.37	
			January, 1921.....	54	
			February, 1921.....	5.45	
			March, 1921.....	5.50	
			April, 1921.....	5.35	
			May, 1921.....	5.22	
Do.....	Dec. 15, 1921	6	June, 1921.....	5.05	401,557,500
			July 29, 1921.....	4.60	
			February, 1921.....	5	
			March, 1921.....	4.25	
			April, 1921.....	5.40	
			May, 1921.....	5.45	
			June, 1921.....	5.28	
			July 29, 1921.....	5.18	
			February, 1921.....	4.93	
			March, 1921.....	4.50	
Jan. 15, 1922	Apr. 15, 1921	54	February, 1921.....	5.30	118,660,000
			March, 1921.....	5.25	
			April, 1921.....	5	
			May, 1921.....	5	
			June, 1921.....	5	
Do.....	Oct. 15, 1921	54	March, 1921.....	5.35	192,026,500
			April, 1921.....	5.15	
			May, 1921.....	5.10	
			June, 1921.....	4.95	
			July 29, 1921.....	4.15	
			March, 1921.....	5.67	
			April, 1921.....	5.57	
			May, 1921.....	5.36	
			June, 1921.....	5.34	
			July 29, 1921.....	4.94	
Feb. 15, 1922	July 15, 1921	54	April, 1921.....	5.28	132,886,500
			May, 1921.....	5.18	
			June, 1921.....	4.98	
			July 29, 1921.....	4.50	
			February, 1921.....	5.30	
Mar. 15, 1921	Sept. 15, 1921	54	March, 1921.....	5.25	193,302,000
			April, 1921.....	5	
			May, 1921.....	5	
			June, 1921.....	5	
			July 29, 1921.....	4.15	
Do.....	Mar. 15, 1922	54	March, 1921.....	5.67	288,501,000
			April, 1921.....	5.57	
			May, 1921.....	5.36	
			June, 1921.....	5.34	
			July 29, 1921.....	4.94	
Apr. 15, 1921	Oct. 15, 1921	54	April, 1921.....	5.28	190,511,500
			May, 1921.....	5.18	
			June, 1921.....	4.98	
			July 29, 1921.....	4.50	
			February, 1921.....	5.30	
16, 1921	Feb. 16, 1922	54	May 1, 1921.....	5.38	256,170,000
			June, 1921.....	5.34	
			July 20, 1921.....	4.90	
			July 29, 1921.....	5.42	
			August, 1921.....	5.06	
June 15, 1921	June 15, 1922	54	June, 1921.....	5.70	314,184,000
			July 29, 1921.....	5.06	
			August, 1921.....	5.42	
			September, 1921.....	5.06	
			October, 1921.....	5.45	
Do.....	June 15, 1924	54	July 29, 1921.....	5.45	311,191,600
			August, 1921.....	5.06	
			September, 1921.....	5.42	
			October, 1921.....	5.06	
			November, 1921.....	5.45	

NOTE.—Prior to May, 1920, the Treasury did not sanction trading in certificates of indebtedness below par, and between the dates of May, 1920, and February, 1921, there was active trading in all issues of certificates of indebtedness, but the quotations were not published in the newspapers prior to the latter date. The prices shown from February, 1921, to July 29, 1921, are the quotations taken from the newspapers as of the close of business of February, March, April, May, June, and July, 1921, respectively.

Comparison of interest rates on issues outstanding, interest rates on offerings of new issues of certificates and yields in current market prices of issues outstanding month by month from May, 1920, when the Treasury sanctioned an open market on certificates of indebtedness, to July 29, 1921.

Month.	Interest rates on issues outstanding.	Interest rate on certificates offered for subscription during month.	Yields on current market prices for issues outstanding.
1920.			
May.....	4½ to 5½ per cent.....	5½ per cent.....	5½ to 5½ per cent.
June.....	4½ to 6 per cent.....	5½ and 6 per cent.....	5½ to 6 per cent.
July.....	do.....	5½ per cent.....	5½ to 6 per cent.
August.....	do.....	6 per cent.....	Do.
September.....	4½ to 6 per cent.....	5½ and 6 per cent.....	Do.
October.....	do.....	5½ per cent.....	5½ to 6 per cent.
November.....	do.....	do.....	5½ to 6 per cent.
December.....	do.....	5½ and 6 per cent.....	Do.
1921.			
January.....	do.....	5½ and 5½ per cent.....	5½ to 5½ per cent.
February.....	do.....	5½ per cent.....	5½ to 5½ per cent.
Mar. 31.....	5½ to 6 per cent.....	5½ and 5½ per cent.....	4.25 to 5.67 per cent.
Apr. 30.....	do.....	5½ per cent.....	4.50 to 5.57 per cent.
May 31.....	do.....	do.....	4.85 to 5.26 per cent.
June 30.....	do.....	5½ per cent (5½ per cent notes).	4.80 to 5.70 per cent.
July 29.....	do.....	No issue during July...	4.15 to 5.40 per cent.

ACTIVITIES AND OPERATIONS OF THE FEDERAL RESERVE BANK OF NEW YORK IN ITS CAPACITY AS FISCAL AGENT FOR THE UNITED STATES IN CONNECTION WITH UNITED STATES TREASURY CERTIFICATES OF INDEBTEDNESS.

Since the inception of the Government policy to sell short-dated certificates of indebtedness, the Federal reserve bank of New York has at all times exerted every effort to give effect to the Treasury policies, and the policy of the Federal reserve bank of New York has at all times been one of close and complete cooperation with the Treasury in bringing about the ends desired.

Prior to the first public offering of certificates, April 25, 1917, an issue of \$50,000,000, 2 per cent certificates, dated March 31, 1917, and due June 30, 1917, were taken by Federal reserve banks, the New York bank subscribing to \$25,000,000 of the issue, of which they were allotted \$20,000,000, or 40 per cent of the entire issue.

Beginning in April, 1917, public offerings of certificates in anticipation of and in connection with the first Liberty loan occurred at frequent intervals until the autumn of that year, when also important offerings of so-called tax certificates were inaugurated, and from that time until the completion of the Victory loan flotation in the spring of 1919, there were two classes of certificates issuing at frequent intervals, the one, loan certificates issued in connection with the flotation of the various Liberty loans, and the tax certificates above referred to.

The effect upon the investment and loan accounts of the Federal reserve bank of New York of the requirement for the creation of an immense volume of bank credit, represented by short-term certificates of indebtedness, which the Government issued to provide itself with funds in anticipation of the sale of bonds, and the currents and countercurrents of the flow of money between New York and the interior as a result of the creation of these bank credits, and the methods by which they were accomplished and controlled, are described in the third annual report of the Federal reserve bank of New York, pages 11 to 13.

A word should be said also of the material benefits resulting from the adoption of the Treasury policy to issue tax certificates, strongly recommended by the Federal reserve bank of New York. The triple effect was, (1) to provide the Government with needed funds in anticipation of the payment of taxes to accrue, (2) to provide the tax-payer with a safe and economical facility for accumulating the moneys which he would have to pay in taxes as they became due, and (3) the avoidance thereby of serious disturbance in the money markets that otherwise would have been inevitable, coincident with the huge payments on tax days.

During the period from April, 1917, to June, 1918, subscriptions to certificate issues were not formally organized, but the banks of the New York district, and particularly the banks in New York City, heartily cooperated with the officers of the Federal reserve bank of New York in meeting the requirements of the Government finances.

During that period, the total subscription to certificates of all classes for the country was \$7,875,187,000 of which the subscriptions in the second district amounted to \$4,224,550,500, and allotments on subscriptions to the second district were \$4,034,786,000.

The percentage of all certificates issued allotted to the second district during this period ranged up to 79.3 per cent on the issue of October 24, 1917, when \$543,683,000 of certificates were taken in the second district, out of the total issue of \$685,296,000, and averaged 51.1 per cent.

Beginning with the issue of June 25, 1918, when, in anticipation of the fourth loan, the Secretary of the Treasury had appealed to the banks of the country to provide \$750,000,000 to the Government every two weeks, to meet its expenditures of \$1,500,000,000 each month, and when it was anticipated that by November, 1918, Government expenditures would be required at the rate of \$2,000,000,000 per month, it became apparent that to carry the Government's program to a successful conclusion, it would be necessary to enlist all of the banks rather than to depend upon voluntary subscriptions from comparatively few of them, and particularly to enlist the country banks, to cooperate in the future as the New York City banks had in the past. To this end, the Federal reserve bank of New York organized a certificates of indebtedness department, under the general direction of a deputy governor (Mr. R. H. Treman), but with a specially qualified staff of experienced security men, under the direction of Mr. Ray Morris, director of sales.

The Federal reserve bank of New York, acting through these media, organized the banks of the second reserve district on county lines and appointed a county director for each of 70 counties in the district; no county directors, however, were appointed for the counties comprising the city of New York and none for Hamilton County, in which there were no banks, and at formal meetings with the county directors enlisted their enthusiastic support to the program of the Treasury and of the Federal reserve bank of New York in procuring an equitable distribution of Treasury obligations. This distribution was computed on the basis of a percentage of the total resources of all banks, member and nonmember alike.

The success of the organization and the intensive work done by it in achieving a wider distribution of the fourth loan certificates was so marked that it was continued throughout the Victory loan. After that loan it was no longer necessary to assign quotas. The measure of this success is indicated by the fact that the banks of the second district outside of New York City subscribed to fourth loan certificates 108 per cent of their total quota, as against 53 per cent to the third loan certificates. The New York City banks subscribed 139 per cent of their quota to fourth loan certificates, as against 129 per cent to third loan certificates, despite the fact that the quotas assigned were materially increased, and that whereas the average number of subscribers in the second district to certificate issues in anticipation of the first loan was 181, in anticipation of the second loan, 185, and in anticipation of the third loan, 741, in the fourth loan, out of 1,234 banks in the district, all but 45 subscribed to the issues, and the total of such subscribers included a great majority of the savings banks.

During the period covering the issue of June 25, 1918, down to and including the issue of May 1, 1919, the subscriptions for the whole country amounted to \$12,569,434,000, the quota for the second district was \$3,301,400,000, subscriptions in the second district were \$4,725,333,500, and allotments of subscriptions in the second district were \$4,725,333,500, or 37.6 per cent of the subscriptions and allotments for the entire country.

While it was the policy and practice of the Federal reserve bank of New York in facilitating the Government's program to make advances against certificates purchased by both member and nonmember banks, the volume which the Federal reserve bank was called upon to carry during 1918 was comparatively moderate. On October 23 of that year, for example, when the certificates preceding the fourth loan, sold in this district, were at their maximum of \$1,681,000,000, the amount carried by the Federal reserve bank of New York was \$424,000,000, or about 26 per cent of the total, which indicates its measurable success in discharging the responsibility of so administering the financing of the loans that the expansion of credits should be no greater than necessary to insure successful flotation, and that the money markets of the country should not suffer dislocation.

After the last issue in anticipation of the Victory loan—i. e., May 1, 1919, only tax certificates were issued until August 1, 1919. Since that date loan and tax certificates have continued to be issued in substantial but gradually reducing volume, merging into the more recent development of the policy of gradual retirement of all short-dated issues of the Government, including Victory notes, announced by the Secretary of the Treasury, through the issue of rather longer maturities, including one-year certificates and three-year notes.

While during the financing incidental to the Liberty and Victory loans the certificates were lodged principally with the banks, to the extent of causing congestion in many of them which would gladly have disposed of the certificates at a concession from their issue price in order that they might have either reduced their obligations to the Federal reserve bank or expanded their commercial accommodations, nevertheless, through the instrumentality of the Federal reserve bank of New York effect was given to the desire of the Treasury that certificates should not be disposed of or traded in below par, but with the pressure of war financing moderated, it quickly became apparent to the officers of the Federal reserve bank that a distribution of certificates in a free market would be desirable, thus making available to the Treasury a wider recourse to investment money and relieving the banks so that they could more effectively function in serving the commercial and agricultural requirements.

This was thoroughly discussed with Treasury officials, with the result that during 1920-21 certificates have been offered to the public by the Treasury through the Federal reserve bank of New York on a basis attractive to investment money, and an open market in them has been developed in New York, supported and accommodated by the Federal reserve bank of New York, through which issues are absorbed by investors and others having idle funds for temporary employment. This market has functioned so well in its demonstration of the liquidity thus given to short time Government issues that during the past year their value as short-time investments in a liquid market has been demonstrated in the slight premiums at which they were traded on in the market, where sales are made on an interest basis, which ordinarily improves as maturity approaches.

During the period from June 3, 1919, to June 15, 1921, inclusive, the subscriptions for the whole country amounted to \$11,412,129,100, subscriptions in the second district were \$5,608,262,500, and allotments of subscriptions in the second district were \$4,861,875,200, or 42.6 per cent of the subscriptions and allotments for the entire country.

From April 25, 1917, to June 15, 1921, inclusive, the volume of certificates of indebtedness and short-term notes of the Treasury, excluding Pittman Act certificates and special certificates, taken by Federal reserve banks for temporary advances to the Treasury, issued in the country, compared with the volume of subscriptions and allotments of subscriptions in the second reserve district are shown in the attached statement. (See pp. 557-558.)

This \$13,621,995,700 was sold through the Federal reserve bank of New York as fiscal agents of the Government at an expense of a little less than \$700,000, or about one two-hundredth of 1 per cent of the entire amount.

Certificates of indebtedness.

Issue.	Issue date.	Maturity date.	Amount of offering.	Rate.	Subscription for country.	Quota for district.	Subscription for district.	Allotment for district.	Per cent district to country.
	Mar. 31, 1917	June 30, 1917	\$50,000,000	Per cent.	\$50,000,000	(1)	\$25,000,000	\$20,000,000	40.0
A	Apr. 25, 1917	do.	200,000,000	2	268,205,000	(1)	136,150,000	136,150,000	50.8
B	May 10, 1917	July 17, 1917	200,000,000	3	200,000,000	(1)	98,512,000	98,512,000	49.3
C	May 25, 1917	July 30, 1917	200,000,000	3 1/2	200,000,000	(1)	175,231,000	125,300,000	62.7
D	June 8, 1917	do.	200,000,000	3 1/2	200,000,000	(1)	116,000,000	100,500,000	50.3
E	Aug. 9, 1917	Nov. 15, 1917	300,000,000	3 1/2	300,000,000	(1)	211,054,000	175,000,000	58.3
F	Aug. 28, 1917	Nov. 30, 1917	250,000,000	3 1/2	250,000,000	(1)	188,837,000	152,938,000	61.2
G	Sept. 17, 1917	Dec. 15, 1917	300,000,000	3 1/2	300,000,000	(1)	204,347,000	204,347,000	68.1
H	Sept. 26, 1917	do.	400,000,000	4	400,000,000	(1)	212,100,000	212,100,000	53.0
I	Oct. 18, 1917	Nov. 22, 1917	300,000,000	4	385,197,000	(1)	179,475,000	179,475,000	46.6
J	Oct. 24, 1917	Dec. 15, 1917	(2)	4	685,296,000	(1)	543,683,000	543,683,000	79.3
K	Nov. 30, 1917	June 25, 1918	(2)	4	691,572,000	(1)	494,070,500	494,070,500	71.4
L	Jan. 2, 1918	do.	(2)	4	491,822,500	(1)	239,954,000	239,954,000	48.8
M	Jan. 22, 1918	Apr. 22, 1918	400,000,000	4	400,000,000	(1)	230,017,000	209,685,000	52.4
N	Feb. 8, 1918	May 9, 1918	500,000,000	4	500,000,000	\$200,000,000	241,322,000	241,322,000	48.3
O	Feb. 15, 1918	June 25, 1918	(2)	4	74,100,000	(1)	14,007,500	14,007,500	18.9
P	Feb. 27, 1918	May 28, 1918	500,000,000	4 1/2	500,000,000	194,000,000	199,715,000	172,666,500	34.5
Q	Mar. 20, 1918	June 18, 1918	500,000,000	4 1/2	543,032,500	173,000,000	193,700,500	193,700,500	35.7
R	Mar. 15, 1918	June 25, 1918	(2)	4	110,962,000	(1)	10,252,500	10,252,500	9.2
S	Apr. 10, 1918	July 9, 1918	500,000,000	4 1/2	551,228,500	175,000,000	215,448,000	215,448,000	39.1
T	Apr. 22, 1918	July 18, 1918	500,000,000	4 1/2	517,826,500	175,000,000	222,486,000	222,486,000	43.0
U	Apr. 15, 1918	June 25, 1918	(2)	4	71,890,000	(1)	12,000,500	12,000,500	16.7
V	May 15, 1918	do.	(2)	4	183,767,000	(1)	61,188,000	61,188,000	33.3
4A	June 25, 1918	Oct. 24, 1918	750,000,000	4 1/2	839,646,500	251,000,000	312,844,500	312,844,500	37.3
4B	July 9, 1918	Nov. 7, 1918	750,000,000	4 1/2	753,938,000	254,000,000	273,219,500	273,219,500	36.2
4C	July 23, 1918	Nov. 21, 1918	500,000,000	4 1/2	584,750,500	169,600,000	211,714,000	211,714,000	36.2
4D	Aug. 6, 1918	Dec. 5, 1918	500,000,000	4 1/2	575,706,500	169,600,000	207,287,000	207,287,000	36.0
4 percent tax TA	Aug. 20, 1918	July 15, 1919	(2)	4	157,552,500	(1)	44,786,000	44,786,000	28.4
4E	Sept. 3, 1918	Jan. 2, 1919	500,000,000	4 1/2	639,493,000	169,600,000	210,068,500	210,068,500	32.8
4F	Sept. 17, 1918	Jan. 16, 1919	600,000,000	4 1/2	625,216,500	203,200,000	216,264,500	216,264,500	34.6
4G	Oct. 1, 1918	Jan. 30, 1919	500,000,000	4 1/2	641,069,000	169,600,000	249,591,000	249,591,000	38.9
T or TB	Nov. 7, 1918	Mar. 15, 1919	(2)	4	794,172,500	(1)	350,847,500	350,847,500	44.2
5A	Dec. 5, 1918	May 6, 1919	600,000,000	4 1/2	613,438,000	203,200,000	222,830,000	222,830,000	36.3
5B	Dec. 19, 1918	May 20, 1919	500,000,000	4 1/2	572,494,000	169,600,000	199,117,000	199,117,000	34.8
5C	Jan. 2, 1919	June 3, 1919	750,000,000	4 1/2	751,684,500	254,000,000	300,977,500	300,977,500	40.0
5D	Jan. 16, 1919	June 17, 1919	600,000,000	4 1/2	600,101,500	203,200,000	203,609,500	203,609,500	33.9
T2 or TC	do.	do.	(2)	4	392,381,000	(1)	165,622,000	165,622,000	42.2
5E	Jan. 30, 1919	July 1, 1919	600,000,000	4 1/2	687,381,500	203,200,000	265,844,500	265,844,500	38.7
5F	Feb. 13, 1919	July 15, 1919	600,000,000	4 1/2	620,578,500	203,200,000	217,497,500	217,497,500	35.0
5G	Feb. 27, 1919	July 29, 1919	500,000,000	4 1/2	532,381,500	169,600,000	174,501,500	174,501,500	32.8
5H	Mar. 13, 1919	Aug. 12, 1919	500,000,000	4 1/2	542,197,000	169,600,000	183,111,500	183,111,500	33.8
T3	Mar. 15, 1919	June 16, 1919	(2)	4	407,918,500	(1)	227,964,000	227,964,000	55.9
5J	Apr. 10, 1919	Sept. 9, 1919	500,000,000	4 1/2	646,025,000	169,600,000	275,355,000	275,355,000	42.6

Not assigned.

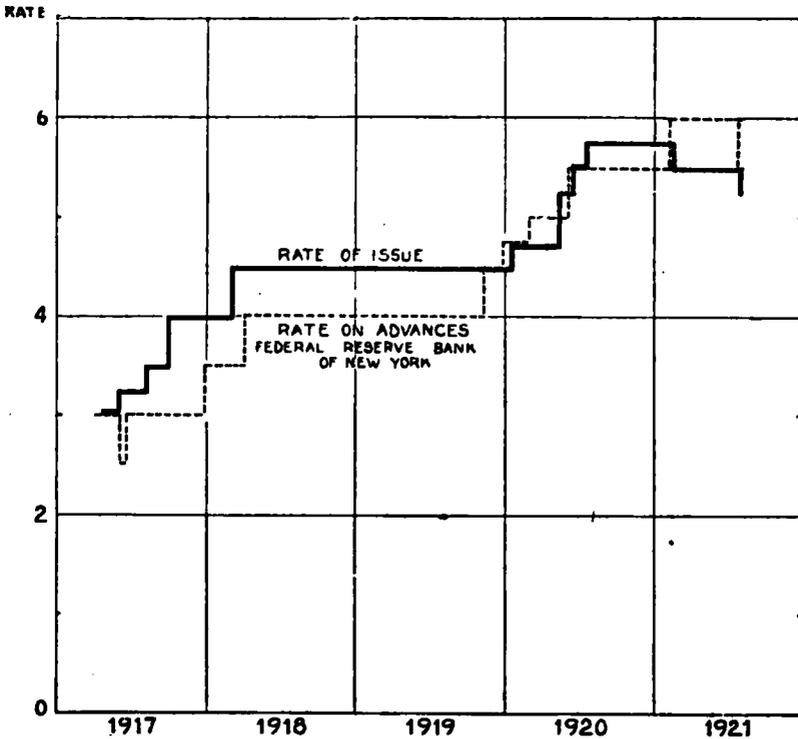
¹ Not stated.

Certificates of indebtedness—Continued.

Issue.	Issue date.	Maturity date.	Amount of offering.	Rate.	Subscription for country.	Quota for district.	Subscription for district.	Allotment for district.	Per cent district to country.
5K.....	May 1, 1919	Oct. 7, 1919	\$500,000,000	<i>Per cent.</i> 44	\$591,308,000	\$169,600,000	\$212,301,000	\$212,301,000	35.9
T4.....	June 3, 1919	Sept. 15, 1919	(3)	44 T	526,139,500	(1)	212,337,000	212,337,000	40.4
T5.....	do.	Dec. 15, 1919	(3)	44 T	238,711,500	(1)	78,557,500	78,557,500	32.9
T6.....	July 1, 1919	Sept. 15, 1919	(3)	44 T	326,468,000	(1)	129,254,000	129,254,000	39.6
T7.....	do.	Dec. 15, 1919	(3)	44 T	511,444,000	(1)	242,504,000	242,504,000	47.4
T8.....	July 15, 1920	Mar. 15, 1920	(3)	44 T	323,074,500	(1)	116,450,500	116,450,500	35.0
A-1920.....	Aug. 1, 1919	Jan. 2, 1920	500,000,000	44	533,801,500	169,600,000	192,326,000	192,326,000	36.0
B-1920.....	Aug. 15, 1919	Jan. 15, 1920	500,000,000	44	532,152,000	169,600,000	201,904,500	201,904,500	37.9
C-1920.....	Sept. 2, 1919	Feb. 2, 1920	(3)	44	573,841,500	(1)	252,679,000	252,679,000	44.0
T9.....	Sept. 15, 1919	Mar. 15, 1920	(3)	44 T	101,131,500	(1)	25,582,500	25,582,500	25.3
T10.....	do.	Sept. 15, 1920	(3)	44 T	657,469,000	(1)	412,319,000	412,319,000	62.7
D-1920.....	Dec. 1, 1919	Feb. 16, 1920	(3)	44 T	162,178,500	(1)	43,165,000	43,165,000	26.6
TM3-1920.....	do.	Mar. 15, 1920	(3)	44 T	260,322,000	(1)	90,410,000	90,410,000	34.7
TJ-1920.....	Dec. 15, 1919	June 15, 1920	(3)	44 T	728,130,000	(1)	281,582,500	281,582,500	38.7
TD-1920.....	Jan. 2, 1920	Dec. 15, 1920	(3)	44 T	703,026,000	(1)	324,189,000	324,189,000	46.1
TM4-1920.....	Feb. 2, 1920	Mar. 15, 1920	(3)	44 T	304,877,000	(1)	107,732,500	107,732,500	35.3
TM-1921.....	Mar. 15, 1920	Mar. 15, 1921	(3)	44 T	201,370,500	(1)	59,982,000	59,982,000	29.8
E-1920.....	Apr. 1, 1920	July 1, 1920	(3)	44 T	200,669,500	(1)	104,682,000	104,682,000	52.2
F-1920.....	Apr. 15, 1920	July 15, 1920	250,000,000	5	83,903,000	84,800,000	33,039,500	33,039,500	39.4
G-1920.....	do.	Oct. 15, 1920		5	170,633,500		94,127,500	94,127,500	55.2
H-1920.....	May 17, 1920	Nov. 15, 1920	100,000,000	5	102,883,000	33,920,000	50,516,500	37,239,000	36.2
A-1921.....	June 15, 1920	Jan. 3, 1921	400,000,000	5	176,604,000	135,680,000	81,370,500	81,370,500	46.1
TJ-1921.....	do.	June 15, 1921		6	242,517,000		93,629,500	93,629,500	55,808,500	38.6
B-1921.....	July 15, 1920	Jan. 15, 1921	(3)	5	126,783,500	(1)	55,808,500	55,808,500	44.0
TM2-1921.....	do.	Mar. 15, 1921	(3)	5	74,278,000	(1)	34,583,000	34,583,000	46.6
C-1921.....	Aug. 16, 1920	Aug. 16, 1921	150,000,000	6	157,654,500	50,880,000	85,000,000	57,704,500	56.5
TM3-1921.....	Sept. 15, 1920	Mar. 15, 1921	400,000,000	5	106,626,500	135,680,000	69,351,000	60,233,500	56.6
TS-1921.....	do.	Sept. 15, 1921		6	341,969,500		212,149,000	181,370,500	40,566,500	53.0
TM4-1921.....	Oct. 15, 1920	Mar. 15, 1921	100,000,000	5	124,252,500	33,920,000	55,407,500	49,566,500	32.6
D-1921.....	Nov. 15, 1920	May 16, 1921	200,000,000	5	232,124,000	67,840,000	108,898,500	83,615,500	36.8
TJ2-1921.....	Dec. 15, 1920	June 15, 1921	500,000,000	5	188,123,000	169,600,000	163,788,500	93,616,000	49.0
TJ-1921.....	do.	Dec. 15, 1921		6	401,557,500		249,077,500	173,291,000	61,019,000	51.4
E-1921.....	Jan. 15, 1921	Apr. 15, 1921	250,000,000	5	118,660,000	84,800,000	99,340,500	77,043,000	40.1
F-1921.....	do.	Oct. 15, 1921		5	192,026,500		200,829,000	49,451,500	85,721,500	37.2
G-1921.....	Feb. 15, 1921	July 15, 1921	100,000,000	5	132,896,500	33,920,000	80,745,500	74,267,000	44.3
TS2-1921.....	Mar. 15, 1921	Sept. 15, 1921	400,000,000	5	193,302,000	135,680,000	89,171,500	124,187,500	38.0
TM-1922.....	do.	Mar. 15, 1922		5	288,501,000		139,670,000	74,267,000	186,664,000	50.5
H-1921.....	Apr. 15, 1921	Oct. 15, 1921	150,000,000	5	190,511,500	50,880,000	126,086,000	157,225,200	43.7
A-1922.....	May 16, 1921	Feb. 16, 1922	200,000,000	5	256,170,000	67,840,000	224,884,500	186,664,000	43.7
A-1924.....	June 15, 1921	June 15, 1924	500,000,000	5	311,191,600	169,600,000	207,690,500	137,155,500	42.8
TJ-1922.....	do.	June 15, 1922		5	314,184,000		207,690,500	137,155,500	137,155,500	42.8
Total.....					31,856,750,100		14,558,146,500	13,621,966,700	

¹ Not assigned.

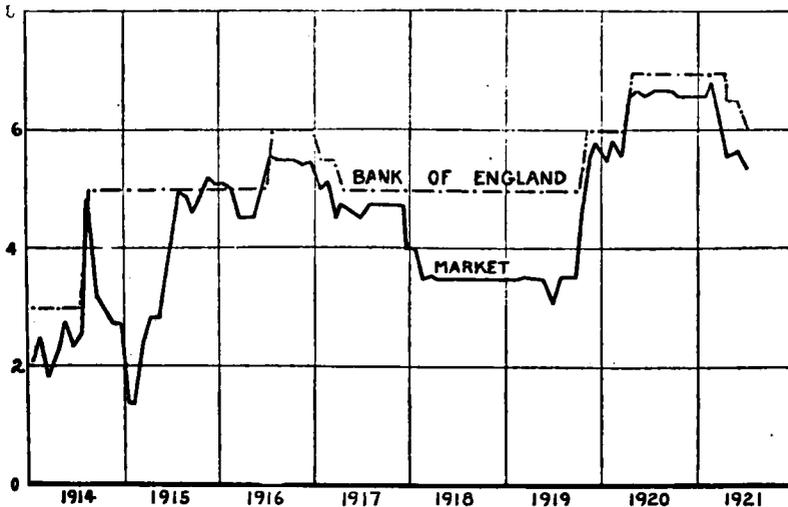
² Not stated.



INTEREST RATE OF CERTIFICATES OF INDEBTEDNESS AT ISSUANCE AND RATE OF THE FEDERAL RESERVE BANK OF NEW YORK ON ADVANCES SECURED BY CERTIFICATES OF INDEBTEDNESS.

Typical interest rates at issuance of United States certificates of indebtedness (omitting longest term issues in 1920 and 1921), and the rate charged by the Federal reserve bank of New York on advances secured by certificates of indebtedness.

Source of information: Annual reports and circulars, Federal reserve bank of New York.

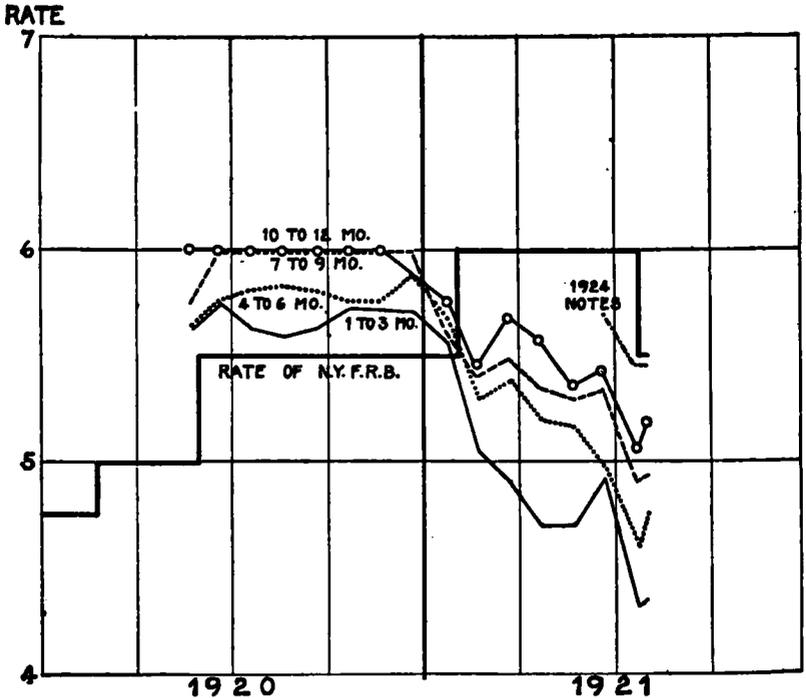


MINIMUM DISCOUNT RATE OF THE BANK OF ENGLAND AND THE MARKET RATE ON 90-DAY BILLS IN LONDON.

Source of information: London Economist.

A chart giving the open-market selling rate of certificates of indebtedness, with certain indications to explain the variation in the rates, compared with the rate at which the Federal reserve bank makes advances upon certificates of indebtedness. And a similar chart prepared upon a somewhat different basis, which will be illuminating. (See p. 559.)

I would also like to introduce a chart covering the period of 1914 to 1921, comparing the market rate for from four to six months' com-

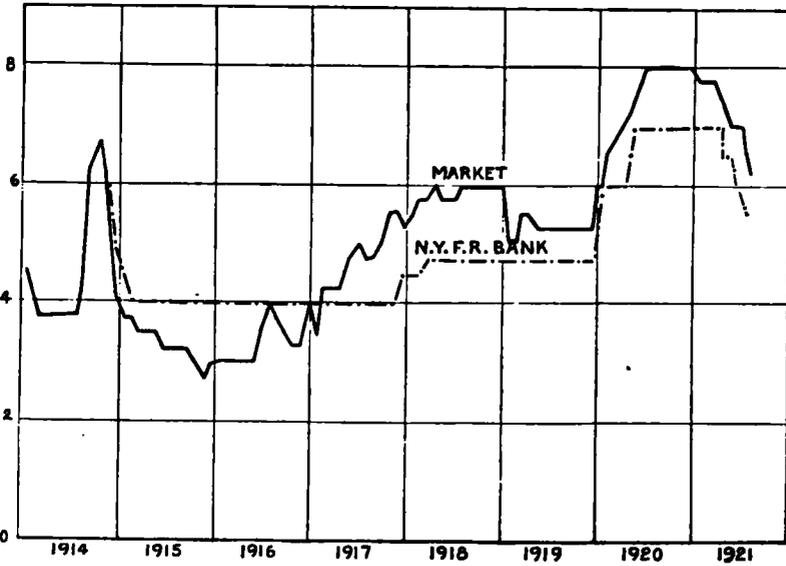


OPEN MARKET RATES FOR CERTIFICATES OF INDEBTEDNESS AND RATE OF FEDERAL RESERVE BANK OF NEW YORK ON ADVANCES.

Open market selling rates of United States certificates of indebtedness with different numbers of months to run before maturity, compared with the rate charged by the Federal reserve bank of New York on advances secured by certificates of indebtedness.

Source of information: Annual reports and circulars of the Federal reserve bank of New York. Tabulation of selling rates prepared by certificates of indebtedness department, Federal reserve bank of New York.

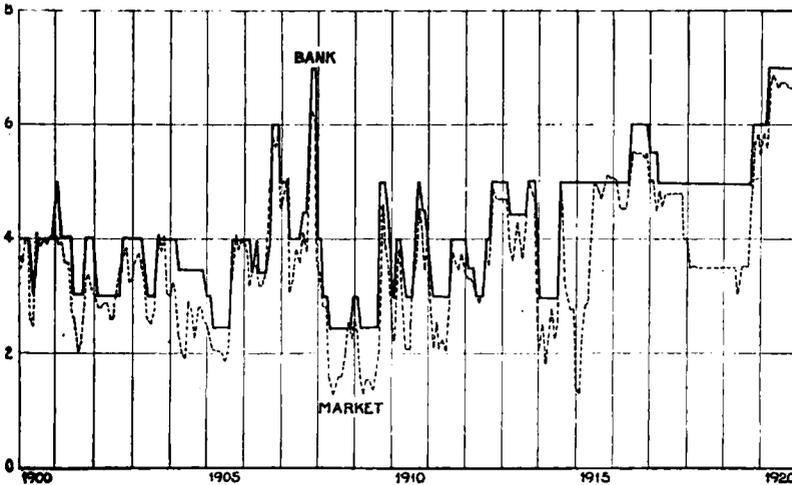
mercial paper in New York with the maximum discount rate of the Federal reserve bank of New York for commercial paper (see opposite page); accompanying this are tables giving the rates from which the charts are prepared. Likewise, a chart covering the same period (see p. 559) and another covering the period since 1900 (see opposite page), giving the market rate and bank rates of London, and the minimum discount rate of the Bank of England.



DISCOUNT RATE OF THE FEDERAL RESERVE BANK OF NEW YORK AND THE MARKET RATE ON COMMERCIAL PAPER.

Discount rate shown is the maximum rate on commercial paper, and market rate is the prevailing selling rate for prime four to six months paper at New York.

Source of information: Annual reports and circulars of the Federal reserve bank of New York; the New York Times, and reports of dealers to the Federal reserve bank of New York.



MINIMUM DISCOUNT RATE OF THE BANK OF ENGLAND AND THE MARKET RATE ON 90-DAY BILLS IN LONDON.

Source of information: Financial Review (1900-1913), London Economist (1914-1921).

Discount rate of the Federal reserve bank of New York on 60 and 90 day commercial paper and market rate on 4 to 6 months' commercial paper in New York.

Month.	1914		1915		1916		1917	
	Market.	Bank.	Market.	Bank.	Market.	Bank.	Market.	Bank.
January.....	4½	.....	3½	4½	3	4	3½	4
February.....	3½	.....	3½	4	3	4	4½	4
March.....	3½	.....	3½	4	3	4	4½	4
April.....	3½	.....	3½	4	3	4	4½	4
May.....	3½	.....	3½	4	3	4	4½	4
June.....	3½	.....	3½	4	3½	4	5	4
July.....	4½	.....	3½	4	4	4	4½	4
August.....	6	.....	3½	4	3½	4	4½	4
September.....	6	.....	3	4	3	4	5	4
October.....	6	.....	3	4	3½	4	5½	4
November.....	5½	6	2½	4	3½	4	5½	4
December.....	4	5	3	4	4	4	5½	4½

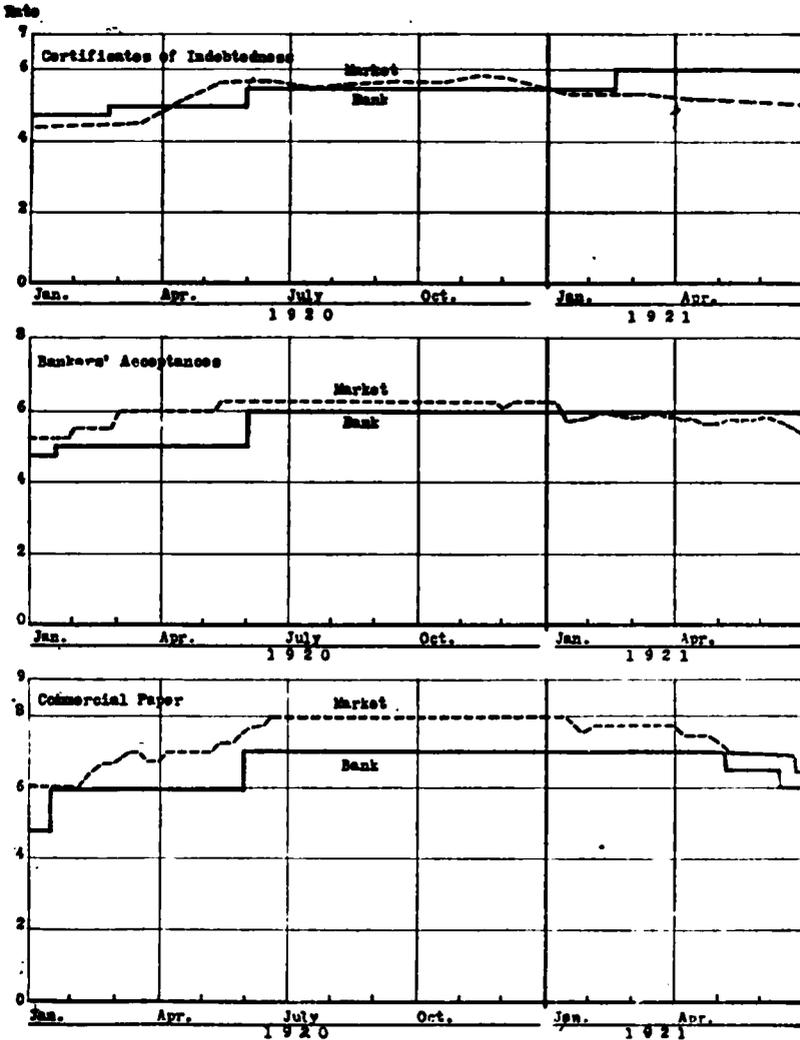
Month.	1918		1919		1920		1921	
	Market.	Bank.	Market.	Bank.	Market.	Bank.	Market.	Bank.
January.....	5½	4½	5	4½	6	6	7½	7
February.....	5½	4½	5	4½	6½	6	7½	7
March.....	5½	4½	5½	4½	6½	6	7½	7
April.....	6	4½	5½	4½	7	6	7½	6½
May.....	5½	4½	5½	4½	7½	7	6½	6
June.....	5½	4½	5½	4½	7½	7	6½	5½
July.....	5½	4½	5½	4½	8	7	6½	.....
August.....	6	4½	5½	4½	8	7	.....	.....
September.....	6	4½	5½	4½	8	7	.....	.....
October.....	6	4½	5½	4½	8	7	.....	.....
November.....	6	4½	5½	4½	8	7	.....	.....
December.....	6	4½	6	4½	8	7	.....	.....

Market rate on 90-day bank bills in London and the minimum rate of the bank of England.

Month.	1914		1915		1916		1917	
	Market.	Bank.	Market.	Bank.	Market.	Bank.	Market.	Bank.
January.....	2½	3	1½	5	5½	5	5	5½
February.....	2½	3	1½	5	5½	5	5½	5½
March.....	1½	3	5	5	4½	5	4½	5½
April.....	2½	3	2½	5	4½	5	4½	5
May.....	2½	3	2½	5	4½	5	4½	5
June.....	2½	3	4½	5	5½	5	4½	5
July.....	2½	3	5	5	5½	6	4½	5
August.....	4½	5	4½	5	5½	6	4½	5
September.....	3½	5	4½	5	5½	6	4½	5
October.....	3	5	4½	5	5½	6	4½	5
November.....	2½	5	5	5	5½	6	4½	5
December.....	2½	5	5½	5	5½	6	4	5

Month.	1918		1919		1920		1921	
	Market.	Bank.	Market.	Bank.	Market.	Bank.	Market.	Bank.
January.....	4	5	3½	5	5½	6	6	7
February.....	3½	5	3½	5	5½	6	6	7
March.....	3½	5	3½	5	6	6	6	7
April.....	3½	5	3½	5	6	7	5½	6
May.....	3½	5	3½	5	6	7	5½	6
June.....	3½	5	3½	5	6	7	5½	6
July.....	3½	5	3½	5	6	7	.....	.....
August.....	3½	5	3½	5	6	7	.....	.....
September.....	3½	5	3½	5	6	7	.....	.....
October.....	3½	5	4½	5	6	7	.....	.....
November.....	3½	5	5	6	6	7	.....	.....
December.....	3½	5	5½	6	6	7	.....	.....

Commenting upon these exhibits, let me say that they show the following: That from the time of the establishment of the Federal reserve bank of New York down to the time when war was declared upon Germany, in April, 1917, the discount rate of the New



DISCOUNT RATE OF THE FEDERAL RESERVE BANK OF NEW YORK AND THE MARKET RATE ON DIFFERENT TYPES OF PAPER.

Prevailing selling rate each week of prime 4 to 6 months commercial paper, prime 60 to 90 day bankers' acceptances and United States certificates of indebtedness maturing in 6 to 9 months.

Source of information: Annual reports and circulars of Federal reserve bank of New York and reports of dealers to the Federal reserve bank of New York.

York bank was at all times above the market rate for commercial paper; from that date to the present date, the discount rate has been below the market rate for commercial paper. The chart shows that in the Bank of England, with one or two exceptions, at the end of 1915 and the beginning of 1916 (see p. 559), the minimum discount rate of the

Bank of England has been above the market rate for commercial bills during the entire period.

Also a chart and table comparing the market rates with our rates for certificates of indebtedness and commercial paper for the years 1920 and 1921 to date. (See p. 563.)

Money rates at New York.

Date.	Prime 4 to 6 months commercial paper.	Prime 90-day bankers' acceptances.	United States certificates of indebtedness, 6 months maturity.	Weekly average time loans, 60-day industrial collateral.	Call loan renewal, typical rate.
1920.					
Jan. 2	6	5½	4.45	7½	10
Jan. 9	6	5½		7½	8
Jan. 16	6	5½		8	8
Jan. 23	6	5½		8	6
Jan. 30	6	5½		8½	10
Feb. 6	6	5½	4.50	9	14
Feb. 13	6	5½		9	10
Feb. 20	6.5	5½		8½	6
Feb. 27	6.75	5½		9½	10
Mar. 5	6.75	6	4.50	9	10
Mar. 12	7	6		8½	7
Mar. 19	7	6		8½	8
Mar. 26	6.75	6		8½	7
Apr. 2	6.75	6	5½	8½	8
Apr. 9	7	6		8½	6
Apr. 16	7	6		8½	7
Apr. 23	7	6		8½	7
Apr. 30	7	6		8½	8
May 7	7	6	5½	8½	7
May 14	7.25	6		8½	8
May 21	7.25	6½		8½	7
May 28	7.50	6½		8½	6
June 4	7.75	6½	5½	8½	6
June 11	7.75	6½		8½	7
June 18	8	6½		8½	8
June 25	8	6½		8½	9
July 2	8	6½	5½	8½	9
July 9	8	6½		8½	8
July 16	8	6½		8½	8
July 23	8	6½		8½	8
July 30	8	6½	5.6	9	8
Aug. 6	8	6½		9	7
Aug. 13	8	6½		9	7
Aug. 20	8	6½		9	7
Aug. 27	8	6½		9	7
Sept. 3	8	6½	5.65	9	8
Sept. 10	8	6½		9½	7
Sept. 17	8	6½		8½	7
Sept. 24	8	6½		8½	7
Oct. 1	8	6½	5½	8	7
Oct. 8	8	6½		8	6
Oct. 15	8	6½		8	7
Oct. 22	8	6½		8	9
Oct. 29	8	6½		8	9
Nov 5	8	6½	5.80	8	9
Nov. 12	8	6½		8	8
Nov. 19	8	6½		8	8
Nov. 26	8	6½		7½	6
Dec. 3	8	6½	5½	7½	7
Dec. 10	8	6½		7½	7
Dec. 17	8	6½		7½	7
Dec. 24	8	6½		7½	7
Dec. 31	8	6½		7½	7
1921.					
Jan. 8	8	6½	5½	7½	7
Jan. 15	8	5½		6½	7
Jan. 22	7½	5½		6½	6
Jan. 29	7½	5½		6½	7
Feb. 5	7½	6	5.40	6½	8
Feb. 12	7½	6		7½	8
Feb. 19	7½	6		7½	7
Feb. 26	7½	5½		6½	7

Money rates at New York—Continued.

Date.	Prime 4 to 6 months commercial paper.	Prime 90-day bankers' acceptances.	United States certificates of indebtedness, 6 months maturity.	Weekly average time loans, 60-day industrial collateral.	Call loan renewal, typical rate.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1921.					
Mar. 5.....	7½	5½	5.35	6½	7
Mar. 12.....	7½	6		6½	7
Mar. 19.....	7½	6		7	7
Mar. 26.....	7½	5½		6½	6½
Apr. 2.....	7½	5½	5.25	6½	6½
Apr. 9.....	7½	5½		6½	6
Apr. 16.....	7½	5½		6½	7
Apr. 23.....	7½	5½		6½	6½
Apr. 30.....	7½	5½		6½	6½
May 7.....	7	5	5.20	7	6½
May 14.....	7	5		6½	7
May 21.....	7	5½		6½	7
May 28.....	7	5½		6½	7
June 4.....	7	5½	5.16	7	6½
June 11.....	7	5½		7	6½
June 18.....	7	5½		6½	5½
June 25.....	6½	5½		6½	5
July 1.....	6½	5½	5.08	6½	5½
July 8.....	6½	5½		6	5½
July 15.....	6½	5½		6	6
July 22.....	6½	5½		6	6
July 29.....	6½	5½		6	6

Also a chart comparing the rate on commercial paper after the Civil War and after the World War. (See p. 566.)

A chart comparing market rates of commercial paper, bankers' acceptances and certificates of indebtedness in the New York market. (See p. 567.)

A chart comparing the weekly call loan rate for loans on the New York Stock Exchange, with the 60-day time loan rate on industrial collateral, on the New York Stock Exchange. (See p. 567.)

CERTIFICATES OF INDEBTEDNESS—METHODS OF DISTRIBUTION—SECOND FEDERAL RESERVE DISTRICT.

[Addresses delivered by Mr. R. H. Treman and Mr. Ray Morris before a conference of county directors at the Bankers' Club, New York City, July 16, 1918.]

CERTIFICATES OF INDEBTEDNESS DEPARTMENT OF THE FEDERAL RESERVE BANK OF NEW YORK.

The certificates of indebtedness department of the Federal Reserve Bank of New York was created to handle the distribution in the second Federal reserve district of this form of security as issued from time to time by the United States Government.

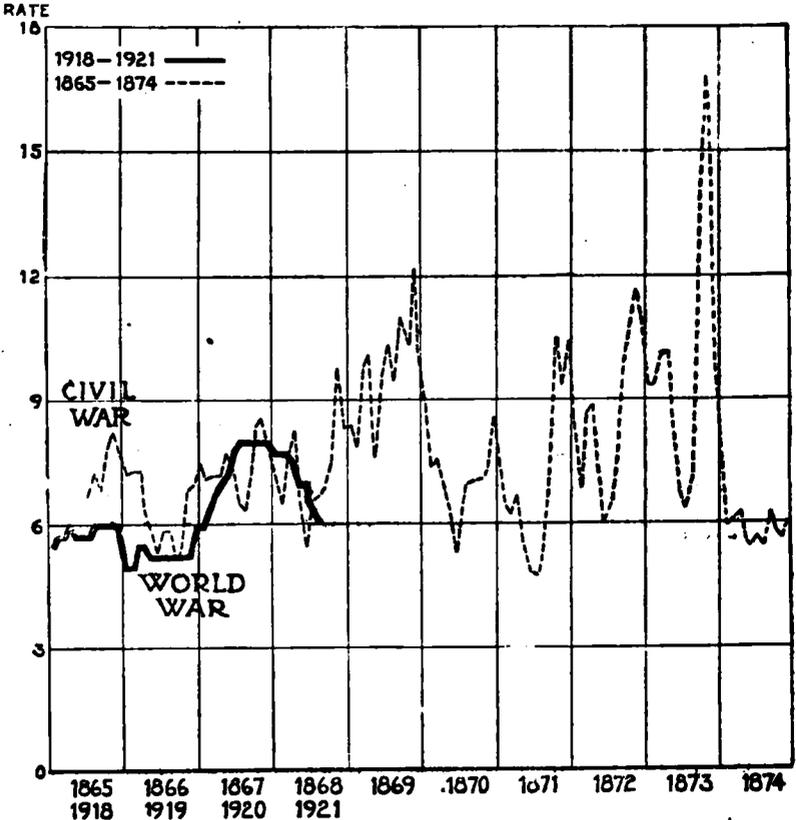
In organizing the department it was decided to appoint a county director for each of 70 counties in the district. No county directors were appointed for New York, Bronx, Kings, Richmond, or Hamilton Counties. A conference of these county directors was held at the Bankers Club in New York City on Tuesday, July 16, 1918. A large majority of the counties were represented, and the tone of the meeting was spirited and enthusiastic. The discussion of the subjects brought before the conference proved to be so instructive and suggestive that there were many requests for a full report of the meeting. This pamphlet is published in response to those requests.

As the deliberations were of the most informal nature and as the addresses of both Mr. Treman and Mr. Morris were of an extemporaneous and discursive character—not prepared for publication—due allowance should be made therefor by the critical reader.

INTRODUCTORY REMARKS BY MR. ROBERT H. TREMAN, DEPUTY GOVERNOR FEDERAL RESERVE BANK OF NEW YORK.

Let me first, in behalf of the directors of the Federal reserve bank, express to you our appreciation of the sacrifices some of you have made in coming down here to attend this meeting. The work before us is one that has been assigned to the bankers. Our present expenditures in this country—counting loans to the Allies—are a billion and a half each month, and it is estimated that by November these expenditures may be at the rate of \$2,000,000,000 per month.

As you know, the Secretary of the Treasury has asked the bankers in the country to take certificates of indebtedness every two weeks to the extent of \$750,000,000.

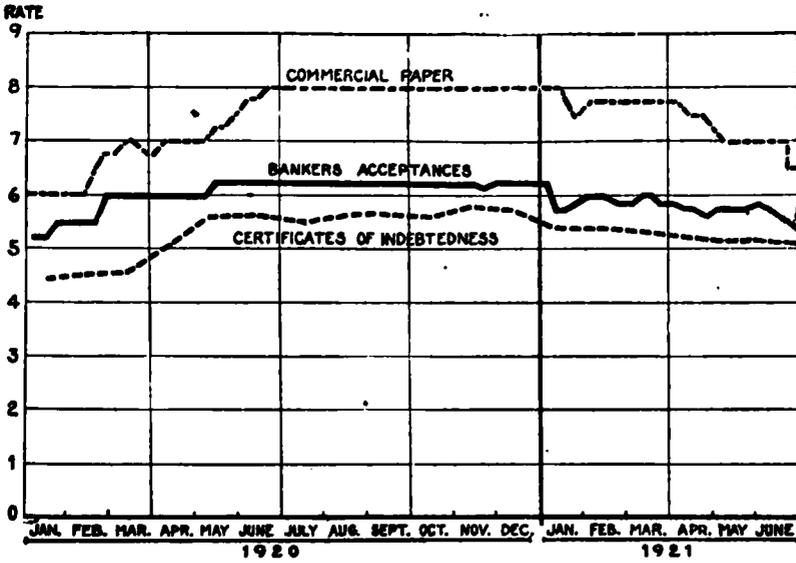


INTEREST RATES ON COMMERCIAL PAPER AFTER THE CIVIL WAR AND AFTER THE WORLD WAR.

Prevailing rates on prime 60 to 90 day paper each month from 1865 to 1874 and prevailing rates on prime 4 to 6 months paper each month from 1918 to 1921.

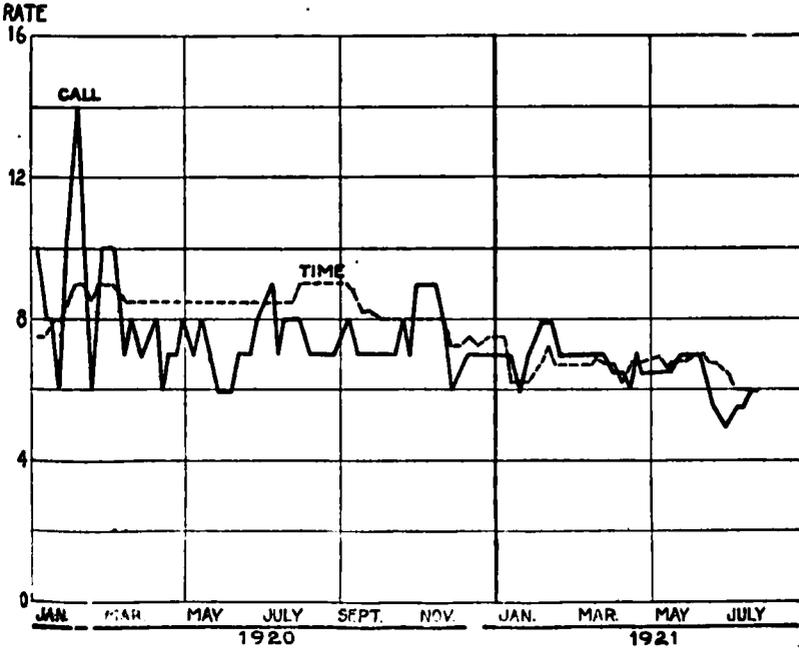
Source of information: For early period, unpublished study by Prof. F. R. Macaulay, of the National Bureau of Economic Research; for recent years, the New York Times and reports of dealers to the Federal reserve bank of New York.

The purpose is to prepare for the next, the fourth, Liberty loan bonds. We are, in this week, withdrawing from the banks all of the deposits that were made in connection with the third Liberty loan and also the tax money, so that after these calls all that will remain in the banks to the credit of the Government is what has been realized from the sale of \$750,000,000 certificates issued June 25. To-day, the subscription for the second issue of certificates of indebtedness dated July 9 closes, and when I came up from the bank there were \$247,000,000 subscribed out of the \$254,000,000, which is the quota of the New York district. Unfortunately, some of the other districts up to to-day have not taken their full quota, but it is the purpose of the Treasury Department to distribute these certificates just as equitably as is possible to do so,



MARKET RATES ON PRINCIPAL TYPES OF PAPER AT NEW YORK.

Prevailing selling rate each week of prime 4 to 6 months commercial paper, prime 60 to 90 day bankers' acceptances and United States certificates of indebtedness maturing in 6 to 9 months.
 Source of information: Reports of dealers to the Federal reserve bank of New York.



CALL AND TIME LOAN RATES IN NEW YORK CITY.

Prevailing call loan renewal rate and prevailing rate on time loans on industrial collateral.
 Source of information: Commercial and Financial Chronicle and New York Times.

and in assigning the different quotas to the 12 reserve banks, each district is expected to take its full quota and likewise each bank within the district is expected to take its full share. We have no doubt of the ability and of the willingness of the banks in this district to cooperate fully. The reason for bringing you here is to perfect an organization so that in the succeeding issues which will be put out, every bank in the district in so far as possible will participate.

It may be of interest to you to know what has been done in the past in regard to the previous issues of certificates and the number of banks subscribing, the records of which I give you herewith:

Certificates issued in anticipation of the first Liberty loan:

Total sale.....	\$816, 000, 000
Total subscriptions, second district.....	525, 393, 000
Total allotment, second district.....	459, 962, 000
Average number of subscribers, 181.	

Certificates issued in anticipation of the second Liberty loan:

Total sale.....	2, 235, 296, 000
Total subscriptions, second district.....	1, 539, 496, 000
Total allotment, second district.....	1, 467, 543, 000
Average number of subscribers, 185.	

Certificates issued in anticipation of the third Liberty loan:

Total sale.....	3, 012, 085, 500
Total subscriptions, second district.....	1, 300, 688, 500
Total allotment, second district.....	1, 255, 308, 000
Average number of subscribers, 741.	

In addition to the regular certificates of indebtedness, the Government put out certificates which were received in payment for taxes as follows:

Total sale.....	\$1, 623, 441, 500
Total subscriptions, second district.....	831, 473, 000
Total allotment, second district.....	831, 473, 000

Certificates issued in anticipation of the fourth Liberty loan (June 25 issue):

Total sale.....	839, 646, 500
Total subscriptions, second district.....	312, 844, 500
Total allotment, second district.....	312, 844, 500

In the issue of July 9, closing to-day, there are, up to this moment, 789 subscribers, so that there has been a gradual increase in the participation. Out of all the 1,222 banks of the district, including savings banks, there are about 60 banks, if I remember correctly, which have not purchased any of the certificates of indebtedness of any issue.

Now, if a bank under the present plan does not take these certificates, you can readily understand that it means that some other bank must take more than its quota.

It is a big job that is before the banks. You whom we have asked to come down here, representing each of the counties in the State, have an individual responsibility so far as that county is concerned. It seems advisable to ask you to come here and sit around the table, and after whatever informal addresses there may be made, if there are any questions any of you would like to ask we hope you will feel perfectly free to speak, because the problems are many and varied.

Closely linked with this question, of course, is the saving of credit and it may seem rather inconsistent that banks are being asked to create credit by subscribing for certificates of indebtedness, and at the same time urged to withhold and save credit.

But gentlemen, burn this into your minds, that the claims of the Government for credit must come first. Whatever claim any individual or corporation has for credit, no matter how urgent, the claims of the Government must be met first of all. Do you appreciate how greatly the demands for credit are growing? Not only the demands of our allies, but in our own country the billion dollar Congress of a few years ago has been succeeded by the \$22,000,000,000 Congress of last year and it is estimated that \$30,000,000,000 will be needed for the years 1918-19.

The question of credit, it seems to me, is preeminently one that must be handled and solved by the bankers. The bankers manufacture credit, and they distribute credit, but credit is also a commodity which can be wasted or it can be saved—it can be employed usefully or it can be employed wastefully, so it is up to the bankers to see that credit is used usefully; in other words, saved and only used where it will purchase that which is to accomplish our one great purpose, the winning of this war. Every saving you make can and should be used for things essential, and buying these certificates tends to that end directly.

Many people easily understand what is involved when you discuss the question of the conservation of coal, they know what you mean when you say that for the needs of the Government, such as shipping and many other needs arising every day, coal provision must be made, but the public has not even yet learned the extent to which they should economize coal.

If the individual is called upon to conserve coal and freeze himself for the benefit of the Government there is no misunderstanding and it is now recognized that the thing must be done.

But it is more difficult to make them understand when customers offer a perfectly good loan, with perfectly good security, why it is the banks are not in a position to give them or loan them the credit that they want. To meet this situation is your job and it is not an easy job, as every banker understands. No one appreciates this more than those of us who are connected with the reserve bank. We have every day numerous letters coming in from banks all over the district stating that "we are called upon to take so many certificates of indebtedness. We are loyal, we are patriotic; we want to do this thing, but how can we do it when all of our resources are invested?" This is especially the case in many of the agricultural districts. They say, "all the loans are tied up with farmers who can only pay in the fall. How are we to find at present the necessary credit to supply the Government?"

This again is the question for the banker, and it is his job to find out the ways and means by which that credit can be transferred from individuals and corporations or in some way can be developed, so as to furnish the Government, without too much restricting the business of the country, what they need.

We come now to specific ways in which this credit can be developed and secured. Do you want to manufacture credit in excess of needs and cause undue inflation? Do you want to "go the limit" as some bankers have advocated?

I heard one of the most prominent bankers of this city say awhile ago: "Business must go on as usual." But, gentlemen, business can't go on as usual any more in the matter of credit than it can in the matter of coal. If we are going to give an additional amount to our friends on the other side of the water, and we can only produce so much, somebody has got to give way and how to do this is being worked out by the Government. But when it comes to the question of credit, that is preeminently for the bankers to work out and along similar basic lines.

The machinery is all ready to manufacture the credit but it is not advisable to go beyond the extent that it is absolutely necessary, and it seems to me, over and against the manufacture of an undue amount of credit, leading no doubt, to overexpansion and possibly inflation, we should recognize that it is in the power of the individual bank to help in saving credit by a proper withdrawing or withholding of credit for the things which are not essential and checking any expansion of credit along non-essential lines. This really becomes in the last analysis a matter for each individual bank, and in each bank it then becomes a matter for each individual banker to do his full part.

In many of the communities the banks of which are represented here, it is a question of loans to farmers. Now it seems to me there is a perfectly clear line that can be drawn in regard to those loans. If a loan of money is asked by a farmer for seed or for necessary tools or for labor, it would seem to me personally—and I am only speaking as an individual—that in those cases every proper and reasonable extension of credit should be made. But the farmer is inclined to be a speculator, and when he comes to you in a month or two and wants loans because he says he is not ready to sell his hay or his oats or his cattle or other products—wants to hold for possibly higher prices, and you encourage him because the loan is a good one as to its credit, it seems to me that your bank is helping to that extent in interfering with the Government's need for credit and its supply. I think that the farmer should be educated to feel that when his crop is raised and harvested, that under these abnormal conditions, he should sell the crop, instead of asking you to furnish credit for him to speculate and hold for possibly better prices—assuming that he can secure fair prices for his output.

The manufacturer also has the same problem. The manufacturer finds to-day, in working up his product, that he is liable, for instance, not to be able to get the wool that he wants or he is not able to get the amount of iron or steel or some other material, and the natural tendency is for him to say: "Why, I want to borrow a little more money because I would like to carry a little more material all of the time to protect the operating of my factory, so that I can manufacture and have the material ready, etc." There again comes the question between reasonable and the unreasonable use of credit. No one can tell here, as we are talking together, what is the wisest thing to do in each individual case, but I am speaking of this because these are the problems that you gentlemen are called upon to settle and solve, and it seems to me that there

is danger along the line of the manufacturer speculating and depending on your bank to supply the credit for this speculation.

The same thing applies to the distributor, i. e., the wholesaler or retailer. Only this morning it was reported to me in the bank that some of the wholesalers in the Central West were accumulating an undue amount of different kinds of commodities so that they would be prepared when the time came in the fall to supply them. That is perfectly legitimate in normal conditions. But if it leads to an undue accumulation either of coal or wheat or of merchandise, it seems to me it is not justifiable under present conditions. And the banker to whom the jobber or the manufacturer comes for these loans, he is the man who, it seems to me, should investigate these conditions—as to the reasonableness or the unreasonableness of the request for credit. It is not an easy job. These men that come to you—you have had personal relations with them for years, and they say: "Well, I have some securities as collateral with you and just at the present time I do not want to sell them," and so ask you to carry the loan longer. It is probable that you have carried them for three or four years waiting for "the golden time" for the market prices to rise so they can get out at a gain. But I submit to you, how long can you carry this kind of loans in justice to the situation? In the small banks, there are a great many loans that have been carried for long periods on payment of the interest, and that is a perfectly legitimate thing for the banks to do in normal times. But I feel there never has come, in the history of each one here, as good a time as you have at present to "clean house" in your bank or distributing house or any other place, and I feel that it is the duty of every distributor, every manufacturer, to run with the lowest amount possible to supply the things which are absolutely necessary for the Government needs.

There are opportunities now for banks to insist upon their customers reducing and paying off loans which have been carried for a long period in the institution. By compelling your customers to pay off these loans it will have a beneficial effect upon them, leading them to economize as they have not been doing before and as the situation now demands they should. We are in this war to win, and we have got to supply the credit that is necessary for the Allies and ourselves, and can secure part of the credit needed by saving it.

We must insure this by taking every precaution and husbanding our strength to exert it forcefully in the proper direction, and give telling blows, as much in credit as in arms. Get this into your heads, rather than follow a day to day course of "business as usual," which would fail to bring the results most earnestly desired.

We are here to-day to talk about supplying the Government in advance, underwriting the credit which will be necessary for the Government before the next Liberty loan, and it will need the money just as fast as it is possible to secure it. In the last campaign for certificates of indebtedness, we were asked in January by the Secretary of the Treasury without much warning, if we could distribute so many certificates every two or three weeks, and after we had thought the matter over, it seemed to us that the most helpful organization that we could secure immediately would be in New York State Bankers' Association, and Mr. Gregory, the president, and Mr. Gallien, the secretary, rose to the occasion, selected a number of bankers throughout the State and called them together hurriedly. They took hold of the matter and this district took its full quota of the certificates of indebtedness of each issue as they came out; in most of them we took more than our full quota and great thanks are due to those men who served. Now, at this present time, instead of three or four billions as before to put out, we have six billions of certificates to sell in the four months. It is a big job for any rich country; it certainly is a big undertaking after what has been already placed upon the country. But I feel confident we will do it well and quickly. Every man, so far as this district is concerned, is going to stand by us and see that each and every bank, so far as possible, does its full share.

We are publishing a little book giving a list of these banks which subscribe to each issue. This plan has been followed for some time in the other Federal reserve districts. They have found this works well. It seems equitable, that those who are doing their proportion or more than their proportion should know what the other banks are doing.

We all recognize that there are some banks which by reason of local conditions may not have been able to take their full quota of the two issues just put out, but every bank ought to take some certificates of each issue and in the aggregate they should make every effort to take their allotted share, thus cooperating in this movement and not placing upon some other bank any burden which each bank should carry for itself.

We must do our part to make the Government financing a success and thus the bankers will be contributing their share to winning the war at the earliest moment. I repeat to you, gentlemen, this is your job and you must assume it.

We have formed a new organization in the Federal reserve bank to direct this work. Mr. Ray Morris will be the director in charge, Mr. H. M. Wilson, Mr. R. T. Crane, and others will be associated with him. They have enlisted in the work. You have done the same and we will make it a big success. Mr. Morris is here to tell you the details of it. I will now introduce Mr. Morris to you so that he may go on and explain what we expect of you. Mr. Morris is a man of known ability, of patriotism, willing to go to still further self-sacrifice to make this thing a go, and I am sure he will have your full support.

REMARKS OUTLINING THE ORGANIZATION OF THE CERTIFICATES OF INDEBTEDNESS DEPARTMENT BY MR. RAY MORRIS, DIRECTOR OF SALES.

Mr. Treman, by reason of being both deputy governor and an up-State banker, has given you such a clear picture of the fundamental problems affecting the certificates, that I am going to skip right over that part of it and come down more or less to the details of the organization, as we have been able to plan them out.

This is a new problem, and it needs to be met with some new measures. I want to say at the outset that we all feel that to the extent that the New York end can be subordinated and the real influential work done in the up-State counties, to that extent it will be done better. I do not know whether a man ever lived anywhere that liked to have somebody 200 miles away tell him how to do his business, but I am sure there is no one like that in New York State, in the 12 northern counties of New Jersey, or in Fairfield County, Conn. Now, this job—I won't say it requires urging—that is not the word—because there is not a banker in the district who is not just as keen about winning the war as we are; but it needs explanation; it needs demonstration; it probably needs encouragement. My proposition is just this: That to the extent that the explaining and demonstrating and encouraging can be done locally up-State by the strong, influential bankers, in contact with their neighbors, it will be done right. I am a considerable believer in the bolshevik principle of self-determination, and I should regard the work of the sales department as perfect if each up-State county found a way of meeting its own problem so effectively that the sales department would be reduced to being a historian of the movement, and if the only literature we need put out would be bragging letters aimed at the other Federal reserve districts. [Laughter.]

As to the difficulties; we all know about the difficulties. I guess I have got in my file a hundred careful, earnest letters, written in a spirit of mingled patriotism and perplexity, from your colleagues, who realize the need, but want to be shown the way.

We all know that the banks have a lot of Liberty bonds on hand which they are carrying for customers; they have got slow securities of various sorts they can not afford to sell; they have got many of the kind of quick loans that never quite get paid off at maturity, and for reasons of business courtesy there is a natural limit to the pressure they can apply to their customers.

Now, what is the answer? Mr. Treman has spoken to you quite fully as to what the answer is. I think there are two answers. I think the first answer deals with the spirit of the transaction, and of that I need say very little, because every one of you gentlemen has it, or you would not be here. Mr. Treman received a telegram from one of your number, who probably would not want me to give up his name, but what he said was: "All of my time and all my resources are at the disposal of the Government to help in the war." Well, that comes pretty near being my text, as affecting the spirit of the enterprise.

As to the ways and means: As a newcomer in the Federal bank organization—I have been in it just about a month—I want to speak for a minute as the outsider that I was a month ago, and say this: That without the Federal bank machinery I think we would be facing an insuperable difficulty to-day. It would certainly be insuperable along the lines of the relatively simple and easy method in which it is now presented. I do not need to ask you gentlemen if you ever considered how we would be fixed if we had to finance the war with the banking machinery that this country had in 1907. You know the answer as well as I do. Everybody would be hoarding reserves. Nobody able and willing or willing and able, to take care of commercial borrowers—clearing house certificates, and all the rest of it; and then, inconvertible paper money and a currency depreciation that would take about 15 years to work out after the war. Now, by the grace of God, and at the eleventh hour, this country has got a banking system which our English critics say is the best in the world, resting solely on the proposition that short, prime paper of a self-liquidating nature is the basis for credit, whenever a bank need it and to the extent that it needs it; and that principle has an immense bearing on this problem, because no matter how fast the Government progresses with its war needs, no matter how seemingly impossible the demands of

the Government, as it spends the money; as I analyze it, it is taking slow assets and throwing them into quick credit form, and if you can get these quick credits in such shape that they are self-liquidating, there need be no serious strain at any time.

As to the specific ability of the individual bank to take its quota, Mr. Treman has given you what we all think is the absolute essence of the thing, in what I may call the clean-up proposition. We know every bank is a separate case; we know there is no rule of thumb that fits all these questions; there are just as many kinds of problems as there are banks in the district. But don't we all of us know also the tendency of so-called quick assets to get non-liquid unless scrutinized very closely, and don't we recognize the need of special war-time scrutiny of our supposedly liquid assets at this time?

With reference to the slower assets; with reference to the old-line bonds held for years, with a big depreciation in them—you do not want to sell them, of course; probably you ought not to sell them. You realize, I think, the extent to which those securities are available as a pledge of collateral against Government deposits. You realize fully the book-credit method of making subscriptions for certificates. You have seen Treasury Circular No. 92, which tells you to what extent you can utilize your bonds and paper, and the percentages they are good for, and you realize that when you subscribe by the book-credit method, you do not make immediate payment, but that the money is gradually drawn out, and to the extent that you can get the certificates in shape as free assets, by pledge of other collateral, you can use them to manufacture credit as needed, by the 15-day loan on your note with the certificate attached, if you are a member bank, or by the sale and repurchase arrangement, if you are not a member.

You need not tell me; I understand it perfectly well, that a metropolitan bank here in New York is well fixed in a transaction of this sort. You understand and I understand that they can get their certificates in quick asset form; that they can pledge them; and with the avails they can obtain peculiarly liquid loans, especially available for short maturities, to an extent that a country bank can not do.

But I submit that there is not a bank in the district—at least, I do not believe there is a bank in the district—that to some extent—I won't say how much—would not profit by a careful study of the pledge features of collateral, and by a careful study of its own ability to get its purchased certificates in quick asset form available for the manufacture of credit as the special needs of the occasion may require, especially in view of the fact that your reserve position is not affected by the transaction; nor are you stopped by any specified legal limit. Each transaction is a separate transaction. The reserve bank does not give you a regular line of credit, but it judges your rediscounts in a business fashion, and in that judgment it separates your rediscounts from your certificate transactions, so that theoretically there is a lot of sea room in the ability of a bank, even if it is pretty well tied up, to take certificates.

I do not want to get in a position of seeming to argue for unsound banking. Mr. Treman has pointed out to you the need of conserving credit when and as you can. I want simply to point out that we have probably received 40 letters from banks who said that they absolutely could not take certificates at all, but I do not think I have seen more than one or two such cases where a bank really was not in shape to take any. I have seen several cases, it is true, where the bank could not take its full quota. But if the deposit of collateral is availed of, and all the devices so cleverly and thoughtfully worked out are utilized, there is usually a little room, no matter what the situation is.

I wanted to see just how this would work out, and, as I have considerable natural resistance to statistical demonstrations, I prepared the accompanying chart (*see next page*), to show what happens, in very simple, graphic form, when a bank with a quota, say, of \$100,000 subscribes regularly by book credit.

Based on the past experience of this bank, the money is all drawn out in four weeks, on the average, or, say, a quarter of it each week. The net Government deposit of the bank with the \$100,000 quota starts in, on the first investment date, at \$100,000. The next week the bank has not made any new investment; it has lost a quarter of its deposit. The next week it has invested \$100,000 more; total investment, \$200,000. It has lost its first \$100,000, down to \$50,000. It has a total Government deposit of \$150,000. Carry the process through each week for 16 weeks and you get an average investment of \$450,000; divide your total Government deposit by 16 and you have an average deposit of \$120,313.

Your certificates pay you 4½ per cent; you pay 2 per cent on the Government deposit. The net result of that transaction is a yield of 5.4 per cent, provided the Government deposit goes out in four weeks, one-quarter each week.

Illustration of overlap feature when a bank subscribes a quota of \$100,000 certificates every two weeks, with book credit form of payment.

[The estimate of complete withdrawal in four weeks is based on experience with past issues. Table figured on four equal weekly withdrawals.]

Date.	Investment.	Week.	Cash on hand.								Government deposit on hand.	
			From I.	From II.	From III.	From IV.	From V.	From VI.	From VII.	From VIII.		
July 2.....	\$100,000	1	\$100,000									\$100,000
July 9.....	100,000	2	75,000									75,000
July 16.....	200,000	3	50,000	\$100,000								150,000
July 23.....	200,000	4	25,000	75,000								100,000
July 30.....	300,000	5		50,000	\$100,000							150,000
Aug. 6.....	300,000	6		25,000	75,000							100,000
Aug. 13.....	400,000	7			50,000	\$100,000						150,000
Aug. 20.....	400,000	8			25,000	75,000						100,000
Aug. 27.....	500,000	9				50,000	\$100,000					150,000
Sept. 3.....	500,000	10				25,000	75,000					100,000
Sept. 10.....	600,000	11					50,000	\$100,000				150,000
Sept. 17.....	600,000	12					25,000	75,000				100,000
Sept. 24.....	700,000	13						50,000	\$100,000			150,000
Oct. 1.....	700,000	14						25,000	75,000			100,000
Oct. 8.....	800,000	15							50,000	\$100,000		150,000
Oct. 15.....	800,000	16							25,000	75,000		100,000
	16) 7,200,000											16) 1,925,000
	Av. Inv. = 450,000											Av. Gov. deposit = 120,313

Average investment..... \$450,000 one year at 4½ per cent = \$20,250
 Less Government deposit 120,313 1 year at 2 per cent = 2,406

Average net investment.. 329,687, earning at the rate of 17,844 per year, or 5.4 per cent.

AGRICULTURAL INQUIRY.

578

But you know the Government withdrawal is very irregular. It did not last four weeks this time. July 1 is a heavy payment day for the Government, the same way it is for most other people.

The chart is based on the average experience of this bank in the past. I mention it not solely because of the profit feature but to show you that the transaction is not as bad as it looks. I mean, even for a bank that does not take advantage of the 15-day pledge of its certificates. Viewed simply as a prime short time investment, it is a pretty good proposition.

Now, there is another thing that bears on that situation that I want to talk to you about very much. The reserve bank is in a certain way in a delicate position with regard to it—and that is the placing of certificates with your customers. We can not go to your customers, because we might occasion you a loss of deposits. But you recognize that your customers, the people in the community, are going to buy Liberty bonds in the fall. The faster the Government spends the new money coming in, the faster somebody gets it. To the extent that you can buy certificates and place them with your customers you are reducing your average investment without reducing your average Government deposit.

Some banks have been very much interested in this. Indeed, one bank in the district this week asked me for advertising matter to put out, and we replied that we did not want to give them anything on the Federal bank letterhead. We did not want to go between them and their customers, but we had a number of sales points prepared, and we would be most willing to send them.

We have talked to a number of men who have the same thing in mind. It is a novelty to a certain extent. A typical bank customer is not used to buying three or four months' paper in that way. But from the standpoint of the customer it is a prime investment, short, paying a good rate, and exempt from the normal income tax, which we are told is going to be increased very handsomely this fall.

So much from the standpoint of the customer. From the standpoint of the bank, as I say, it reduces your average investment in certificates without reducing your Government deposit. It is enabling the bank to take certificates that it could not otherwise take. We all understand that yield is not the point. I simply mention that as one of the rather complicated and numerous angles that arise in connection with this proposition.

Now, as to the county organization: As I said a minute ago, I am satisfied that the way to get a hard, difficult job of this sort done is through the exercise of what I may call "community pressure." Now, how can that best be brought about?

You gentlemen are all extremely busy men. Of those of you that I have the good fortune to know well, it seems to me that every one is in some Government activity, Red Cross, etc., besides being an exceedingly busy banker. What is the answer to that? The answer is that the county director in this organization ought not to be expected to do continuous detail work, and we do not expect it. What can he do? Here is one thing he can do.

Some counties have local banking associations organized. Mr. Dow organized one last Spring in Chautauqua County which helped us greatly in the conduct of the third Liberty loan. Now, suppose there is a county where there is no bankers' association. Suppose the county director forms one—very informal; no dues, no technicalities, no procedure at all. Suppose you invited these bankers to lunch with you and went over those things with them. Don't you think that is one of the things that can be done, and done effectively? As regards the quota, I think you all understand the way it was arrived at.

Secretary McAdoo started with a figure of 6,000,000,000 to be raised, and then he took the figures of the total banking resources; the relation of one to the other is the quota. That is not scientific, but it is easy, and to that extent it has some merits. Because it is the whole country's problem it is fair. I think you might say it is not fair for any single bank in the country, but it is fair for the country as a whole.

Now, I want to ask another question. I am asking for information. Suppose I wrote to each county director and said: "The quota for your county is so much," and that county director built up an equalization board, as was done in some counties in the Liberty loan last fall, to redistribute that quota; how would that appeal to you? I realize that there are a great many more banks that would like to be distributed down than would like to be redistributed up. [Laughter.] But I think if you sat around a table with a given county problem before you, for instance, you might in some cases get a voluntary quota accepted by the savings banks. The savings banks are not included in the quota, but lots of them want to subscribe. Take the case of a county that has a couple of prosperous savings banks in it and one National or State bank that is up against it; if your equalization board or your county association whichever way you apply it, thought it was fair and equitable to all concerned to give

that savings bank what I have called a voluntary quota, to the relief of somebody else, you could very easily bring your county out, without stepping on the toes of anybody.

Take the case of a county that has almost any kind of a rich business concern in it. If you have some of those people who would like to take certificates regularly, and you started in to redistribute quotas, I should imagine that in many cases—not in all cases—you could get certain voluntary quotas which might serve to unburden some other fellow that is overburdened. That is one of the points that I would very much like information and suggestions on to-day.

I personally would heartily welcome the opportunity to attend any of these county organization meetings. I would like to listen, rather than to talk. I would like to get the feel of this situation all around the district; I would like to meet the bankers; and I shall certainly make every effort to attend any of those meetings where you want me, or Mr. Wilson and Mr. Crane, my associates, will attend, and we should like very much to do it.

That is pretty nearly the story. It is an attempt to substitute the "I will" feeling for the "I would like to but I can't" feeling, and I think that the most important step we have taken is in having you gentlemen come here in the fine way you have come to-day to help work out this problem of local responsibility, local pride, and the local feeling that will make each county want to take its full quotas. I think most of them can take their full quotas, after the bankers have counseled together and worked on it, and it seems to me this is the way to start it. I do not think it is going to be too burdensome for any one of the county directors.

May I just say, in closing, that there will naturally be some expense attendant on these meetings. I should not suppose there will be a heavy expense bill, but if you gentlemen run up any bills on account of this that you want paid, why, of course, just turn them in.

SUPPLEMENTARY REMARKS BY MR. R. H. TREMAN.

There are two or three points which have suggested themselves to me since Mr. Morris has been talking. First, he referred to the length of time in which the certificate of indebtedness purchase money remains with each bank. We have expected that, as soon as the adjustments resulting from the July 1 settlements have been made, during the next two or three months the Government money would remain somewhat longer than was the case with money resulting from the certificates last winter and spring. I would not want, however, to hold out before you any false promises along these lines, because the increase in the Government expenditures is so great and is on such an immense schedule that it is difficult, I assume, for even the Treasury officials to keep pace with them. We assume, however, that deposits will remain, on the average, a month or so.

There will probably be issued—at least that is the present plan—in August or September, an issue of tax certificates, receivable at par and interest in payment of taxes of various kinds. In so far as those are issued and placed, just to that extent, probably, will the issue of the regular certificates be cut down, so that when that issue takes place, if you interest yourselves in placing those tax certificates with corporations or individuals who like to carry out the practice which some of them have originated of laying aside so much a month toward their taxes for next spring and summer, they can invest that sum in tax certificates, and to that extent you will not be asked to take the regular certificates of indebtedness.

A question that one of the leading bankers of the State asked me this morning is one that I think would be a very common one to most of you, and that is, To what extent is the Federal reserve bank prepared to loan to banks? The banker said, "we are willing to subscribe, but we are unable to turn our loans quickly enough to take this amount every two weeks unless we borrow. Can we depend on the Federal reserve bank to assist us; and, if so, to what extent?"

First, as to our ability. At the present time we have invested in actual rediscounts, including the purchase of acceptances of various kinds, approximately \$500,000,000. At one time the amount was over \$600,000,000. If you asked to what extent can we go further, I would state that, based on their condition on the 14th of July, the reserve banks as a whole could to-day loan approximately \$2,075,000,000 more than they are loaning at the present time and without going into their reserve; that is, without going below the legal reserve requirement of 40 per cent of gold against notes and 35 per cent against deposits. The Federal reserve bank of New York alone could to-day loan approximately \$750,000,000 additional to that being loaned.

This raises the question of the gold which you retain in your vaults. If you turn this gold into the Federal reserve bank you will strengthen the situation. Under the old system every bank felt that it was necessary for its own self-protection to

retain some gold in its vault, and that sentiment continues to prevail now with some banks.

Recently a banker wrote me that his bank had held its gold since 1861, and I was glad to know that it had felt that it was safe all this time. As a matter of fact, however, a dollar of gold in a bank's own vaults is no better for circulation than a dollar of any other form of United States currency, but the same dollar of gold if taken out of the individual bank's vault and deposited with the Federal reserve bank will count as an added reserve for the individual bank against which it may extend credit equal to several times the amount of such reserve. Furthermore, the Federal reserve bank against every dollar of gold so deposited with it can create credit in the form of either deposits or reserve notes to the extent of \$2.50 against each dollar of gold.

Now, to the extent that the Federal reserve banks are able to increase their gold reserve, to that extent will our position be strengthened against a greater demand for credit from abroad as well as at home in case the war goes on. To the extent that you separate your gold certificates from incoming cash and send them in to us, to that extent will you also be strengthening the situation for yourselves.

Do you understand the reason for sorting out the silver certificates? Our export balances with certain countries are running in our favor, but with other countries, like India, from whom we are buying burlaps and other commodities, the trade balance is adverse, and India and other oriental countries will accept silver in payment of these trade balances, which saves the United States the necessity of exporting gold.

The ability to use silver in place of gold in such settlement led to the recent financial legislation withdrawing a certain amount of silver dollars from circulation. In so far, therefore, as you sort out silver certificates also and send them to the Federal reserve bank you are helping the situation.

The question my banking friend asked was, "To what extent will the Federal reserve bank loan?" In answer, let me say that the Federal reserve bank is the servant of the banks of this district who own it, and the Federal reserve bank wants to serve this district and the country in every way possible along sound banking lines.

As Mr. Morris has pointed out, the Federal reserve bank of New York does not set a limit against the loans to each bank, but on the other hand, there are some things which we must guard against. There seem to be some banks who still believe that they should continue to loan "as usual" and to the extent which they have always done, without appreciating the need for the saving or conservation of credit in order that the Government may have its requirements supplied. It would seem that such banks should not be encouraged in their borrowing, as it is fallacious to think that business can go on and credit be dispensed "as usual." The Federal reserve bank is prepared and expects to continue to be prepared to supply to its member banks all the legitimate credit that is needed.

So far as loans secured by Government securities are concerned, we take less account of these than of loans on commercial paper and have been pursuing a very liberal policy in regard to loans secured by Government obligations. If loans are made for 15 days, we have renewed them, although it is not fair to continue renewing 15-day loans indefinitely, thus giving the bank the benefit of the rate of 4 per cent instead of a higher rate on longer maturities.

We have no fixed rule and there has been very little tendency so far as we have noted on the part of any bank to abuse the privilege of borrowing. The Federal reserve bank has endeavored to assist the banks of the district in meeting what we realize are difficult problems, which in some sections are much more difficult than in others.

Some of the member banks I find have not understood the status of their reserves. We had a banker in the bank last week who controls a State bank and a national bank. He spent most of the day with us, during which we outlined to him the operations of the Federal reserve bank. In discussing his reserves it developed that he had maintained with the Federal reserve bank their balance intact. He had never drawn against it; he had just left it in the bank and had continued to maintain the same reserve with his correspondent banks that he had always done.

He did not realize that we simply require member banks to maintain an average reserve for the month equal to the legal requirement. That reserve might be drawn down to nothing during several days a month provided the bank carries a sufficient excess reserve during the rest of the month to bring the average for the month up to the required amount.

If the bank has purchased certificates and is called upon to pay for part of them, it ought to understand that it can cut into its reserves for a few days if it wants to, because in many cases, say in one or two weeks, it will have outside additional deposits which will enable it to make up the deficiency in its reserve.

I speak to you at length because we do not often have a chance to speak to you face to face. But if at any time any of these problems arise, we ask you to have the officers

of your bank write to us freely and personally. You can write to Mr. Morris if there is anything concerning the certificates of indebtedness, or to the officers of the bank, in regard to regular banking functions, and we can assure you we are going to help you in every way. That is what you pay us for. That is what we are here for, and the resources of the Federal reserve bank of New York are behind every bank of this district.

ROUND TABLE DISCUSSION.

Mr. DELMER RUNKLE (president, New York State Bankers Association). Gentlemen, it seems hardly necessary for me to go into any explanation of the question which has been so ably and so fully explained by Mr. Treman and Mr. Morris. They, I think, have covered every bit of the ground.

There is one matter, however, that I would like to bring out at this time and take occasion to say to the members of the Bankers Association of New York State, to the members of the council, most of whom are here, and the county directors, and that is one which has been referred to by both Mr. Treman and Mr. Morris—the organization of county councils or organizations.

Mr. Gregory started that, at the close of his administration, and it worked well and did a great deal toward helping to float the last certificates. That organization had not been sufficiently perfected so that it could be worked, as was explained by Mr. Morris, up to the full at this time, but now there is, it seems to me, a most excellent opportunity to perfect this organization. In Rensselaer County, we have such an organization. There are 14 banks in the county. That organization has no by-laws, no dues, simply getting together in cooperation with the banks.

We meet at 1 o'clock at the Troy Club, have a little informal dinner and the officers of the 14 banks, who may be present at that time, meet and talk over various matters, certificates of indebtedness, Liberty loan, Red Cross or whatever may pertain to banking, and we have found that it has been extremely helpful in bringing together and getting together our people that never were together before, and working in a spirit of cooperation.

I am therefore extremely anxious that these county directors who have been chosen now will cooperate with the chairmen of the various groups and effect these county organizations. Get together. If you have three banks in the county all right; get those three banks together.

Sometimes I find some of our own bank officers do not know an officer of another bank. How are you going to work with a spirit of cooperation if the bank officers of the same county do not get together?

With the war going on, as has been said by Mr. Treman, we have an immense task, and it will take the combined efforts of every banker and the cooperation of every banker. Let me repeat, then. Will you gentlemen please do this and try it out? Nothing succeeds like success and anything that is worth doing is worth doing well. We have got to raise this money and we are going to raise it. It is simply a matter of the ways and means of doing it. The Federal reserve bank stands ready to help us furnish the money, and we are going to do it to the limit along the prescribed lines that have been laid out, by conserving credits judiciously.

I had a little illustration the other day. We all of us like to get good loans; we hate to turn down our friends and those who have been doing business with us and who are perfectly good. A man came in and wanted to borrow \$2,000. He admitted in his letter that it was of a rather speculative nature, but he had to borrow. I wrote him immediately that I would be glad to make such a loan but unless he promised me that at the end of four months unquestionably he would pay that back, I explained to him why I could not loan it to him. It was not eligible paper for rediscount; it could not be used in the Federal reserve bank. He wrote back to me and said: "I see your point; I could not pay it back in that time, and I do not want the loan." I presume every man here has had the same thing occur to him. It is a question of not going on, as has been stated with "business as usual," but we have got to take care of the legitimate loans, to farming and manufacturing requirements, and the manufacturing necessities.

Mr. EDWARD J. GALLIEN (secretary, New York State Bankers Association): I want a little information, if I can get it. It was suggested by Mr. Morris. There must be bankers who have interested customers in purchasing some of the certificates of indebtedness from time to time, and I wish they would give us the benefit of their experience in interesting their customers and how it affected their deposits.

Mr. TREMAN. I would be very glad to give this opportunity to any banker here if he would advise us. This is merely an informal gathering. Kindly contribute your portion toward making it a success.

Mr. TOWNSEND. Mr. Chairman, I would like to say a word. I am county director of Orange County. I will call the members of the Orange County Bankers Association together early next week to put this matter before them. I will ask the officers of the various banks to attend. I will try and get them then and there to pledge themselves what they will do. If some of them fail to come and attend, I will take it upon myself to go to those different bankers in person and place the matter before them. It is going before each bank and each director, not altogether to the officers.

By forming an association we will have done two or three good things, and that is the way of getting at results as a practical matter. I want to know just exactly where I am at, before I talk to them.

Mr. TREMAN. What Mr. Townsend has said is a matter that is of interest in many districts, and I want to commend his way of getting bankers together, and there are other reasons for doing that, because in a great many cases in the past, unfortunately there have been local differences and the bankers have not been working closely together as they should. This is a golden opportunity to serve. It is no time for friction or differences; individual differences sink out of sight.

In England they tell us that there is no individual banking, that there is nothing but banking that is carried on for the benefit of the Government, and that is the basis on which we should be here.

Mr. Townsend speaks of another thing, and that is the question of talking to the directors of these banks which do not cooperate.

Now in some cases an officer of a bank will take a position representing a bank which ordinarily, but not always, represents the feeling of the bank authorities, and that authority is represented by the board of directors. In so far as a bank fails to do its duty, I firmly believe that if the county director would ask these directors to come together, and he would attend one of the bank meetings with the directors there and put it before them, I am certain those directors will come forward and do their full loyal share of this great work.

You ask about our loaning. I did not know but what Mr. Case would be here in time to tell you, because there is more or less misunderstanding about this. A great many banks have bonds which in the past they have invested in. Many banks have bonds which have depreciated in value. They do not want to sell them at present prices and take their loss, and they ask what can they do with them.

One of the bankers who was down in the bank a while ago said: "I would rather take my bonds and borrow from my correspondent and make my loans that way instead of going through the red tape of borrowing from the Federal reserve bank." He never did borrow from the Federal reserve bank. He did not know how much red tape there was connected with it and was not fully justified in making that statement. In the first place, it was a proper use for his bonds and he probably thought it a good way for him to make his loans, but upon investigation he probably found he was paying that bank from one-half to 1½ per cent more than he could have borrowed it for from the Federal reserve bank.

Now, so far as the use of the bonds which a bank possesses as security: You are familiar with the circular issued October 8, 1917, defining what bonds will be received for Government deposits. Personally, I believe that a good use that a bank can make of some of its bonds is to place them with the Federal reserve bank as security for these deposits which are created in payment for certificates of indebtedness. Then, if a bank puts up these bonds, it can leave the certificates which it purchases with the reserve bank here in custody and thus have collateral ready for any emergency, because if something unusual came up, all it will have to do is to telegraph the Federal reserve bank: "We want to borrow a certain amount of money; use our certificates which you have in your custody department as the collateral." We would telegraph right back to the bank that the loan had been made, and the money was available to it.

Now, when applications for loans have come in to the Federal reserve bank, I want to explain what is the practice: Your request reaches us usually in the morning; it is checked up as to whether the collateral is as required under the regulations of the board and if so, it comes to the executive committee, which meets at 2.15 p. m. every day, and between 3 and 4 o'clock you get a telegram at your bank that the loan has been passed upon, accepted, and the amount is placed to your credit. There can not be any way in which you can secure a loan much quicker than through that process. But if you use your bonds as security for Government deposits, that would leave your certificates of indebtedness free, and you can put them up; that is, on a 15-day loan as collateral. If the 15-day loan is not quite long enough for you, I have no doubt that the bank, under normal conditions, would loan you for another period of 15 days on the certificate. We could not promise that we would continue indefinitely renewing these 15-day loans at the 4 per cent rate. If you want to borrow for a

longer period, we would be reasonable about renewals, but if you wanted to continue it for 60 or 90 days, we might feel obliged to charge you at the 90-day rate, which would be 4½ per cent, where Government securities are used as collateral.

Mr. A. A. G. LUDERS. How would that work out for nonmember banks with reference to the amount of the loan; is that subject to renewal?

Mr. TREMAN. The facilities of the Federal reserve bank are primarily for the member banks. For those who are nonmember banks, we can assist them in financing. If a nonmember bank has certificates of indebtedness which it has purchased under the book credit plan and they find when they are called upon to repay a part of these payments or deposits that it embarrasses them, the Federal reserve bank will buy those certificates of them on simply a statement from them in writing to the Federal reserve bank that they would like to sell those certificates to the Federal reserve bank for 15 days, and that within that period they will and do agree to buy them back again. It doesn't require any red tape except to advise us that you desire the accommodation. If you have left the certificates in the custody of the Federal reserve bank, we will credit you with the money, deposit it or transfer it to any bank in New York City and carry it for 15 days.

Mr. CHARLES E. HULBERT (Delaware County). I am from Delaware and there they are facing the same questions I am. They do not seem to be answered. At the end of this four-months' period these reserve banks are expected to sell bonds for the amount of the certificates. Now, if we bankers of these different counties borrow on these bonds in advance to the full amount of these certificates and our customers buy those bonds at the end of that period on November 1 and give a check on their own bank, how are we going to borrow without security? That is a hard question with me, as when the certificates of indebtedness mature we expect to handle all our certificates; we expect to sell our full quota of bonds; we expect to raise our full quota for the Red Cross. We are in an agricultural section of the county. It is hard times, but we are going to do it just the same and we are going to raise our quota, but we do not know how. We will have to borrow. We intend also to take care of the farming community. We do not expect to make any new loans, and we want to know how you have it planned and how we are going to get over the hard point, which is next November.

Mr. TREMAN. So far as the use of these certificates is concerned, I assume you will have more or less of your customers who will buy bonds of you. Some of these people pay cash and most of them borrow?

Mr. HULBERT. Most of them borrow.

Mr. TREMAN. You have got to pay for these bonds if you buy them. But you have been buying certificates of indebtedness to use in payment for those bonds. If you sell bonds through your bank in excess of the amount of certificates which you hold, then, of course, you have got to in some way make up that balance; but if you hold more certificates than you sell bonds, and you turn them in here, you will receive cash for them. If you sell more bonds than you have certificates, you have got to find some way to make up the balance. Of course you can borrow by making a 15-day loan and putting up eligible paper you may have on hand. If you might not want to rediscount notes and they are eligible, you can put that paper up against your note. Does that answer your question?

Mr. H. D. FEARON (Oneida). In our county, the savings banks carry a larger balance than any other banks and it seems to me that from that point of view the savings banks are in a better position to take certificates than the commercial banks, because they are looking for permanent forms of investment if they have to continue with the Liberty loan afterwards, while the commercial bank must ordinarily meet commercial notes as well as doing its share toward the Government notes. In the county districts it seems to me it is up to them to share their proportion with the commercial banks.

Mr. TREMAN. So far as savings banks are concerned in this district, it seems to me that there is no very much better form of investment for them than these short-time certificates of indebtedness carrying the 4½ per cent interest. If I were county director of a county where there were savings banks I would write to every officer and director of the savings banks and put it up to him, and then before I got through I would have them subscribing largely to it.

Mr. LEGGETT (Allegany). There is one question that has been on my mind, as the gentleman here on my right stated. A good many country banks have got savings departments for which they issue books, and those deposits to a considerable extent, at least, are represented by bonds; they are not Government bonds; they are a miscellaneous lot of bonds; some of them bonds on which the Federal reserve would grant a credit, but most of them not bonds on which they would grant a loan. Now, if there are any gentlemen here who can suggest some way in which those bonds might be employed, not for 15 days but for a somewhat longer time I am sure it would be helpful in a great many cases.

Mr. TREMAN. Well, I know of some institutions which have felt that banking methods and banking opinion was changing from year to year under the changing conditions, and some banks that I know of have sold some of their bonds when the loss was not very great. Furthermore, in other banks they are having a committee of their directors go through their loans, look over those that have become somewhat ancient, and calling the loans, giving as the reason that it is for the best interest of the customer himself to be forced to make reasonable payments at every maturity; that it leads him to individual economy. I am frank to say that none of us are at present practicing sufficiently the economy that we are preaching. I think if that is true of the bankers it is also true of their customers, and I think you are doing a good turn to your customers if you begin to put the thumb screws on a little, without putting them on so heavily as to cause them serious embarrassment. If you keep giving a little notice they will be apt to gradually reduce this accommodation. This is important and enables you to clean up all old loans and bring them to the final settlement. Tell them the Government is requiring you to transact business in a different way from what you have been doing in the past, and that you must call upon them to pay up or to reduce their loans. And, frankly, it would be for their own good because it will lead to individual economy and thrift.

Mr. J. C. ESTELOW (Chenango County). May I point out what seems to me to be an inequality, in addition to what has been spoken of as to the savings banks taking certificates of indebtedness as well as the commercial banks of the country. We are called upon to take, in agricultural sections, our proportion of the bonds and our proportion of the certificates of indebtedness. You are treating all counties alike. Ours is Chenango, and the county below is Broome County. Ours is wholly agricultural. Broome has the Endicott-Johnson Co., an enormous manufacturing interest, bringing in enormous amounts of money. We in Chenango have not been making any money; deposits have not increased. For generations, the banks have supplied farmers temporarily for the season's interests. It is late now, but at another time we hope you will take it into consideration—the increase of deposits in banks. And we think it a reasonable and an equitable thing to take that into consideration in fixing the amount of the quota on the different counties. It means more bonds, but patriotically they wanted to take the share that has been laid upon them. However, I can conceive, in Broome County—with its enormous increase in money coming into the county—I can conceive in some of the other counties where they have manufacturing industries, these expenditures of the Government going back into the banks. But they are not going back into the country banks very much.

Mr. TREMAN. Mr. Estelow, what you state is true in regard to Broome County and in regard to the manufacturing districts; a good deal of money is going in. But our experience is that manufacturers say the cost of material and labor is so much greater that it entails upon every manufacturer and every distributor so much greater demands for credit that they themselves are all tied up; that they would like some of the agricultural banks to take their share of it. [Laughter.] There is the truth on both sides. You are coming into a period in the next two or three months when you secure your fall returns in your county, because your product is now going out and the money is coming back. The problem is a hard one, Mr. Estelow, for everybody, but the problem is not so great but that the banks in this district are going to solve it, and in every case wherever there is an individual bank which has up its individual problems, if they will come to us we will do what we can to help them out. But the thing is going through, depending both on the county and the city bank, and you are the gentlemen who are going to put it over.

Mr. JOHN T. SYMES (Niagara County). The problem has been shown to us, and the method of solution, and the time has arrived to pledge ourselves to this solution, and to dedicate ourselves to the service of the country. We are interested in the thing because this happens to be our obligation. It is part of the public financing of the war, and we must stand behind Mr. Baker and Mr. McAdoo, or else we might as well ask the boys to come home. I suggest a resolution: That we return; that we form an organization in the counties where they are needed and are not now in existence; that we intensify those that are already in existence, and that we solve this problem. Each one of us can help, and as these men have promised to come and meet with us and spend the necessary time, I am sure there is going to be no trouble whatever.

Mr. CHARLES SMITH (Oneonta). I have been asked by the gentleman across the table here how I am going to get the directors of the several banks which I have visited to meet me. The easiest proposition in the world.

In the other campaign we had with reference to the other certificates of indebtedness I wrote the letters to the officer of the bank and informed him that I was going to be present at such an hour at the bank, and wished to meet him and as many of the directors of the bank as wished to hear me. Now, if he was present alone, or his cashier

was present with him, or all of the board of directors, so much the better, but I had done my duty when I presented the matter either to him alone or to such of those as he had with him, so it was not up to me if he made mistakes.

Now gentlemen, this question of these certificates of indebtedness is just as simple as you make it yourselves. It is a duty that we are called upon to do; to get behind these certificates of indebtedness and see that they are taken. I want to tell you my personal experience in our bank with the last certificates of indebtedness. We made a good thing out of them. It was simply a book entry, that we took so many thousand dollars of the certificates, and the transaction was closed. We got 4½ per cent, I think, and we paid 2 per cent. When the Federal reserve bank called on us for the loan, and when the account was closed, we had our certificates with which to pay for our Liberty loan bonds.

In the transaction at the time, my cashier came to me and said: "Well, we have got these certificates of indebtedness down here, and they have drawn on you for the whole amount; we need the money, what are you going to do about it?" "Simply inform them we want to borrow." It seemed to me the easiest transaction I ever had in my business career. I haven't had an extensive banking career, but that is my business experience. I am selling something at a profit, and a man is perfectly willing to trade at a profit.

There is just one thing more I want to say, if I may be permitted: Last night in coming down here I got the evening papers, and this morning in all the papers I saw in big, bold type on the front of those papers that the American troops had held the line. [Great applause.] American troops had held back the Germans. Gentlemen, it is just as important for you and me to do our part as American bankers in this certificate of indebtedness battle, as it is for our boys over there to hold the line against the Huns. [Applause.]

Mr. TREMAN. I think Mr. Smith's remarks will be a very fitting closing. Now it is up to you, gentlemen. We have called and had you here to-day. We will do our part and we hope that you will do yours, and if we cooperate the victory is already won. We thank you, gentlemen, very much.

Adjourned.

Gov. STRONG. Further regarding the call loan market in New York, let me say that on July 26, 1921, it had reached one of the lowest points in volume since the banks started making reports to us in 1917.

Mr. Chairman, to conclude the discussion of the New York money market, I have gone into it in some detail in order to point out that there is a great variety of rates and of influences for the management of the reserve bank to consider in determining what rate for the discount of paper by member banks should be established.

The CHAIRMAN. Well, do you mean to suggest by that that the rate of discount is determined wholly by the rates upon the various classes of commercial and Government paper?

Gov. STRONG. No, sir; the rate of discount is determined by a great variety of considerations, and only one of those considerations is the relation which it bears to rates in the money market, and the rates in the money market in New York are a variety of rates as I have attempted to show.

The sound policy, in my belief in establishing rates by a reserve bank is what I described this morning, that the rate should not be low enough to be an inducement to borrow from the reserve bank in order to make a profit or shave on the rate, nor should it be low enough to be an inducement for the creation of credit for speculative purposes, and obviously if any consideration, such as war and war finance, necessitates at the moment maintaining a rate below the market value for money, then the bank is faced with a very difficult problem in controlling what is done with its funds.

The CHAIRMAN. Would the reserve ratio have anything to do with the rate?

Gov. STRONG. It would indeed, but I have confined the discussion as to the money market only to that factor of market rates. The approach of an exhaustion of the lending power of the Federal reserve bank, by a reduction of its reserve to the minimum which the reserve act provides, is of course one of the considerations for increasing the rate, and in normal times another consideration would be a possible heavy outflow of gold from the country, which would come out of our reserve.

Mr. Chairman, I have referred more than once to the fact that one of the influences which affects money rates in New York is the flow of funds into New York and out of New York. Now, until the Federal reserve system was established it was difficult to get satisfactory figures to indicate what that flow was, how it occurred, and the volume of it. Since the establishment of the Federal reserve system we do get figures which are fairly reliable in indicating how the tides of credit move in and out of New York. I referred especially to the fact that at one time the withdrawal of money from loans on the New York Stock Exchange was an influence.

We have had made an analysis of the transactions of the gold settlement fund which is illuminating on that point, and before presenting it for the record and explaining it I would like to describe the operation of the fund. (See pp. 584-586.)

The Federal reserve act provides that Federal reserve banks may act as a clearing house, may perform the functions of a clearing house, and in order that they might among themselves establish a clearing house each reserve bank has deposited a fund of gold which, by an amendment to the Federal reserve act, is now held in the custody of the Treasurer of the United States in Washington. This gold is what you might describe as a credit balance by each of the reserve banks in a common fund, each by proportionate contribution. Now we maintain accounts with each other. The Federal reserve bank of New York has an account with each of the other 11 reserve banks, and a vast series of transactions takes place between the reserve banks and goes through those accounts.

There are transactions arising from the collection of checks, to which I have referred, from the making of wire transfers for member banks, from the flow of the Government's deposits back and forth throughout the country, and from the issue and payment of checks by the United States Government which come to us and are paid and charged against the Government's accounts with us, and a variety of other transactions.

These debit and credit accounts maintained between all the Federal reserve banks are settled every day by a code telegram which goes to the Federal Reserve Board, and which indicates how much is owing by each reserve bank to each of the others. This enables the Federal Reserve Board to run an account in Washington which adjusts the proportionate ownership of the 12 banks in this gold fund according to whether they are debtor or creditor in the clearing house, so to speak, and the proportionate ownership of this fund of gold—about \$400,000,000 it is now—changes from day to day, and the balances are settled every day by means of a code telegram.

Now, by an examination of the transactions which we have through this gold settlement fund it is very easy to see whether the exchanges, so to speak, are running against New York or in favor of New York,

because it is through that funnel that is concentrated all this flow of credit back and forth throughout the country. Formerly the net movement of funds would have been settled by actual shipments of currency but they now are settled, as I have described, by telegrams to and from Washington changing the proportionate ownership of this fund of gold.

The CHAIRMAN. There is no actual transfer of the money; it is just bookkeeping?

Gov. STRONG. It is just bookkeeping; that is all, sir. The gold is held in the Treasury, and one day we may own \$200,000,000 of it, and a few days later we may own only \$10,000,000 if the exchange runs against us.

Representative SUMNERS. How do you find whether the balance is against you? Do you have a settlement day?

Gov. STRONG. No; every day is a settlement day. We know every night just how much of that gold is ours; we know just how much it has increased or decreased as the result of these transactions. It has some bearing on the efficiency of the credit system of the country.

Now, this analysis of the gold settlement fund transactions is prepared upon such a basis as to throw a great deal of light upon some of the matters which have been rather loosely discussed, I am afraid, before the commission by a former witness. We have divided all transactions which are settled through the gold settlement fund between ordinary transactions, those which would represent the ordinary flow of credit, and extraordinary transactions—in other words, those transactions which are made for the purpose of offsetting the normal flow, so that reserves would not be exhausted.

The ordinary transactions are those that I have described, principally payments of checks and transfers made by telegraph.

The extraordinary transactions are the transfers which are effected by the Treasurer of the United States between the districts and the sales of bills between Federal reserve banks, made, of course, for the purpose of correcting our reserves in case they get too low or too high, and rediscounts between the reserve banks. Those we regard as abnormal, as they serve to offset an adverse flow of funds away from the district or a flow of funds in our favor and against other districts. Now, the total transactions through the gold settlement fund of the New York reserve bank for the first six months of the year 1920 were as follows:

Check and wire transfers from New York, that is, such as would have caused a loss of our reserve with exchange against us, \$11,346,902,000.

Check and wire transfers to New York in our favor, \$10,990,012,000.

The result would be a loss of reserve by New York for the first six months of the year 1920 of \$356,890,000 out of our reserve.

That was increased by payments into the 5 per cent redemption fund, which we now make for the national banks, by six and a half million dollars, showing that on ordinary transactions the difference between what was paid out by the New York bank and what came into the New York bank through the gold settlement fund was \$363,437,000 against us.

Now, how was that offset? That was the normal flow of funds away from New York that took our reserve away. It was offset by net transfers of the Treasurer of the United States in our favor—the difference between \$304,000,000 and \$188,264,000, or \$115,736,000.

By the sale of bills and acceptances, net, of \$327,396,000.

By net amount of rediscounts for other reserve banks, \$35,354,000, to be subtracted from the offsets.

Making a total of offsetting items against this flow out of New York of \$407,778,000.

So that as the result of the ordinary operation of the exchanges and of the extraordinary transactions offsetting the flow of funds away from New York we in fact gained \$44,341,000 in the first six months of the year 1920.

Now for the last six months of 1920, we have the following figures: The transfers against New York were \$11,497,721,000; the transfers in favor of New York were \$10,765,158,000, making New York's loss \$732,583,000. Plus the payments into the 5 per cent fund of \$30,362,000, made the net balance against New York in ordinary transactions of \$762,945,000.

This shows a very much larger flow of funds out of New York than had occurred in the first half of 1920.

Now the extraordinary transactions which took place to offset this flow of funds away from New York were the net transfers for account of the Treasurer, \$323,792,000.

Sales of bills and acceptances, net, \$243,921,000.

Rediscounts, net, with other Federal reserve banks, that is, rediscounts which we made with other reserve banks—and those operate both ways, when we first make them they are in our favor, and when we pay them off they are against us—of only \$75,000.

Rediscounts for other Federal reserve banks, the net amount favorable to New York, \$31,942,000.

This shows that for the last six months of 1920 the extraordinary transactions offsetting this depletion of our reserve amounted to \$599,730,000.

We did actually suffer a loss of reserves of \$163,215,000.

Now for the period January 1, 1921, to July 20, 1921, the difference against New York, without reciting the total figures, on ordinary transactions, was \$609,108,000. The offsetting transactions more than offset that, amounting to \$643,444,000. So that for this year to date we have had restored to us \$34,336,000 of the reserve that we lost in the last six months of 1920.

May I have those figures shown in the record, Mr. Chairman?

The CHAIRMAN. They may go into the record.

(The statement of gold settlement fund transactions presented by Gov. Strong are here printed in full, as follows:)

Gold settlement fund transactions, January to June, inclusive, 1920.

Ordinary transactions:

Check and wire transfers from New York.....	\$11,346,902,000
Check and wire transfers to New York.....	10,990,012,000

Loss from New York.....	356,890,000
Payments to 5 per cent fund.....	6,547,000

Net balance from New York ordinary transactions.....	\$363,437,000
--	---------------

Extraordinary transactions:

Treasurer United States—	
Transfers to New York.....	\$304,000,000
Transfers from New York.....	188,264,000

Net balance to New York.....	115,736,000
------------------------------	-------------

Extraordinary transactions—Continued.

Bills, acceptances, etc.—

Transfers to New York.....	\$408, 513, 000	
Transfers from New York.....	81, 117, 000	
Net balance to New York.....		\$327, 396, 000
		443, 132, 000

Rediscounts with other Federal reserve banks—

Transfers to New York.....	215, 000, 000
Transfers from New York.....	215, 000, 000

Rediscounts for other Federal reserve banks—

Transfers from New York.....	388, 352, 000
Transfers to New York.....	352, 998, 000

Net balance from New York.....	35, 354, 000
--------------------------------	--------------

Net balance to New York, extraordinary transactions.....	407, 778, 000
--	---------------

Net balance to New York, all transactions.....	44, 341, 000
--	--------------

Gold settlement fund transactions July to December, inclusive, 1920.

Ordinary transactions:

Check and wire transfers from New York.....	\$11, 497, 721, 000
Check and wire transfers to New York.....	10, 765, 138, 000
Loss from New York.....	732, 583, 000
Payment to 5 per cent fund.....	30, 362, 000

Net balance from New York ordinary transactions.....	\$762, 945, 000
--	-----------------

Extraordinary transactions:

Treasurer United States—

Transfers to New York.....	\$464, 792, 000
Transfers from New York.....	141, 000, 000

Net balance to New York.....	323, 792, 000
------------------------------	---------------

Bills and acceptances, etc.:

Transfers to New York.....	\$262, 995, 000
Transfers from New York.....	19, 074, 000

Net balance to New York.....	243, 921, 000
------------------------------	---------------

Rediscounts with other Federal reserve banks:

Transfers to New York.....	\$160, 000, 000
Transfers from New York.....	159, 925, 000

Net balance to New York.....	75, 000
------------------------------	---------

Rediscounts for other Federal reserve banks:

Transfers to New York.....	\$122, 207, 000
Transfers from New York.....	90, 265, 000

Net balance to New York.....	31, 942, 000
------------------------------	--------------

Net balance to New York, extraordinary transactions.....	599, 730, 000
--	---------------

Net balance from New York, all transactions.....	163, 215, 000
--	---------------

Gold settlement fund transactions, Jan. 1-July 20, 1921.

Ordinary transactions:

Check and wire transfers from New York.....	\$10, 187, 382, 000
Check and wire transfers to New York.....	9, 658, 277, 000
	<hr/>
Loss from New York	529, 105, 000
Payment to 5 per cent fund.....	80, 003, 000
	<hr/>

Net balance from New York, ordinary transactions.....

\$609, 108, 000

Extraordinary transactions:

Treasurer United States—

Transfers to New York.....	\$649, 800, 000
Transfers from New York.....	43, 500, 000
	<hr/>

Net balance to New York.....

606, 300, 000

Bills and acceptances—

Transfers to New York.....	\$60, 600, 000
Transfers from New York.....	2, 001, 000
	<hr/>

Net balance to New York.....

58, 599, 000

Rediscounts for other Federal reserve banks—

Transfers from New York.....	\$221, 000, 000
Transfers to New York.....	199, 545, 000
	<hr/>

Net balance from New York.....

21, 455, 000

Net balance to New York, extraordinary transactions.....

643, 444, 000

Net balance to New York, all transactions.....

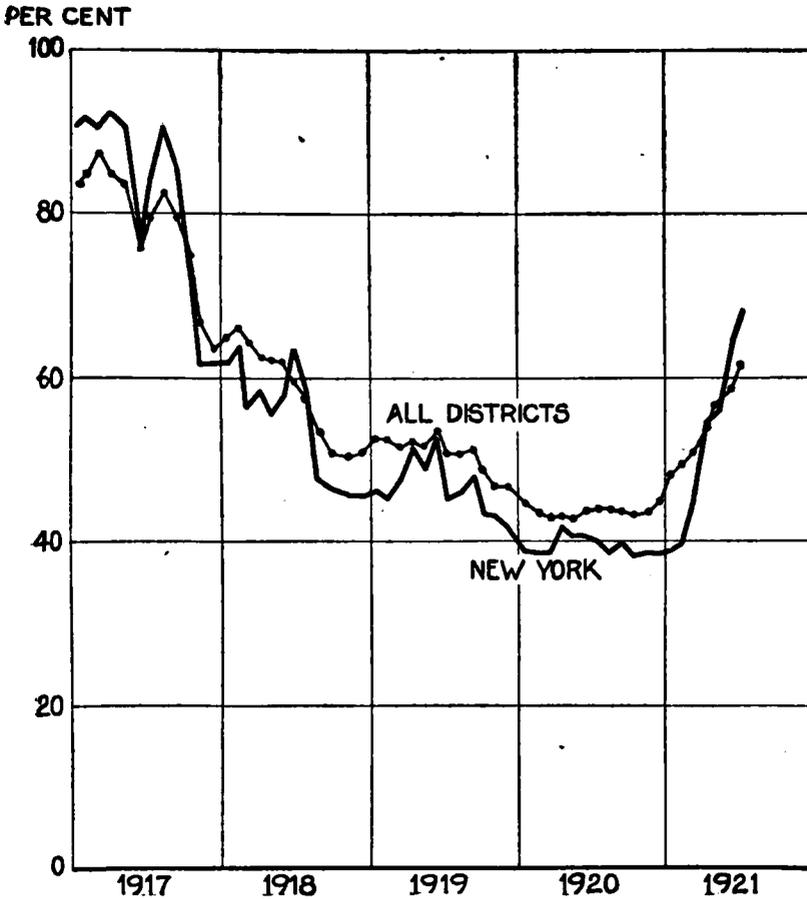
34, 336, 000

Gov. STRONG. In those figures a very large part of the offsetting items are of course what the New York reserve bank, when the exchanges were against New York, secured from other reserve banks by the sales of bills and acceptances, and by actual borrowings from the other reserve banks.

I would like to refer to this by simply introducing charts and tables.

There is first a chart which shows a comparison of the monthly reserve ratio of the New York bank with the same ratio of all twelve reserve banks. (See opposite page.)

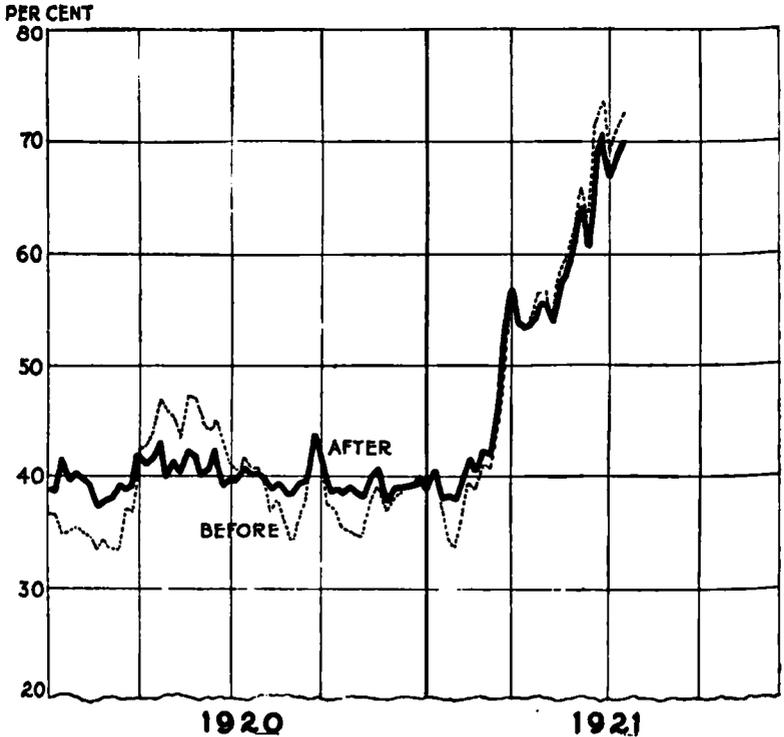
A chart which compares the reserve of the New York bank as it was after rediscounting for or with other reserve banks and as it would have been had we not made those rediscounts for or with other reserve banks, including sales of acceptances. (See p. 588.)



RESERVE PERCENTAGES OF THE FEDERAL RESERVE BANK OF NEW YORK AND OF THE ENTIRE FEDERAL RESERVE SYSTEM.

Monthly average of the ratio of total reserves to deposit and note liability reported each week.

Source of information: Annual reports of the Federal Reserve Board, the Federal Reserve Bulletin, and weekly press statements.



RESERVE PERCENTAGES OF THE NEW YORK FEDERAL RESERVE BANK BEFORE AND AFTER INTERBANK BORROWING.

Light line shows the percentage of reserves to note and deposit liability as it would have been each week if computed before any rediscount or acceptance transactions with other reserve banks. Heavy line shows the percentage after such transactions had taken place.

Source of information: Daily computations by the Federal Reserve Board.

Reserve percentages of the Federal Reserve Bank of New York before and after interbank accommodations and reserve percentages of the Federal reserve system.

	New York.		Entire system.		New York.		Entire system.
	Before accommodation.	After accommodation.			Before accommodation.	After accommodation.	
1919.				1919.			
Jan. 3.....		48.1	51.2	Apr. 25.....	51.8	52.1	51.7
Jan. 10.....		46.4	51.8	May 2.....	52.3	51.9	51.9
Jan. 17.....		44.8	52.8	May 9.....	48.4	51.1	51.1
Jan. 24.....		45.1	52.2	May 16.....	44.9	51.3	51.3
Jan. 31.....		43.7	53.0	May 23.....	51.0	51.3	51.3
Feb. 7.....		48.3	53.5	May 29.....	51.3	51.6	51.6
Feb. 14.....		43.4	51.9	June 6.....	53.6	51.7	51.7
Feb. 21.....		45.3	52.3	June 13.....	52.4	52.7	52.7
Feb. 28.....		44.0	51.3	June 20.....	54.5	52.5	52.5
Mar. 7.....		43.8	51.4	June 27.....	54.3	52.1	52.1
Mar. 14.....		46.9	51.4	July 3.....	46.1	52.6	52.6
Mar. 21.....		51.9	51.6	July 11.....	42.6	52.7	52.7
Mar. 28.....		52.4	51.9	July 18.....	45.5	52.7	52.7
Apr. 4.....		54.4	52.2	July 25.....	46.9	52.7	52.7
Apr. 11.....		49.3	51.1	Aug. 1.....	49.1	52.5	52.5
Apr. 18.....		51.3	52.1	Aug. 8.....	44.7	52.1	52.1

Reserve percentages of the Federal Reserve Bank of New York before and after interbank accommodations and reserve percentages of the Federal reserve system—Continued.

	New York.		Entire system.		New York.		Entire system.
	Before accommodation.	After accommodation.			Before accommodation.	After accommodation.	
1919.							
Aug. 15.....		45.3	50.9				
Aug. 22.....		45.0	51.3				
Aug. 29.....		43.0	50.7				
Sept. 5.....		44.5	50.4				
Sept. 12.....		47.0	50.4				
Sept. 19.....		51.6	52.5				
Sept. 26.....		49.7	51.0				
Oct. 3.....		46.3	49.7				
Oct. 10.....		42.0	49.1				
Oct. 17.....		41.2	48.3				
Oct. 24.....		44.1	48.7				
Oct. 31.....		41.6	47.9				
Nov. 7.....		40.2	46.8				
Nov. 14.....	37.6	43.7	47.1				
Nov. 21.....	38.7	45.0	46.9				
Nov. 28.....	35.8	41.9	45.5				
Dec. 5.....	36.8	42.4	46.4				
Dec. 12.....	36.5	41.3	46.0				
Dec. 19.....	40.1	44.6	46.8				
Dec. 26.....	36.2	40.0	44.8				
1920.							
Jan. 2.....	36.7	38.8	43.7				
Jan. 9.....	36.6	38.6	45.4				
Jan. 16.....	34.8	41.5	45.1				
Jan. 23.....	35.0	39.5	44.8				
Jan. 30.....	35.3	40.3	44.5				
Feb. 6.....	34.9	39.7	44.1				
Feb. 13.....	34.5	39.0	43.2				
Feb. 20.....	33.4	37.1	42.7				
Feb. 27.....	34.3	37.6	42.5				
Mar. 5.....	33.5	38.1	42.6				
Mar. 12.....	33.4	39.1	42.5				
Mar. 19.....	37.2	38.8	43.5				
Mar. 26.....	36.9	39.1	42.7				
Apr. 2.....	42.5	42.2	42.9				
Apr. 9.....	42.6	41.0	43.3				
Apr. 16.....	43.9	41.7	43.3				
Apr. 23.....	47.0	43.1	43.0				
Apr. 30.....	45.7	39.9	42.4				
May 7.....	45.3	41.4	42.7				
May 14.....	43.4	40.3	42.2				
May 21.....	47.2	42.3	42.7				
May 28.....	46.9	41.8	42.7				
June 4.....	44.8	40.1	42.5				
June 11.....	44.1	40.6	43.0				
June 18.....	44.9	42.5	44.5				
June 25.....	42.8	39.2	43.6				
July 2.....	41.0	39.8	42.8				
July 9.....	40.5	39.8	43.1				
July 16.....	41.7	40.8	43.9				
July 23.....	40.7	40.2	44.4				
July 30.....	40.8	40.4	44.2				
1920.							
Aug. 6.....				39.7	39.8	44.0	
Aug. 13.....				36.8	38.8	43.9	
Aug. 20.....				37.9	39.5	43.5	
Aug. 27.....				35.9	38.5	43.2	
Sept. 3.....				33.9	38.6	42.5	
Sept. 10.....				36.0	39.5	42.8	
Sept. 17.....				37.8	39.5	43.8	
Sept. 24.....				42.9	43.7	43.6	
Oct. 1.....				41.7	41.1	43.7	
Oct. 8.....				37.5	38.5	42.9	
Oct. 15.....				36.9	38.7	42.7	
Oct. 22.....				35.3	38.6	43.3	
Oct. 29.....				35.1	39.1	43.1	
Nov. 5.....				34.7	38.6	43.0	
Nov. 12.....				34.6	38.3	43.6	
Nov. 19.....				37.9	40.0	44.1	
Nov. 26.....				39.2	40.8	44.4	
Dec. 3.....				36.8	37.8	44.1	
Dec. 10.....				38.1	39.1	44.5	
Dec. 17.....				38.6	39.1	45.5	
Dec. 23.....				39.4	39.3	44.9	
Dec. 30.....				39.5	40.0	45.4	
1921.							
Jan. 7.....				38.7	39.0	46.4	
Jan. 14.....				40.5	40.6	48.1	
Jan. 21.....				37.3	38.1	48.5	
Jan. 28.....				34.6	38.3	49.0	
Feb. 4.....				33.3	38.1	49.3	
Feb. 11.....				36.2	39.4	49.6	
Feb. 18.....				39.4	41.7	50.3	
Feb. 25.....				38.8	40.5	49.9	
Mar. 4.....				40.9	42.2	50.8	
Mar. 11.....				40.8	41.8	50.9	
Mar. 18.....				45.4	45.8	51.0	
Mar. 25.....				50.1	50.3	50.8	
Apr. 1.....				56.7	56.7	52.4	
Apr. 8.....				53.8	53.8	53.5	
Apr. 15.....				53.2	53.2	53.7	
Apr. 22.....				54.6	53.9	54.1	
Apr. 27.....				56.3	55.5	55.0	
May 4.....				56.6	55.5	55.3	
May 11.....				54.5	53.8	55.9	
May 18.....				58.3	57.0	56.8	
May 25.....				59.9	58.1	57.6	
June 1.....				62.2	60.3	57.4	
June 8.....				65.9	64.2	58.3	
June 15.....				62.6	60.6	56.8	
June 22.....				71.6	68.9	60.4	
June 29.....				73.6	70.7	60.8	
July 6.....				69.0	66.8	60.0	
July 13.....				71.0	68.7	61.6	
July 20.....				72.4	70.0	62.5	

Interbank accommodations between the Federal reserve bank of New York and other Federal reserve banks.

	Rediscounts with.	Bills sold.	Total.	Rediscounts for.	Bills bought.	Total.
1919.						
Jan. 31.....		\$10,141,000	\$10,141,000			
Feb. 7.....		20,148,000	20,148,000			
14.....		2,539,000	2,539,000			
20.....		10,164,000	10,164,000			
28.....		5,016,000	5,016,000			
Mar. 9.....		1,183,000	1,183,000			
14.....		23,087,000	23,087,000			
Apr. 11.....		2,827,000	2,827,000	\$20,000	\$10,048,000	\$10,068,000
25.....		10,083,000	10,083,000	10,000		10,000
May 2.....		10,010,000	10,010,000	10,000		10,000

Interbank accommodations between the Federal reserve bank of New York and other Federal reserve banks—Continued.

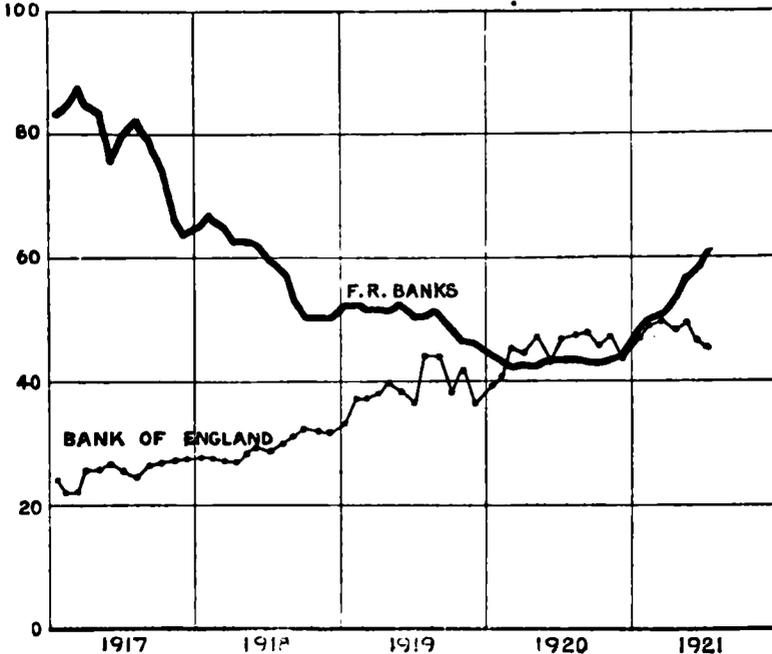
	Rediscunts with.	Bills sold.	Total.	Rediscunts for.	Bills bought.	Total.
1919.						
May 9		\$3,245,000	\$3,245,000			
16		5,022,000	5,022,000			
June 6		5,120,000	5,120,000			
13		3,319,000	3,319,000			
20		5,041,000	5,041,000			
27		5,028,000	5,028,000		\$5,062,000	\$5,062,000
July 18		37,055,000	37,055,000			
Aug. 22		10,028,000	10,028,000			
29		10,013,000	10,013,000			
Sept. 5		19,304,000	19,304,000			
19		2,794,000	2,794,000			
Oct. 10		3,176,000	3,176,000			
17		3,177,000	3,177,000			
31		40,121,000	40,121,000			
Nov. 7		50,081,000	50,081,000			
21		5,012,000	5,012,000			
28		10,005,000	10,005,000			
1920.						
Jan. 2		32,357,000	32,357,000			
9		29,943,000	29,943,000			
16	\$79,500,000	20,817,000	100,317,000			
23	43,700,000	24,906,000	68,606,000			
30	50,000,000	25,649,000	75,649,000			
Feb. 6	49,800,000	22,277,000	72,077,000			
13	49,735,000	18,654,000	68,389,000			
20	48,100,000	10,113,000	58,213,000			
27	47,950,000	7,358,000	55,308,000			
Mar. 5	67,950,000	5,424,000	73,374,000			
12	84,550,000	4,276,000	88,826,000			
19	19,795,000	3,408,000	23,203,000			
26	32,015,000	2,081,000	34,096,000			
Apr. 2		4,341,000	4,341,000	\$5,000,000		5,000,000
9		2,371,000	2,371,000	20,850,000		26,850,000
16		2,371,000	2,371,000	36,450,000		36,450,000
23		2,371,000	2,371,000	63,996,000		63,996,000
30		2,371,000	2,371,000	84,996,000	7,687,000	92,683,000
May 7				57,037,000	5,470,000	62,507,000
14				48,715,000	1,634,000	50,349,000
21		2,148,000	2,148,000	80,388,000		80,388,000
28		2,371,000	2,371,000	84,425,000		84,425,000
June 4		2,371,000	2,371,000	78,544,000		78,544,000
11		2,371,000	2,371,000	59,740,000		59,740,000
18		1,355,000	1,355,000	37,730,000		37,730,000
25		5,394,000	5,394,000	61,961,000		61,961,000
July 2		14,926,000	14,926,000	35,354,000		35,354,000
9		24,940,000	24,940,000	36,096,000		36,096,000
16		24,940,000	24,940,000	40,183,000		40,183,000
23		32,451,000	32,451,000	39,385,000		39,385,000
30		32,551,000	32,551,000	39,025,000		39,025,000
Aug. 6		29,122,000	29,122,000	27,285,000		27,285,000
13		41,013,000	41,013,000	10,391,000		10,391,000
20		33,459,000	33,459,000	8,306,000		8,306,000
27		40,923,000	40,923,000			
Sept. 3	47,500,000	26,925,000	74,425,000			
10	34,600,000	20,064,000	54,664,000			
17	10,975,000	14,379,000	25,354,000			
24		13,404,000	13,404,000			
Oct. 1		9,862,000	9,862,000	19,003,000		19,003,000
8		15,784,000	15,784,000			
15		28,870,000	28,870,000			
22	25,000,000	24,305,000	49,305,000			
29	48,000,000	13,362,000	61,362,000			
Nov. 5	44,700,000	14,883,000	59,583,000			
12	38,000,000	19,736,000	57,736,000			
19	14,750,000	17,299,000	32,049,000			
26	10,150,000	14,352,000	24,502,000			
Dec. 3	6,700,000	9,338,000	16,038,000			
10	6,400,000	7,923,000	14,323,000			
17		6,917,000	6,917,000			
24		6,917,000	6,917,000			
30		6,917,000	6,917,000			
1921.						
Jan. 7		4,273,000	4,273,000			
14		2,263,000	2,263,000			
21		11,747,000	11,747,000			
28		51,828,000	51,828,000			
Feb. 4		54,938,000	54,938,000			
11		46,022,000	46,022,000			
18		33,373,000	33,373,000			
25		23,962,000	23,962,000			

Interbank accommodations between the Federal reserve bank of New York and other Federal reserve banks—Continued.

	Rediscounts with.	Bills sold.	Total.	Rediscounts for.	Bills bought.	Total.
1921.						
Mar. 4.....		\$18,854,000	\$18,854,000		\$25,000	\$25,000
11.....		13,678,000	13,678,000		25,000	25,000
18.....		5,887,000	5,887,000		25,000	25,000
25.....		3,311,000	3,311,000		25,000	25,000
Apr. 1.....		537,000	537,000		25,000	25,000
8.....		187,000	187,000		25,000	25,000
15.....		178,000	178,000		25,000	25,000
22.....					25,000	25,000
27.....					25,000	25,000
May 4.....				\$14,827,000	25,000	14,852,000
11.....				10,000,000	25,000	10,025,000
18.....				17,810,000		17,810,000
25.....				25,347,000		25,347,000
June 1.....				28,348,000		28,348,000
8.....				22,515,000		22,515,000
15.....				30,050,000		30,050,000
22.....				37,612,000		37,612,000
29.....				39,450,000		39,450,000
July 6.....				31,015,000		31,015,000
13.....				30,485,000		30,485,000
20.....				31,414,000		31,414,000

NOTE.—These figures include bills sold to other Federal reserve banks at their own request. In 1920 such sales amounted to \$70,000,000 out of total sales to other Federal reserve banks from this bank's portfolio of \$147,000,000. The figures do not include bills purchased by this bank in the open market for the account of other Federal reserve banks. Such purchases in 1920 amounted to \$731,000,000.

PER CENT.

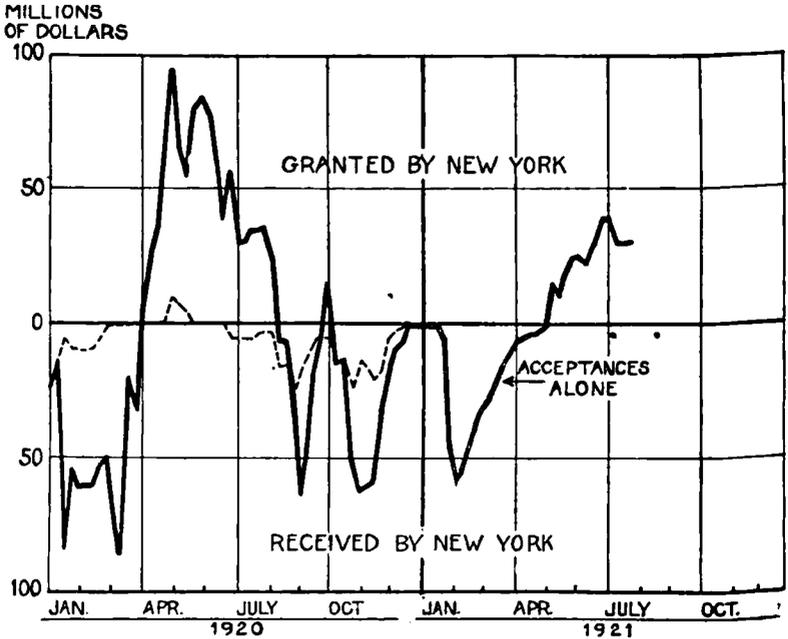


RESERVE PERCENTAGES, FEDERAL RESERVE BANKS AND THE BANK OF ENGLAND.

Average monthly percentage of reserves to combined net deposit and note liabilities, for the Federal reserve system and for the Bank of England, computed on the same basis.

Source of information: Annual reports of the Federal Reserve Board, weekly press statements of the Federal Reserve Banks and weekly press statements of the Bank of England.

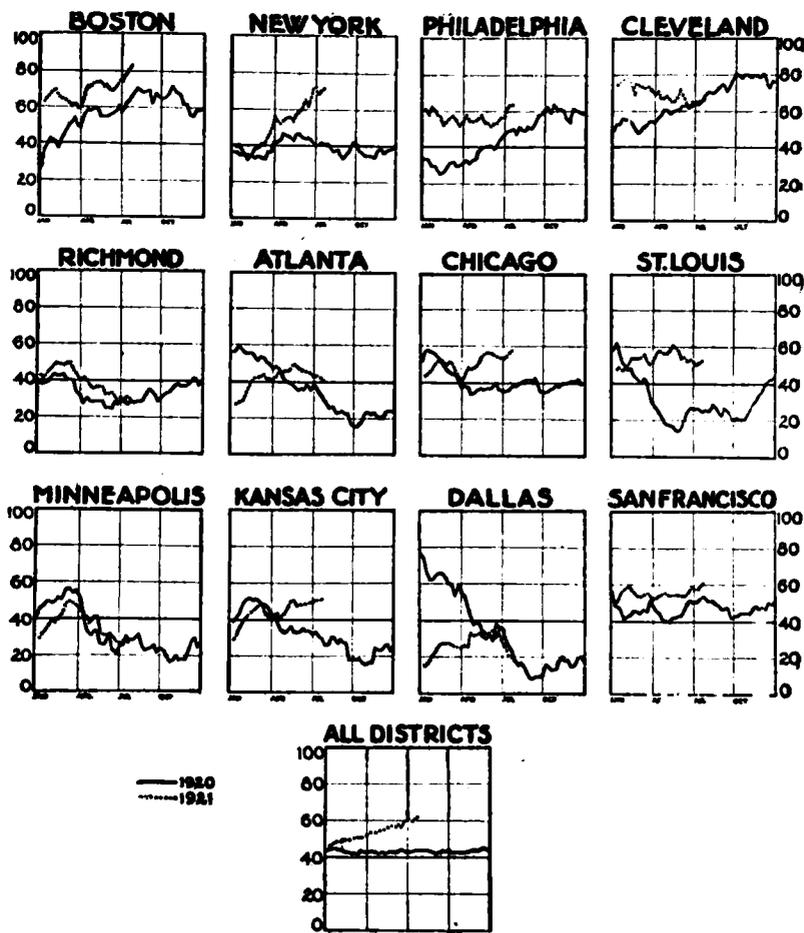
Also a chart comparing the reserves of the Bank of England with all Federal reserve banks over the period 1917 to date.



ACCOMMODATION BETWEEN THE FEDERAL RESERVE BANK OF NEW YORK AND OTHER RESERVE BANKS.

Accommodation granted by the Federal Reserve Bank of New York through rediscounts or the purchase of acceptances is shown above the zero line. Accommodation received by New York through rediscounts with other banks or sale of acceptances at its own request is shown below the zero line. Accommodation through the sale or purchase of acceptances alone (at the request of the selling bank) is shown by the broken line. In the early months of 1921 all accommodation received was through the sale of acceptances. Source of information: Annual Report of the Federal Reserve Bank of New York for 1920, weekly press statements, and special statement by the bill department.

And another chart comparing the accommodations granted between the New York reserve bank and other reserve banks, both ways.



RESERVE PERCENTAGES FEDERAL RESERVE BANKS BEFORE INTERBANK ACCOMMODATIONS.
 Source of information: Daily computation of Federal Reserve Board.

Also a chart which I would like to show to the committee just now, making an analysis of the reserve operations of all the reserve banks by comparison.

Gov. STRONG. Mr. Chairman, I pointed out the fact that as exchange ran against New York we had to offset that in order to keep our reserve, by various transactions. What transpired in the entire system is exhibited by this chart so graphically that I will take the liberty of explaining it. You will notice that the black line is the reserve percentage for 1920 of each of the reserve banks as it would have been had they not discounted any paper with other reserve banks, or had they not discounted any paper for other reserve banks. It is exactly what would have happened to the reserves of the reserve banks had they not had any transactions to correct their reserve percentages.

Representative TEN EYCK. In other words, it would have been their local situation.

Gov. STRONG. It would have been their local situation without assistance given to or rendered by other Federal reserve banks.

You will observe that the reserve in Boston, from the beginning of 1920—the chart covers only the years 1920 and 1921, divided into quarterly periods—pretty constantly rose from about 30 per cent, that is 10 per cent below the legal minimum, up to as high in the spring of 1920 as about 70 per cent.

Now, New England is a manufacturing district, an industrial district principally, and I interpret that chart to mean that in an industrial district this period of expansion and rising prices and of collapse again was dealt with by a more prompt readjustment than was possible in an agricultural section, for instance.

You will notice Boston, Philadelphia, Cleveland, three outstanding districts of that character, had a rising curve of reserve toward the end of 1920, very markedly so. Now, compare that with a district like Dallas, which is the other extreme. In the beginning of the year 1920 Dallas had nearly an 80 per cent reserve, and from that time it made a continuous descent until it got down as low as 9 per cent in the late summer of 1920.

And that characteristic you will find was true of the Kansas City district, the Minneapolis district, the St. Louis district, the Atlanta district.

In Richmond the curve has been almost continuously below the 40 per cent minimum during all of that period.

The great variation in demands upon the reserve banks through the period of 1920 is exhibited there, as you will see, by the black line. The dotted line is the year 1921.

When all of these figures are assembled, when the reserve banks dealing with each other had effected a correction of their reserve position, see what the chart presents—an almost continuous line just above 40 per cent during the year 1920.

Representative TEN EYCK. New York pretty near kept the medium all the way through?

Gov. STRONG. Well, as a matter of fact that was just about what happened in New York. The fluctuations in the year 1920 were substantially these, that while we did by sales of acceptances and otherwise cause some \$375,000,000 of funds to be transferred to New York from other districts, during that same year we loaned to other districts about \$475,000,000. And it was up and down.

The CHAIRMAN. Now, according to those charts, there was evidently one period when three Federal reserve banks were loaning to practically all the rest.

Gov. STRONG. That is true. I think Boston, Cleveland, and Philadelphia during the latter part of that period, not the earlier part, were almost continuous lenders. I believe I have in the course of my remarks some tables to introduce to show the interbank borrowings as far as they concern the Federal reserve bank of New York. (See pp. 588-591.)

Representative SUMNERS. Does not that also show that the deflation in agricultural prices was probably greater than the deflation in manufacturing prices?

Gov. STRONG. The first impression that I get from this chart is that those sections where industry and trade predominate were able to

readjust very much more quickly than those agricultural sections where the turnover is an annual one. The turnover in a butcher store is a week or two weeks, say. In a grocery somewhat longer. And so on. In New England the manufacturer of shoes could shut down and let his people go, and sell out his stock and pay his debts, but the farmer had to go right on making his crop. Consequently the descending line of reserve shows the very great pressure in those districts.

The second thing that that chart indicates to me—and I think this will be disclosed by studies which are now being made—is that the expansion which took place in bank loans and deposits was very much greater in agricultural sections than it was in industrial sections, and especially in the money centers. We are just now engaged in having an analysis made of all the member bank reports for the purpose of comparison, based on the predominating characteristics of each of the counties of the United States, to show the degree of expansion that takes place in the agricultural counties. It will be shown by counties and States. And it is an immense undertaking. When it is completed, I believe that it will be illuminating to the commission as showing just what did happen. (For expansion by counties, see pp. 650–663.)

The CHAIRMAN. Was that expansion due to the greater demand primarily in the agricultural districts which lowered the turnover or the relatively smaller borrowing powers to begin with?

Gov. STRONG. Well, sir, I would express it in this way—that the farmer was engaged in making a high-priced crop, which he had to complete at high wages, high costs, before he could get any of his money back; whereas the merchant or the manufacturer was not making a crop that took a year, he was just taking in and turning out goods, and by readjusting his prices promptly, by pushing his sales, by such policy as Mr. Ford recently stated he had pursued, he was able to readjust. These people were able to meet the sudden change of conditions very much more quickly than the farmer. With the farmer there was no money coming in until that crop was harvested and sold. And then what accentuated the condition was that when they got this high-priced crop they could not sell it at a price which would liquidate their loans.

I have referred at some length, at possibly too great length, to the influence of the New York call-money market and its relation to the attraction of funds to New York. I think it is an influence which is greatly exaggerated under present conditions. I think the reserve system is accomplishing a good deal in convincing bankers that these investments which they make in eligible paper, with their immediate availability at the reserve bank, are desirable, constituting, as they should, the major part of their portfolios.

But there is another very important influence which developed during the war, the possibility of competition by the banks of New York, in the payment of high rates on deposit balances, to retain deposits which they felt were being withdrawn or would be withdrawn by reason of the Government loans, withdrawn to other sections of the country, and due also to a desire to build up deposits, if you please, in order to take care of the enormous withdrawals that they would suffer. This became manifest to the Federal reserve bank. It was a development that occurred not only in New York,

but one which the members of the Reserve Board discovered was observable in other parts of the country.

So early as February of 1918 it became the subject of correspondence between the Federal reserve bank of New York and the Federal Reserve Board. And the subject was discussed also with the authorities of the New York Clearing House Association. There was no rule which governed the amount of interest which could be paid on out-of-town bank balances by banks which were members of the clearing house.

Now in London, whenever the bank rate changes, the committee of the clearing house banks of London meets and fixes the rate which they will allow on what they call bankers' balances, because the change in the bank rate creates a change in conditions which justifies a review of this question of interest which shall be allowed upon bankers' balances; and to make the statement brief, I shall only say that after much discussion, numerous meetings with the clearing house officials, and a visit which Gov. Harding made to New York, when he addressed all of the members of the clearing house on the subject and pointed out the dangers of an outbreak of unrestrained competition for deposits that would be reflected all over the country—the dangerous effect that it might have upon the program of the Treasury for financing the war—the clearing house adopted an amendment to the constitution, which was modified in form some time since it was first adopted. The result of it is to fix the rates, by a definite provision of the constitution, which the New York banks are allowed to pay upon the deposit of out-of-town bank balances. I shall not read those. The amendment to the constitution and the rulings of the clearing house committee on the application of this amendment to the constitution are long. I think they are of sufficient importance, however, if the commission is willing to have them printed in the record, to present to the commission, and I have a copy of the constitution here to submit for that purpose. The effect of the change is to make the maximum rate, under the present provision of the constitution, 2½ per cent, which the New York banks allow to their out-of-town correspondent banks, that being a rate which is graduated up from 1 per cent, and which is fixed in definite relation to our 90-day rate for the discount of commercial paper.

(The part of the constitution of the New York Clearing House Association as in force since January 16, 1920, presented by Gov. Strong, is hereto attached, as follows:)

ARTICLE XI.

INTEREST ON DEPOSITS, EXCHANGE CHARGES TO BE PAID BY MEMBERS, ETC.

SECTION 1. No member of this association, or bank or trust company or others clearing through any member, shall agree to pay, or shall pay, directly or indirectly, on any credit balance payable on demand or within 30 days, or certificate of deposit so payable, by its terms, issued to or for the account of any bank (other than a mutual savings banks located in the second Federal reserve district), trust company, or other institution conducting a banking business, or private banker or bankers, located in the United States or Dominion of Canada, interest at a rate in excess of 1 per cent per annum when the then 90-day discount rate for commercial paper at the Federal reserve bank of New York is 2 per cent or less, and an additional one-fourth of 1 per cent for every one-half of 1 per cent that such discount rate of the Federal reserve bank shall exceed 2 per cent, except that the maximum rate paid or agreed to be paid on any such credit balance or certificate of deposit shall not in any case be higher than 2½ per

cent per annum; nor shall any member, or nonmember clearing through a member, pay or agree to pay on any like credit balance of, or like certificate of deposit issued to, any mutual savings banks located in the second Federal reserve district or any person, persons, copartnership, corporation or association, other than those specified and included above, interest at a higher rate than 3 per cent per annum; nor on any time deposit, or certificate of deposit payable by its terms later than 30 days from the date thereof, at a higher rate than 3½ per cent per annum. The foregoing provisions are not intended to apply to the account of, or any certificate of deposit issued to, any person or persons residing and transacting business in any foreign country other than the Dominion of Canada, or to any corporation, association, or copartnership organized and located therein, nor to affect such interest rates as are or may be fixed or regulated by law.

Sec. 2. No member of this association or bank or trust company or others clearing through any member shall pay exchange or other charges, or allow time, in connection with the collection of any item collectible through the Federal reserve banks, but which is collected through other sources, in excess of the charges which would have been payable or the time allowed had such item been collected through the Federal reserve banks.

Sec. 3. The clearing house committee, upon ascertaining to the satisfaction of a majority of its members that a member or nonmember clearing through a member has violated any of the provisions of this article, shall report its findings to the association and if approved by a majority vote of all the members of the association the offending member or nonmember shall be fined \$5,000. On the second offense, the member or such nonmember shall be subject to expulsion from the clearing house association, and the committee will proceed to act as the constitution provides for the expulsion of a member.

RULINGS ON ARTICLE XI.

Question (Mar. 8, 1920).—Would it be an evasion of the spirit or letter of the clearing-house constitutional provision regulating the payment of interest on deposits (Art. XI) to offer or agree to pay depositors 3½ per cent interest on all or any part of an open account, providing the depositor indicates, either orally or in writing, that a certain part of such deposit will not be needed for current account transactions; and would it be an evasion to agree to pay 3½ per cent on the entire balance of an open account, providing some part of the account has been fixed for a stipulated time in excess of 30 days?

Ruling.—Offering or agreeing to pay 3½ per cent interest on deposits under either of the suggested plans would be an evasion of the spirit and letter of the constitution.

Article XI, section 1, permits the payment of 3½ per cent interest only "on any time deposit, or certificate of deposit payable by its terms later than 30 days from the date thereof."

Time deposits are deposits on which payment can not legally be required within 30 days, and the fact that a deposit, or any part of it, is not disturbed for a given period does not constitute it a time deposit. The terms of a deposit at its date determine whether it is a demand or time deposit, and any agreement or understanding to treat a deposit alternatively for the purpose of payment of interest would be an evasion of the constitutional requirement.

SCHEDULE OF MAXIMUM INTEREST RATES UNDER SECTION 1, ARTICLE XI.

On any credit balance payable on demand or within 30 days, or certificate of deposit so payable, by its terms issued to or for the account of any bank (other than a mutual savings bank located in the second Federal reserve district), trust company, or other institution conducting a banking business, or private banker or bankers, located in the United States or Dominion of Canada:

When the 90-day rate for commercial paper at the Federal reserve bank of New York is—	The maximum rate per cent to be paid on the above accounts.
2 per cent or over, but less than 2½ per cent.....	1
2½ per cent or over, but less than 3 per cent.....	1½
3 per cent or over, but less than 3½ per cent.....	1¾
3½ per cent or over, but less than 4 per cent.....	1½
4 per cent or over, but less than 4½ per cent.....	2
4½ per cent or above.....	2½

On any credit balance or certificate of deposit payable on demand or within 30 days of any mutual savings bank located in the second Federal reserve district, or any person, persons, copartnership, corporation, or association other than those specified and included above, a maximum rate of 3 per cent per annum.

On any time deposit, or certificate of deposit payable by its terms later than 30 days from the date thereof, a maximum rate of 3½ per cent per annum.

The above maximum rates are not intended to apply to the account of, or any certificate of deposit issued to, any person or persons residing and transacting business in any foreign country other than the Dominion of Canada, or to any corporation, association, or copartnership organized and located therein, nor to affect such interest rates as are or may be fixed or regulated by law.

NEW YORK CLEARING HOUSE,
New York, August 24, 1920.

DEAR SIR: A question having been raised as to the rate of interest to be paid, under section 1, Article XI, to institutions located in Alaska, Hawaii, and other outlying Territories and possessions of the United States, the committee has this day ruled:

That Alaska and Hawaii are included within the provisions of section 1, Article XI, governing interest to be paid to any bank, trust company, or other institution conducting a banking business, or private banker or bankers, located in the United States; and that financial institutions located in other outlying Territories and possessions of the United States do not come within this classification but do come within the classification of institutions "other than those specified and included above" the maximum interest upon whose balances is limited to 3 per cent.

By order.

Chairman Clearing House Committee.

Gov. STRONG. I would also like to submit, not for inclusion in the record, but for the commission's information, a complete file of all the correspondence which took place on that subject. Any part of it, of course, that the commission cares to print I have no objection to being printed in the record. I would, however, appreciate it if the names of the banks and individuals could be left out of the correspondence.

I will leave this file of papers with the commission, and the letters may be printed if you so desire.

(The file of correspondence presented by Gov. Strong is hereto attached:)

DEPOSIT INTEREST RATES.

FEBRUARY 4, 1918.

DEAR MR. WARBURG: The interest question is a live one with New York City banks. A little while ago we learned that Bank A is paying interest at the rate of 2 per cent on all balances, including those of commercial borrowing depositors, provided the latter maintain a free balance of \$10,000. We recently received from Bank B a circular they have sent out, a copy of which is inclosed.

As the action of Bank A has led some of the other commercial banks to meet the competition, Gov. Strong is considering bringing up the action of Bank B at the next meeting of the money committee for general discussion.

Very truly, yours,

PIERRE JAY, *Chairman.*

HON. PAUL M. WARBURG,
Vice Governor Federal Reserve Board, Washington, D. C.

BANK B,
New York, January 28, 1918.

BENJAMIN STRONG, Esq.,
Governor Federal Reserve Bank, New York.

DEAR GOV. STRONG: Referring to the conversation between yourself and Mr. A. I take pleasure in inclosing a copy of the notice which was sent to our correspondents on the 26th instant.

Yours, very truly,

MR. B, *Vice President.*

FEDERAL RESERVE BOARD,
Washington, February 11, 1918.

DEAR MR. JAY: The question that you raise in your letter of February 4, concerning rates of interest that are being paid at this time by the banks in New York, is one that has given us quite some concern.

There is no doubt but that, at this time, there appears to be developing a general stampede on the part of the banks to outbid each other for deposits. Apparently they are afraid of withdrawals in view of the additional requirements that the Treasury is going to make upon them in connection with the additional certificates, and they are all keen to secure additional deposits, but something has got to be done or they will all get into trouble.

Gov. Harding was to write to all Federal reserve agents to make a study of this matter in advance of the meeting which we expect on February 26. I hope that you will make a special study of this question in New York and discuss it fully with Gov. Strong, because I think it is a problem which ought to be very carefully analyzed and handled.

With kindest regards,
Very truly, yours,

PAUL M. WARBURG.

PIERRE JAY, Esq.,
Federal Reserve Agent, New York.

FEBRUARY 25, 1918.

DEAR MR. FREW: Referring to our conversation of last week in regard to the policy of banks of New York City in allowing interest on deposit accounts, I am writing to convey to you the substance of the communication which has been received by this bank from Gov. Harding, of the Federal Reserve Board.

In referring to the announcement of further offers of certificates of indebtedness by the Treasury Department, he states that it is feared by the board that in view of the keen competition between banks for deposits which has recently developed, this increase of rate on certificates will lead banks to offer higher rates on deposits.

His telegram to me contains the following references to this matter:

"It appears to us here that banks are holding too nervously to deposits instead of encouraging sale of certificates to their depositors, which would have effect of releasing reserves. This scramble for deposits, if unchecked, will lead to most unfortunate conditions.

"Board suggests consideration by leading banks of European method, namely, that interest rate allowed should be based upon the discount rates fixed by Government banks.

"Suggest that you discuss with your clearing-house banks allowance on demand deposits interest not in excess of $1\frac{1}{2}$ to 2 per cent below the 15-day rate for commercial paper established from time to time by their Federal reserve bank.

"A similar differential on 90-day rate might be adopted for time deposits. Any marked general increase in rates on deposits likely to force Treasury to demand higher rates on Government balances."

I am sure it is not the disposition of the Federal Reserve Board any more than of the management of this bank to attempt to assume an attitude of control or direction as to the policy of its member banks in these matters, and it has been our understanding that the clearing-house committee has already seen the wisdom of investigating this matter and possibly recommending that the clearing house take some action in regard thereto. On the other hand, we can not overlook the fact that anything in the nature of a generally unsound development of the banking situation in this city might ultimately put unnecessary burdens on the Federal reserve bank which it could not escape, and consequently we feel that we have an interest and a very material one in promoting arrangements to be undertaken voluntarily among the bankers themselves regarding the maintenance of sound banking conditions.

May I ask you to convey the contents of this letter to members of the clearing-house committee at the next meeting.

Thanking you in anticipation of your courtesy in doing so, I beg to remain.

Very truly, yours,

BENJ. STRONG, Governor.

WALTER E. FREW, Esq.,
Chairman Clearing House Committee,
New York Clearing House Association, New York, N. Y.

MARCH 1, 1918.

MY DEAR MR. FREW: Since writing you on February 25, I understand that the members of the clearing-house committee have given further consideration to the general subject of the advance in rates of interest allowed by the New York banks on deposit accounts, and that it is expected that some definite plan by which this matter can be dealt with is about to be submitted to your committee for its consideration.

You ask me for a more definite expression of the views of the Federal reserve bank as to the proposed procedure by the clearing-house committee in this matter.

In general, I do not hesitate to say that the management of this bank would view with concern the development of conditions approaching those which arose in 1906 and 1907, which led to occurrences disastrous to the interests of the city and of the country as a whole and in consequence caused loss and suffering by the banking and business interests of the country, and by many people who were thrown out of employment or who sustained financial loss.

At the present time the chief sufferer would be the Government of the United States, and at a time when the Nation is engaged in war and when its interests are paramount to those of any institution or individual.

Any development in this city, where the chief financial reliance of the Government rests, which tends to undermine the financial stability or the morale of the banking institutions, is a direct menace to the Government's financial program.

In my last letter I referred to the desire of the Federal Reserve Board and of this bank to avoid any attempt to assume a control or direction in these matters, and that has been the consistent policy of the Federal reserve system; but I think I should say with all frankness that the competition which seems to have started in this city, in the payment of interest on balances, has spread to all parts of the country, has occasioned considerable concern in other financial centers, as well as in Washington, and those who are responsible for the management of the Federal reserve banks feel very strongly that the burden rests upon the bankers of this city, the country's chief financial center, to take steps at once by concerted action to safeguard the financial condition of the banks of New York City, and through the influence of their example to facilitate the preservation of equally sound conditions in other parts of the country.

Action, which I understand is now under consideration, looking to uniformity in interest allowed on deposits, based upon the rates of discount of the Federal reserve bank, appears to be a reasonable and proper way by which the desired result may be obtained.

In conclusion, let me say that such influence as this bank may properly and legally exert to maintain such a condition of stability, not only in the interests of the banks themselves but of the Government, will, of course, be directed to the same end.

Very truly, yours,

BENJ. STRONG, *Governor.*

WALTER E. FREW, Esq.,
*Chairman Clearing House Committee,
New York Clearing House, New York.*

MARCH 4, 1918.

DEAR MR. WARBURG: I inclose herewith copy of proposed amendments to the clearing house association which will be acted upon at the meeting to be held Monday next, March 11. I have just received these from Mr. Frew. He tells me that he expects to have the unanimous backing of the clearing-house committee in favor of the amendments.

I heard to-day that Bank A, of a reserve city, is writing to the banks throughout the country offering to pay 3½ and 4 per cent on their balances.

Very truly, yours,

PIERRE JAY, *Chairman.*

HON. PAUL M. WARBURG,
Vice Governor Federal Reserve Board, Washington, D. C.

BANK A,
New York, March 4, 1918.

MY DEAR GOV. STRONG: I inclose to you a copy of the resolutions which were offered at the clearing house to-day. I hope that you will take this matter up with Gov. Harding and that I can get a reply as soon as possible. I desire at this time to express to you my appreciation of your good efforts in endeavoring to bring about some system of control of this annoying problem.

Yours, sincerely,

W. E. FREW.

Hon. BENJAMIN STRONG,
Governor of the Federal Reserve Bank, New York City.

SCHEDULE OF MAXIMUM RATES UNDER THE AMENDMENT.

On banks (other than a savings bank located in the State of New York), trust company, or other institution conducting a banking business, or private banker or bankers, located in the United States or Canada, or of any agency of a foreign bank located in the city of New York, or upon any certificate of deposit, payable on demand or within 30 days issued to or for the account of any such bank, institution, person, persons, or agency:

The 90-day rate for commercial paper at the Federal reserve bank of New York is—	Maximum rate to be paid on above accounts.
2 per cent.....	1
2½ per cent.....	1½
3 per cent.....	1½
3½ per cent.....	1½
4 per cent.....	2
4½ per cent.....	2½
5 per cent.....	2½
5½ per cent.....	2½
6 per cent or above.....	3

On any savings bank located in the State of New York, or any person, copartnership, corporation, or agency other than those specified and included above, payable on demand or within 30 days on any credit balance or certificate of deposit, a maximum rate of 3 per cent per annum.

The above maximum rates do not apply to the accounts of or certificate of deposit issued to corporations or copartnerships organized and located in foreign countries other than Canada and having no agency located in the city of New York, nor to affect such interest rates as are or may be fixed or regulated by law.

MARCH 5, 1918.

DEAR MR. WARBURG: With regard to the progress of the proposed change to the constitution of the New York Clearing House, relative to a sliding scale on interest payments on deposits, I have learned to-day that considerable opposition is developing to it from very important institutions on the ground that it is a measure to raise interest and that this is a time when New York should take the lead before the country in standing for conservatism on interest rates. I was told that Bank A, Bank B, and Bank C were opposed to the amendment. I understand that many of the New York banks are receiving strong protests from interior bankers against the action of New York as being unnecessary and likely to lead to similar action elsewhere.

Very truly, yours,

PIERRE JAY, *Chairman.*

Hon. PAUL M. WARBURG,
Vice Governor Federal Reserve Board, Washington, D. C.

FEDERAL RESERVE BOARD,
Washington, March 6, 1918.

DEAR GOV. STRONG: When you were in my office yesterday I showed you Mr. Frew's letter to me of the 4th instant. After full discussion of the matter at the board meeting this morning I have written Mr. Frew, giving him the views of the board on the subject, and for your information I inclose a copy of my letter.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Mr. BENJAMIN STRONG,
Governor Federal Reserve Bank, New York.

MARCH 11, 1918.

DEAR MR. WARBURG: A feature of the meeting of the New York Clearing House Association to-day was Gov. Harding's address, which was very forceful and to the point, and has greatly assisted the solution of this difficult problem.

After Gov. Harding's address Mr. A suggested two motions, one of which, copy of which is inclosed, was unanimously adopted, and the other, suggesting that 2 per cent should be considered as the normal rate basis for bank deposits, was postponed for consideration, along with the original proposal of the clearing house committee, at the next meeting of the association. No date was set by the committee for the next meeting, and it will be left subject to the call of the clearing house committee. The trust companies are going to have a meeting to-morrow and appoint a committee to meet with the clearing house committee and discuss the whole matter.

Gov. Harding had a talk with Mr. B, president of Bank A, this morning, during which he expressed his willingness to cooperate by reducing his bank deposit rates to 2 per cent if the others would do so, but, of course, his institution is not one of those which has any substantial bank deposits.

On Saturday morning, before the clearing house committee, Mr. C. of Bank B, expressed himself as willing to cooperate, although the proposal to pay only 2 per cent on bank deposits was not under consideration at that time.

I will keep in touch with the clearing house committee and advise you of any further development.

Very truly, yours,

PIERRE JAY.

HON. PAUL M. WARBURG,
Federal Reserve Board, Washington, D. C.

(No initials or signature on copy.)

[Telegram.]

WASHINGTON, D. C., March 12, 1918.

JAY, Chairman Federal Reserve Bank, New York, N. Y.

Board is anxious to have you watch situation in your district with respect to competition for deposits through advancing interest rates with view of getting banks contemplating advances to defer action and of inducing those who are paying more than normal rates to reduce them. Board feels that Government financing should have right of way and that reserve strength of banks would be increased by encouraging the public to invest in Treasury certificates of indebtedness and Liberty bond issues rather than by banks competing for these funds and thus necessitating heavy investment in these securities for their own account. Wide distribution of Government issues is most important. Deposits throughout the country show general tendency to increase in volume and there seems to be no good reason to increase rates of interest paid for them thus adding to cost of money. Transfer of balances from one bank to another does not add anything to strength of banking position as a whole. Board urges that broad national view be taken of this question. In view of approaching Liberty bond campaign sharp nation-wide contest between banks for deposits would be particularly unfortunate. New York Clearing House yesterday unanimously adopted this resolution:

"Resolved, That this association wishes to record that any general campaign for deposits at increasing and competitive rates of interest inasmuch as such action is disturbing throughout the Nation and does not add to the collective strength of banking resources is at this time improper and should not be undertaken by any institution."

It is expected that New York Clearing House will reach definite agreement within next 10 days or 2 weeks. In meanwhile interior banks are advised against hasty and ill-considered action. Please bring this telegram to attention of banks in your district with view of ascertaining their views and of enlisting their cooperation.

HARDING.

MARCH 18, 1918.

MR. A.: I am sending you herewith copy of a letter Gov. Harding is mailing you to-day which his secretary has just dictated over the telephone to one of our stenographers.

In accordance with our conversation yesterday afternoon, I transmitted to his secretary this morning the suggestions for his letter which we agreed upon, and inclose copy herewith. He has not, however, used very many of them.

I have had to be away from the office most of the morning, but understand from the secretary that you had a conversation with Gov. Harding on the telephone, so that you and he are undoubtedly up to date in the matter.

Very truly, yours,

PIERRE JAY, *Federal Reserve Agent*

MARCH 18, 1918.

MY DEAR MR. FREW: I acknowledge receipt of your letter of the 15th instant, inclosing copy of the proposed amendment to the constitution of the New York Clearing House, which, I understand, has been agreed upon by the clearing-house committee and by the committee of trust companies, including both members of the clearing house and those not members.

The proposed amendment to your by-laws has been considered by the Federal Reserve Board, and while the board regrets that it has not proved practicable to reach an agreement providing for an interest schedule based on a maximum of 2 per cent for bank balances, it appreciates the difficulties in the way of reaching such an agreement.

The board understands that no bank or trust company will be obliged to increase any lower existing rate, but that the rates proposed are maximum rates to which level any higher rate now obtaining must be reduced, and it is gratified to know that the plan proposed will, if adopted, materially reduce the average rates of interest now being paid by banks and trust companies on the various classes of accounts, namely, bank balances, open accounts and certificates of deposits payable on demand, and current deposits and certificates.

The schedule, therefore, is a revision downward instead of upward, and while the board fears that unless thoroughly explained and understood its adoption may result in an advance of rates by some of the interior banks, it feels that a distinct gain has been made in the promotion of a spirit of harmony and unanimity among the New York City institutions, which ought to be instrumental in preventing any runaway competition throughout the country, which the board will use every effort to forestall.

In view of all the circumstances, therefore, the board will make no objection to the revised plan proposed, and it sincerely hopes that your committee's view of the result will prove correct.

I wish on behalf of the board to thank you and the other members of your committee for your consideration and unremitting efforts to bring about a satisfactory solution of this exceedingly difficult problem and to express sincere appreciation of the spirit of cooperation, concession, and conciliation which has been manifested by your banks and trust companies.

Very truly, yours,

BENJ. STRONG, *Governor.*

WALTER E. FREW, Esq.,
*Chairman New York Clearing House Committee,
New York, N. Y.*

MARCH 19, 1918.

DEAR GOV. HARDING: I am inclosing a copy of the letter which the New York clearing house committee sent out late yesterday afternoon to all of the members, which gives their remarks upon the proposed amendment to the constitution of the New York Clearing House Association.

At the meeting this afternoon, as I reported to you over the telephone, the amendment to the constitution was adopted with only three dissenting votes * * *.

Very truly yours,

PIERRE JAY, *Chairman.*

HON. W. P. G. HARDING,
Governor Federal Reserve Board, Washington, D. C.

NEW YORK CLEARING HOUSE,
New York, March 18, 1918.

DEAR SIR: For your information, the clearing house committee desires to advise you that the committee and a committee representing the trust companies have had several conferences on the proposed amendment to the New York Clearing House

Constitution, which is intended to establish the maximum rate which the members and nonmembers of the association will be allowed to pay on various classes of deposits, if the amendment is adopted by the association.

The result of these conferences, the committee is pleased to state, has brought about a better understanding of the situation, and amendments have been agreed upon which will be offered at the meeting of the association to be held on Tuesday, the 19th instant, as amendments to the amendment now before the association which, if adopted, will make Article XI read as follows:

“ARTICLE XI.

“INTEREST ON DEPOSITS.

“SEC. 1. No member of this association, or bank or trust company or others clearing through any member, shall agree to pay, or shall pay, directly or indirectly on any credit balance payable on demand or within 30 days, or certificate of deposit so payable, by its terms, issued to or for the account of any bank (other than a mutual savings bank located in the second Federal reserve district), trust company or other institution conducting a banking business, or private banker or bankers, located in the United States or Dominion of Canada, interest at a rate in excess of 1 per cent per annum when the then 90-day discount rate for commercial paper at the Federal reserve bank of New York is 2 per cent or less, and an additional one-fourth of 1 per cent for every one-half of 1 per cent that such discount rate of the Federal reserve bank shall exceed 2 per cent, except that the maximum rate paid or agreed to be paid on any such credit balance or certificate of deposit shall not in any case be higher than 3 per cent per annum; nor shall any member, or nonmember clearing through a member, pay or agree to pay on any like credit balance of, or like certificate of deposit issued to, any mutual savings bank located in the Second Federal Reserve District or any person, persons, copartnership, corporation, or association, other than those specified and included above, interest at a higher rate than 3 per cent per annum; nor on any time deposit, or certificate of deposit payable by its terms later than 30 days from the date thereof, at a higher rate than 3½ per cent per annum. The foregoing provisions are not intended to apply to the account of, or any certificate of deposit issued to, any person or persons residing and transacting business in any foreign country other than the Dominion of Canada, or to any corporation, association or copartnership organized and located therein, nor to affect such interest rates as are or may be fixed or regulated by law.

“The clearing house committee upon ascertaining to the satisfaction of a majority of its members that a member or nonmember clearing through a member, has violated the provisions of this section shall report their findings to the association and if approved by a majority vote of all the members of the association the offending member or nonmember shall be fined \$5,000. On the second offense the member, or such nonmember, shall be subject to expulsion from the clearing-house association, and the committee will proceed to act as the constitution provides for the expulsion of a member.”

The committee desires to call attention particularly to the fact that the amendment regulating rates of interest on deposits states only the maximum rates members and nonmembers are allowed to pay, and does not compel them to pay the maximum rates; but on the contrary allows entire freedom of action provided the maximum rates are not exceeded. The proposed amended article complies with the suggestion of the Federal Reserve Board that the interest rates allowed should be based upon the discount rates fixed by the Federal reserve bank and further complies with their expressed views of the two objects of the Federal Reserve Board: First, to bring about a cessation of competitive bidding for deposits; and, second, to reduce to a conservative level interest rates which, under prevailing conditions, have been, in its opinion, unduly advanced.

The committee believes that the proposed amendment will accomplish these results and tend to reduce competition with the Government in financing the war.

The committee sends you the above copy of the new Article XI, as it will be read if these proposed amendments are adopted, for your careful consideration, so that you may be prepared to express your position at the meeting to be held March 19.

By order:

WALTER E. FREW,
Chairman Clearing House Committee.
WILLIAM J. GILPIN,
Manager.

FEDERAL RESERVE BOARD,
Washington, March 20, 1918.

DEAR MR. JAY: I have your letter of the 19th instant inclosing copy of the letter of the clearing house committee dated March 18, addressed to all member banks, explaining the amendment to the rules of the clearing house which was adopted at the meeting on yesterday.

Thanking you, I am,
Very truly, yours,

W. P. G. HARDING, *Governor.*

Mr. PIERRE JAY,
Chairman Federal Reserve Bank, New York.

MARCH 26, 1918.

DEAR GOV. HARDING: With this I am inclosing preliminary report of an inquiry in regard to interest rates which has been made in this district by a committee of the New York State Bankers Association. Now that the situation in New York has been dealt with, I believe it would be a good plan to agitate for a reform of method in the practice of paying interest on deposit accounts throughout the entire district.

Would you be good enough to write me an expression of your views, returning with it this report, which is the only copy I now have.

Very truly, yours,

BENJ. STRONG, *Governor.*

W. P. G. HARDING,
Governor Federal Reserve Board, Washington, D. C.

To the bank addressed:

At a meeting of the executive committee of the New York State Bankers Association, held July 25, 1917, a committee to consider the matter of interest rates on deposits was appointed by President John H. Gregory as follows: S. H. Beach, chairman, president Rome Savings Bank; E. C. McDougal, president Bank of Buffalo; S. G. H. Turner, president Second National Bank of Elmira; McNaughton Miller, secretary and treasurer Union Trust Co., Albany; G. T. Townsend, president Merchants National Bank, Middletown; C. O. Ireland, cashier Bank of Amityville; G. J. Keyes, vice president Fidelity Trust Co., Rochester; John McHugh, vice president Mechanics and Metals National Bank, New York City.

The above-named committee and President Gregory met in Syracuse on September 5 and after a full discussion of the matter it was decided that before the subject could be intelligently considered it would be necessary to have at hand statistics showing just what rates of interest are now being paid by each bank in the State; and from the replies to the question cards sent out to all the banks in the State the desired statistics have been gathered and compiled as follows:

RECAPITULATION OF INTEREST RATES NOW PAID TO DEPOSITORS, AS SHOWN BY THE INQUIRY CARDS SENT OUT BY THE COMMITTEE ON INTEREST RATES.

Group I contains—

- 46 National banks of which 46 have reported.
- 60 State banks of which 55 have reported.
- 15 Trust companies of which 15 have reported.
- 6 Savings banks of which 6 have reported.

Group II contains—

- 30 National banks of which 27 have reported.
- 27 State banks of which 25 have reported.
- 7 Trust companies of which 7 have reported.
- 6 Savings banks of which 6 have reported.

Group III contains—

- 32 National banks of which 30 have reported.
- 16 State banks of which 16 have reported.
- 4 Trust companies of which 4 have reported.
- 4 Savings banks of which 4 have reported.

Group IV contains—

- 108 national banks of which 95 have reported.
- 17 State banks of which 15 have reported.
- 11 trust companies of which 11 have reported.
- 16 savings banks of which 16 have reported.

Group V contains—

- 103 national banks of which 88 have reported.
- 15 State banks of which 15 have reported.
- 11 trust companies of which 11 have reported.
- 14 savings banks of which 14 have reported.

Group VI contains—

- 88 national banks of which 62 have reported.
- 9 State banks of which 6 have reported.
- 12 trust companies of which 7 have reported.
- 31 savings banks of which 31 have reported.

Group VII contains—

- 37 national banks of which 33 have reported.
- 35 State banks of which 32 have reported.
- 14 trust companies of which 12 have reported.
- 31 savings banks of which 31 have reported.

Total number of banks, 805; total number reporting, 720.

The statistics of Group VIII are not included because, being located in the boroughs of Manhattan and Richmond where conditions materially differ from those affecting the other banks of the State, the response to the inquiry from this group was not sufficiently general to make the figures of value.

The 720 banks which reported pay maximum rates of interest on time deposits as follows:

Interest on time deposits.

	4½ per cent.	4 per cent.	3½ per cent.	3¼ per cent.	3 per cent.	2½ per cent.	2 per cent.	Have no in- terest depart- ment.
Group I:								
National banks		20		1	25			
State banks		25			5			
Trust companies		10			5			
Savings banks		6						
Group II:								
National banks		20		1	6			
State banks		22		1	2			
Trust companies		7						
Savings banks		6						
Group III:								
National banks		4		7	16			3
State banks		5		2	8			1
Trust companies				3	1			
Savings banks				4				
Group IV:								
National banks		28		36	21		4	6
State banks		10		1	3			1
Trust companies		6		5				
Savings banks		12		4				
Group V:								
National banks		20		13	42	1	3	9
State banks		9		5	1			
Trust companies		6		4	1			
Savings banks		9	1	4				
Group VI:								
National banks		18		8	11	1	2	22
State banks		1		1	1			
Trust companies		4		1	1			1
Savings banks		25	1	5				
Group VII:								
National banks		7		2	16			6
State banks		4		2	19		1	6
Trust companies		3		1	4			4
Savings banks	2	29						

Above statistics (in which none of the banks in Group VIII are included) show that of the 720 banks which reported, 44 per cent are paying 4 per cent on time deposits and 56 per cent are paying less than 4 per cent. The exact figures follow: 2 banks pay 4½ per cent; 316 banks pay 4 per cent; 2 banks pay 3½ per cent; 116 banks pay 3¼ per cent; 208 banks pay 3 per cent; 2 banks pay 2½ per cent; 10 banks pay 2 per cent; 64 banks pay no interest.

The maximum rate paid by the three classes of commercial banks on checking accounts are reported as follows:

Interest rates paid on checking accounts.

	4 per cent.	3½ per cent.	3 per cent.	2 per cent.	1 per cent.	None.
Group I:						
National banks.....	6	1	15			24
State banks.....	2	3	26			24
Trust companies.....	4	1	7			3
Group II:						
National banks.....	1		2			24
State banks.....	7		1			17
Trust companies.....	2		2			3
Group III:						
National banks.....			4	2		24
State banks.....			5	1		10
Trust companies.....						4
Group IV:						
National banks.....	2	9	21	5		58
State banks.....	2	1			1	11
Trust companies.....	3	3	2	1		2
Group V:						
National banks.....			7	6		75
State banks.....			1	1		13
Trust companies.....			1	8		2
Group VI:						
National banks.....		1	5	8	1	47
State banks.....			2			4
Trust companies.....			2	3		2
Group VII:						
National banks.....		1	1	12		19
State banks.....		1	1	17		13
Trust companies.....	1	2	3	6		

Above statistics (in which none of the banks in Group VIII are included) show interest paid on checking accounts by 612 commercial banks and trust companies as follows: Thirty pay 4 per cent; 23 pay 3½ per cent; 108 pay 3 per cent; 70 pay 2 per cent; 2 pay 1 per cent; 379 pay no interest.

Of the 379 banks which report no interest paid on checking accounts, 333 make no exceptions; while 46 report that they pay from 1½ per cent to 3½ per cent on public funds only.

Of the 233 banks which report interest paid on checking accounts, 169 require minimum balances ranging all the way from \$1 to \$25,000, and 81 of them pay interest on a "few inactive accounts only." The minimum balances required are as follows: Six banks require \$1; 19 banks require \$5; 1 bank requires \$10; 1 bank requires \$25; 6 banks require \$50; 9 banks require \$100; 1 bank requires \$150; 13 banks require \$200; 4 banks require \$250; 3 banks require \$300; 1 bank requires \$400; 41 banks require \$500; 45 banks require \$1,000; 1 bank requires \$1,500; 2 banks require \$2,000; 1 bank requires \$2,500; 10 banks require \$5,000; 4 banks require \$10,000; 1 bank requires \$25,000.

Of the 233 commercial banks which pay interest on checking accounts, 38 have special rules for computing interest; 89 credit interest on daily balances; 49 credit interest on monthly balances; 45 credit interest on quarterly balances; 12 credit interest on semiannual balances.

Of the 49 which credit interest monthly, 25 compute the interest on minimum monthly balances; 24 compute the interest on average balances. Of the 45 which credit interest quarterly, 27 compute the interest on minimum quarterly balances; 18 compute the interest on average balances. Of the 12 which credit interest semi-annually, 7 compute the interest on average balance; 5 compute the interest on minimum balance.

One of the national banks, which has "special rules" for paying interest, advertises in the press of its own and contiguous counties as follows:

"COMPOUND-INTEREST DEPARTMENT.

"Deposits made before the 16th of any month draw 4 per cent interest from the first day of that month, compounded quarterly.

"A larger return on your money than offered by most banks because of the date from which we allow interest and the compounding every three months.

"We place no limit on the amount of your deposit."

The foregoing statistics put before us for the first time a complete knowledge of the rates paid and methods by which interest to depositors is computed by a very large percentage of all classes of banks doing business in the State of New York.

The two most striking features of the tabulation are the wide discrepancy in the rates of interest paid both on time and checking accounts and the lack of coordination in business methods of banks operating in practically the same field.

The gathering of this information is particularly valuable at this time, because the marked depreciation in the value of all classes of securities has rendered it exceedingly difficult for some banks to earn a reasonable dividend for their stockholders after paying to depositors the prevailing rates of interest which have no doubt been brought to the present high level through competition for deposits.

The offering of an increased rate by some one bank in a community forces its competing neighbors to a like increase, regardless of whether or not such increase is in every case warranted, and the inevitable result, if no remedial steps are taken, will be in many communities to put banking as a business upon an unprofitable basis.

That the payment of the maximum rate now prevailing is not necessary to the conducting of a successful banking business is fully evidenced by the foregoing statistics, which show that the banks paying the maximum rate of 4 per cent are actually in the minority.

It is the judgment of the members of the committee that before rendering a final report the foregoing tabulated figures should be mailed to all the banks and trust companies in the State, in order that any ideas or suggestions which may occur to any of their officers may be communicated to the committee for consideration.

All communications will be held strictly confidential, and if sent to any of the undersigned will be accorded full discussion and consideration at the next meeting of the committee.

S. H. BEACH,
E. C. McDOUGAL,
S. G. H. TURNER,
McNAUGHTON MILLER,
G. T. TOWNSEND,
C. O. IRELAND,
G. J. KEYES,
JOHN McHUGH,

Committee on Interest Rates Paid to Depositors.

FEDERAL RESERVE BOARD,
OFFICE OF THE GOVERNOR,
Washington, March 27, 1918.

DEAR GOV. STRONG: I have received your letter of the 26th instant inclosing preliminary report regarding interest rates paid by banks in the State of New York. It seems to me that many of the banks are paying excessive rates for deposits, and I agree with you that a determined and systematic effort should be made throughout the entire country to reform the pernicious practice of paying excessive interest on deposits.

I have already taken the matter up with 11 Federal reserve banks, and if you will kindly let me have an outline of the methods which you propose to adopt in your own district, I will write the other Federal reserve banks again, making a more definite suggestion as to methods of procedure than I have hitherto done. Our situation here is complicated somewhat because members of the board are not unanimous as to the merits of the plan adopted by the New York clearing house. Some of them feel that it is unfortunate that the differential should be as against the 90-day rate instead of the 15-day rate, and call attention to the fact that in three of the districts including Chicago, the 90-day rate is already 5 per cent, so that the adoption of the New York plan by the Chicago clearing house would mean a $2\frac{1}{2}$ per cent rate, an increase of one-half per cent. Unless the 90-day rate in New York should be raised to 5 per cent, this might mean a flow of bank balances out of New York into Chicago, so it is evident that there is a new factor to be considered in fixing rates, and some members of the board regard this as unfortunate. In this connection, I would invite your attention to a memorandum which was submitted to the board this morning by Mr. Warburg. I would very much appreciate an expression of your views regarding it.

From my understanding of the situation in New York, I hardly think that the trust companies and some of the banks could be induced to agree that the Federal reserve bank rate on 90-day paper should be in excess of 5 per cent, before a $2\frac{1}{2}$ per cent rate should go into effect on bank balances. I am afraid, if the matter is reopened, that it might result in the abrogation of the present agreement, without reaching a new working basis. But you of course, are in a much better position to judge this than I am.

You will note that Mr. Warburg favors increasing the 90-day rate to 5 per cent. It was suggested this morning that I send a copy of Mr. Warburg's memorandum to all Federal reserve banks, but I am not doing so as I think it would be better to reach a definite agreement as to the New York rates before discussing changes with the interior banks.

Very truly, yours,

W. P. G. HARDING.

Mr. BENJAMIN STRONG,
Governor Federal Reserve Bank, New York.

WASHINGTON, March 27, 1918.

Memorandum for the board:

It will be necessary for the board to devise some definite policy with respect to the discount rates to be established by all Federal reserve banks as soon as the bond bill and the War Finance Corporation bill become law. I believe that an agreement has practically been reached amongst ourselves as to the policy to be adopted, but it is necessary to definitely outline it and to advise the Federal reserve banks, which have expressed unanimous desire to have some of these rates dealt with upon a uniform basis.

I am writing this memorandum in order to bring before the board a definite proposition for the purpose of discussion and conclusions.

I. It is suggested that the 15-day Liberty loan rate be fixed at 4 per cent as soon as the war finance bills become law and provided it contains the clause embodied in the House bill providing for the elimination of the 2-cent stamp as far as concerns paper secured by Liberty loan bonds.

II. It is suggested that the 90-day rate for Liberty loan paper be established at 4½ per cent.

In this connection we might discuss the question whether it would not be desirable to establish a policy to the effect that, without committing the Federal reserve banks to any renewal at a definite rate, it is the plan of the Federal Reserve Board to permit renewals at the same rate of 4½ per cent in cases where the customer's note, or an agreement connected therewith, provides that at least 15 per cent of the amount borrowed will be paid off each month. If we take it that our loans from now on will be issued at intervals of six months, this would provide for approximately the liquidation of these Liberty loan borrowings between loans. Wherever such agreement does not exist, a higher rate may become applicable later on.

I am throwing this out, not as a sufficiently matured plan, but simply as a basis for discussion. There is no doubt that with the Liberty loan rate at 4½ per cent and bankers acceptances selling between 4½ per cent to 4¾ per cent, our 90-day rate for commercial paper of 4½ per cent is too low. It ought to be advanced to 5 per cent, at which rate it stands to-day in three of the Federal reserve banks, viz, Boston, Chicago, and Minneapolis. In advancing this rate to 5 per cent, which would still be 1 per cent below the rate at which the best paper sells at present in the open market—6 per cent—we meet the difficulty that this advance would bring about an increase in the interest allowed on deposits in New York from 2½ per cent to 2¾ per cent. It looks to me, however, that a second effort should be made to straighten out this situation in New York now that the first agreement has been reached.

This would be comparatively simple if the clearing house would amend its recently adopted rule to the effect that the advance of interest rates on deposits shall not follow automatically an increase of the 90-day commercial paper rate of the Federal reserve banks but that in each case there shall first be a meeting of the New York clearing house which shall decide whether or not a new rate, which is to be considered the maximum under all circumstances, shall go into effect. This meeting could, for the time being, decide that the 2¾ per cent rate shall go into effect when the 90-day commercial paper rate of the Federal reserve bank shall be in excess of 5 per cent instead of providing, as now, that it shall go into effect when such rate touches 5 per cent. It will probably be difficult and not entirely welcome to the New York banks to have the question reopened at this time, but I believe that, in view of the general situation and bearing in mind the pressure that the Secretary of the Treasury can bring by suggesting that he will increase his rates on Government deposits to 2½ per cent in case the rates of the banks advance to that figure, reconsideration may be brought about.

III. The acceptance rate can probably remain where it is at this time.

IV. Trade acceptances will adjust themselves automatically in accordance with what we decide to be the policy for the commercial paper rates.

91341—22—vol 2—39

We have so far followed the rule that the trade acceptance should be one-half per cent lower than the 90-day commercial paper rate. The latter being $4\frac{1}{2}$ per cent at present, the trade acceptance is 4 per cent so that technically it is below the bankers' acceptance rate, which is an anomaly and another argument for the increase of the 90-day paper to 5 per cent.

V. The 15-day commercial rate and the 6 months' paper rate can be discussed after we have reached a conclusion about the questions above outlined.

VI. I believe that the indications of what we should do with interest rates are absolutely clear and do not permit of any doubt. The only difficulty that we meet is that of the deposit situation. My own feeling is that, even if we could not reach a satisfactory conclusion as to the deposit situation, the rate situation will have to be adjusted. But I hope that the deposit situation can be straightened out.

Respectfully submitted.

PAUL WARBURG.

MARCH 30, 1918.

DEAR GOV. HARDING: The officers have discussed your letter of March 27 to Gov. Strong on the subject of interest rates and also discount rates, and in his absence to-day I am writing to say that we are giving consideration to the question of how we should proceed in other parts of this district outside of New York City to secure lower interest rates, but have not reached any definite conclusions. We feel, however, that we should not take any action on this matter until after the Liberty loan campaign, as it is a subject likely to arouse many local animosities, and it is of vital importance to the success of the campaign that there should be harmonious action among the banks everywhere in the district.

We feel, however, that the New York situation can be effectively met by our establishing a rate of $4\frac{1}{2}$ per cent on 90-day commercial paper, as this will not necessitate an increase of the $2\frac{1}{2}$ per cent maximum rate on bank balances now established by the New York clearing house scale and becoming effective April 1. We should not consider it practicable to reopen the rate question in New York City at present. The effect of the present schedule is very considerable, and the general adoption of it even by banks outside of the clearing house is most gratifying.

We are carefully considering Mr. Warburg's memorandum on the subject of discount rates and expect to report to you definitely the views of the officers over the telephone on Monday.

Very truly, yours,

PIERRE JAY, *Chairman.*

Hon. W. P. G. HARDING,
Governor, Federal Reserve Board, Washington, D. C.

MAY 25, 1918.

DEAR JUDGE ELLIOTT: Complying with your request, and as arranged over the telephone, I take pleasure in sending you herewith inclosed a copy of an opinion, dated March 5, 1918, rendered by Mr. Charles E. Rushmore to Mr. Frew at the time the amendment to the constitution of the New York clearing house relative to the fixing of a rate of interest on deposits was passed.

I am also inclosing a copy of article 11 of the constitution of the New York Clearing House Association, the amendment in question.

Very truly, yours,

PIERRE JAY, *Federal Reserve Agent.*

Judge M. C. ELLIOTT,
Counsel, Federal Reserve Board, Washington, D. C.

REMARKS OF MR. WALTER E. FREW, CHAIRMAN CLEARING HOUSE COMMITTEE.

[Delivered at meeting of the Clearing House Association, Mar. 4, 1918.]

I am unanimously instructed by the clearing house committee to give notice of an amendment to the constitution by which an effort will be made to end, by clearing house agreement and control, the prevailing competition between banks in the matter of paying interest on deposits. At a time when we are called upon to act together in the matter of Government loans, it is considered a severe bar to concerted action that a rivalry should exist in the great body of American bankers represented by this

association, and it is believed there is serious danger that bidding for deposits through competing interest rates may weaken the banking structure and lead to injurious results.

It would be manifestly improper for me at this time to enter into an argument on the proposed amendment, but I ask you to give this subject your very earnest consideration. Remember we are in very momentous times, and our actions should be broad and patriotic. It may be that the fate of the next loan will depend upon the unity of the banks on the amendment which we propose to introduce. The Federal Reserve Board have expressed their apprehension on the situation, and have suggested the establishment by the New York clearing house banks of maximum interest rates on deposits, based on the discount rates fixed from time to time by the Federal reserve bank of New York. We think it proper that the position of the Federal reserve bank of New York on this matter should also be known, and we beg leave to read the letter addressed to us by Gov. Strong of the bank.

(Letter of Gov. Strong, of Federal reserve bank, Feb. 28, 1918.)

As there have arisen questions of the legality of these regulations, we would like to state that similar restrictions have been adopted by and are in operation with 46 clearing houses throughout the country.

The clearing house committee submitted this question to its counsel, Mr. Charles E. Rushmore, and I read his reply:

RUSHMORE, BISBEE & STERN,
New York, March 5, 1918.

In re New York Clearing House Association—Interest on deposits.

DEAR SIR: At your request, I beg to supplement my letter of the 4th instant, expressing the opinion that an amendment to the constitution of your association which shall provide a maximum rate of interest on deposits is violative of no law. The only question that has been raised, as I understand, is as to whether or not it could be held to offend the laws against combinations in restraint of competition. I shall address myself to that proposition.

The deposit of money with a banking institution creates the relation of debtor and creditor, and any arrangements between the parties as to the rate of interest to be paid is clearly not an act affecting interstate commerce within the meaning of the Sherman antitrust law (*Hopkins v. United States*, 171 U. S., 578).

The question, therefore, must be determined in respect of the local statute law and of the common law.

That the prohibition against monopolies and restraints of trade, contained in chapter 690 of the Laws of 1899 (New York), does not apply, would seem to require no discussion. The act, in so far as it needs to be considered, reads as follows:

"SECTION 1. Every contract, agreement, arrangement, or combination whereby a monopoly in the manufacture, production, or sale in this State of any article or commodity of common use is or may be created, established, or maintained, or whereby competition in this State in the supply or price of any such article or commodity is or may be restrained or prevented, or whereby for the purpose of creating, establishing, or maintaining a monopoly within this State of the manufacture, production, or sale of any such article or commodity, the free pursuit in this State of any lawful business, trade, or occupation is or may be restricted or prevented, is hereby declared to be against public policy, illegal, and void."

It is obvious that neither credits, nor money itself, are articles or commodities manufactured, produced, or sold within the meaning of the act. While money may in some instances be regarded as an article or a commodity, it is but a medium of exchange, and its manufacture or production is confined to the Government itself. The act was designed to relate only to such articles or commodities as are themselves used or consumed in the maintenance of life (*Matter of Jackson*, 57 Misc., 1; *Opinions of the Attorney General*, 1904, p. 534; *Senate Journal of 1897*, Jan. 15, p. 43; Jan. 20, pp. 67-69; *Resolution*, Jan. 5, p. 50; *Laws of 1893*, chap. 716; *Laws of 1896*, chap. 267; *In re Welch*, 29 Fed. Cas., 605).

That money was not contemplated as coming within the provisions of this act is further evidenced if evidence were needed, by the provisions of the stock corporation law (par. 14), reading as follows:

"Sec. 14. Combinations prohibited: No domestic stock corporation and no foreign corporation doing business in this state shall combine with any other corporation or person for the creation of a monopoly or the unlawful restraint of trade or for the prevention of competition in any necessary of life."

This is but another form of expressing the antimonopoly act, in so far as it relates directly to corporations, but, by an earlier section of the stock corporation law (par. 5), it is declared that this paragraph "shall not apply to moneyed corporations."

It is provided in paragraph 580 of the penal law that—

"If two or more persons conspire * * *

"6. To commit any act injurious to the public health, to public morals, or to trade or commerce, or for the perversion or obstruction of justice, or of the due administration of the laws—

"Each of them is guilty of a misdemeanor."

In order to come within the condemnation of this statute, it would be necessary to hold that your proposed restriction would be an act "injurious * * * to trade or commerce."

It may be said that all statute laws bearing upon the subject, and the common law, are aimed against the creation and maintenance of monopoly and such restraint of individual freedom in trade as are unreasonable and tend to the injury of the public, as well as of the individual. An agreement in partial restraint of trade has invariably been upheld where it has been "such only as to afford a fair protection to the interests of the party in favor of whom it is given, and not so large as to interfere with the interests of the public." (*Nordenfeldt v. Maxim-Nordenfeldt Co.* (1894), App. Cas., 535, 567; *Oregon Steam Navigation Co. v. Windsor*, 20 Wall., 64, 66.) The evil of monopoly, that has been and is sought to be overcome by the law, is the consequent enhancement of prices (*Standard Oil Co. v. United States*, 221 U. S., 1, 54, 56-57.) It was said in *People v. North River Sugar Refining Co.*, XXII Abbott's N. C., at page 207: "Any combination, the tendency of which is to prevent competition in its broad and general sense and to control, and thus at will enhance prices, to the detriment of the public, is a legal monopoly." A monopoly in commercial law "is the abuse of free commerce, by which one or more individuals have procured the advantage of selling alone or exclusively all of a particular kind of merchandise or commodity to the detriment of the public." (*In re Greene*, 52 Fed., 104, 115, 116.)

Applying the tests as above set forth to the proposed action on the part of the clearing house, it is manifest that it does not fall within the condemnation of the law, as not only is its purpose, but the resultant will be, not to restrain trade, but to promote it, not to create a monopoly, but to avoid it. Bidding for money by offering advanced interest rates to depositors must, if carried far enough, tend to the withdrawal of funds from smaller, though entirely solvent, institutions, into the control of the more powerful institutions, which by reason of the greater volume of business done by them can afford to make smaller profits. The tendency of such a course is toward that which the law condemns, even though it could not reach the degree of creating a monopoly. It seems needless to suggest the possible evils that would flow, if such bidding process were unchecked, from the sudden or protracted drain upon the resources of the smaller banks, and from the inevitable effect upon interest rates to borrowers and upon the market for securities. On the other hand, the fixing of a maximum rate to depositors at a reasonable point below the discount rate of the Federal reserve bank leaves a range for individual freedom of action below that maximum, and would tend to stabilize the money market and provide against such a weakening of the banking structure as above referred to. Its object is, and its effect would be, not to enhance, but to prevent the undue enhancement of, prices for money, and, hence, it not only could not operate to the detriment of the public but would be a positive benefit to trade and commerce. There is contemplated no interference with the broadest use of his money by the depositor. The investment markets of the world will always be open to him.

I might add, although it lends no weight to the position taken above, that the clearing house is a voluntary association having for one of its purposes "the maintenance of conservative banking through wise and intelligent cooperation." While the advantages of membership are of the greatest importance, nevertheless, membership is not an absolute essential to the conduct of the banking business by any duly authorized institution. Your constitution does not act upon or bind those who are not members or who do not clear through members.

The questions under consideration were discussed in the opinion (unpublished) of Judge Everett Smith in *Peoples Savings Bank v. First National Bank et al.*, in the Superior Court of the State of Washington, King County, and the legality of a restrictive provision adopted by the Seattle Clearing Association, somewhat similar to that proposed by the New York Clearing House Association, was upheld.

Very truly, yours,

CHARLES E. RUSHMORE.

WALTER E. FREW, Esq.,

Chairman Clearing House Committee, New York City.

With this statement I now formally give notice to amend the constitution of the association by the addition of a new article to be designated Article XI and by re-numbering the present Article XI so that the same shall be designated Article XII, which new Article XI shall read as follows:

ARTICLE XI. INTEREST ON DEPOSITS.

SECTION 1. No member of this association, or bank or trust company, or others clearing through any member, shall agree to pay, or shall pay, directly or indirectly on any credit balance, payable on demand or within 30 days, of any bank (other than a savings bank located in the State of New York), trust company, or other institution conducting a banking business, or private banker or bankers, located in the United States or Canada, or of any agency of a foreign bank located in the city of New York, or upon any certificate of deposit, so payable, issued to or for the account of any such bank, institution, person, persons, or agency, interest at a rate in excess of 1 per cent per annum when the then 90-day discount rate for commercial paper at the Federal reserve bank of New York is 2 per cent or less, and an additional one-fourth of 1 per cent for every one-half of 1 per cent that such discount rate of the Federal reserve bank shall exceed 2 per cent, except that the maximum rate paid or agreed to be paid on any such credit balance or certificate of deposit shall not in any case be higher than 3 per cent per annum; nor shall any member, or nonmember clearing through a member, pay or agree to pay on any like credit balance of, or like certificate of deposit issued to, any savings bank located in the State of New York, or any person, copartnership, corporation, or agency other than those specified and included above, interest at a higher rate than 3 per cent per annum; nor on any time deposit, or certificate of deposit payable later than 30 days from the date thereof, at a higher rate than 3½ per cent per annum. The foregoing provisions are not intended to apply to the accounts of, or certificates of deposit issued to, corporations or copartnerships organized and located in foreign countries other than Canada and having no agency located in the city of New York, nor to affect such interest rates as are or may be fixed or regulated by law.

The clearing house committee upon ascertaining to the satisfaction of a majority of its members that a member or nonmember clearing through a member, has violated the provisions of this section shall report their findings to the association and if approved by a majority vote of all the members of the association the offending member or nonmember shall be fined \$5,000. On the second offense the member or such nonmember shall be subject to expulsion from the clearing house association and the committee will proceed to act as the constitution provides for the expulsion of a member.

NEW YORK CLEARING HOUSE,
New York, April 8, 1918.

DEAR SIR: Referring to the provisions of Article XI of the clearing house constitution, relating to interest on deposits to be paid by clearing house institutions, we beg to advise you that the 90-day rate for commercial paper at the Federal reserve bank of New York having been advanced to 4½ per cent, the maximum rate of interest to be paid under the sliding scale at this time will be 2½ per cent.

By order.

WALTER E. FREW,
Chairman Clearing House Committee.

WILLIAM J. GILPIN, *Manager.*

MAY 8, 1918.

DEAR MR. JAY: After you left last night I heard from Mr. A., of Boston, advising that the clearing house there had yesterday afternoon fully considered the interest question and established a ruling providing that the limited rate would apply only to banks and bankers' balances, with a 3 per cent maximum. The rate will be scaled from 1 per cent when the Federal reserve bank rate is 2 per cent or less than 2½ per cent and will go up one-fourth per cent for each one-half per cent advance in the Federal discount rate, so that on an advance in discount rate from 4½ per cent to 5 per cent the interest rate will be 2½ per cent. They also established a penalty of \$1,000 for the first violation and expulsion from the clearing house for the second offense. Mr. A. kindly offered to send the text of the ruling to you last night, so that it would reach you at the hotel to-day.

In Philadelphia a meeting was held, but it was determined that there was no competition for deposits there which made it necessary or advisable to take action, and none was taken.

Mr. B. and all of the local officers of the A. B. A. are out of town handling the Hot Springs convention. Two of his secretaries, however, remained in the office, but they are uninformed as to any definite action that was taken by any clearing house

and had no data in the office. One of them tells me that she remembers Mr. B. and Mr. C. discussing the matter, and her recollection of the conversation is that it was decided that the matter could be dropped at that time.

Things are generally quiet here to-day, with money somewhat firmer, and indications are that before the end of the day we will see our loans up.

Sincerely, yours,

E. R. K

PIERRE JAY, Esq., *Hotel Seneca, Rochester, N. Y.*

JUNE 15, 1918.

DEAR GOV. HARDING: The inclosed letter from Bank A explains itself.

In our last conference on the subject of interest rates, I understood that the Federal Reserve Board proposed, after the Liberty loan was placed, to take up the whole subject of interest rates in other Federal reserve districts to see whether arrangements similar to those effected in New York might not be concluded.

Possibly you may feel willing to have me give some specific advice to Bank A.

Very truly, yours,

BENJ. STRONG, *Governor.*

Hon. W. P. G. HARDING,
Governor Federal Reserve Board.

BANK A,
New York, June 11, 1918.

Hon. BENJAMIN STRONG,
Governor Federal Reserve Bank, New York, N. Y.

MY DEAR SIR: In view of the recent action of the members of the New York clearing house in voluntarily reducing interest rates on bank accounts, you may be interested in the inclosed circular received from Bank A of a reserve city not in the second district, in which they invite bank accounts and agree to allow interest thereon at the rate of 3 per cent per annum on balances of \$5,000 or over.

Very truly, yours,

Vice President and Secretary.

JUNE 21, 1918.

To: Mr. Jay.

From: Benj. Strong.

The attached letter from Gov. Harding explains itself. I really think the time has arrived when we should discuss with our clearing house people some slight revision of their interest plan and take up aggressively throughout the district the subject of reduction in the general level of interest rates allowed on deposits.

FEDERAL RESERVE BOARD,
Washington, June 20, 1918.

DEAR GOV. STRONG: I have your letter of the 15th instant inclosing letter from the Bank A, which I return herewith.

I have written on behalf of the board letters to all Federal reserve banks and to the clearing houses of the principal cities, asking that some action be taken to reduce excessive rates of interest on bank balances. The trust companies and some of the national banks in one of the reserve cities not in your district have made the practice of paying 3 per cent on bank balances for a number of years, and I have realized that that city is going to be a difficult point to handle.

I have had in mind for some time past a trip to two of the reserve cities, but my duties here have been so exacting of late that I have not had an opportunity of visiting either city. I intend to do so, however, in the near future. Meanwhile, I am writing Mr. A, asking him to post himself on the situation in one of them, and to join me there at a convenient time.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Mr. BENJAMIN STRONG,
Governor Federal Reserve Bank, New York.

JULY 19, 1918.

DEAR GOV. HARDING: Owing to Gov. Strong's absence, some of his correspondence has been delayed.

The question of payment of higher rates of interest in other centers and of banks paying 3 per cent or more on active balances, as I understand it, will be taken up soon and that it is your intention to visit personally one of the reserve cities as soon as you can arrange to do so conveniently, and I assume that when it is done, you will have representatives from two of the reserve cities in this district cover the situation in western New York, in which location we find the worst situation in our district in regard to excessive rates of interest.

Very truly, yours,

R. H. TREMAN, *Deputy Governor.*

HON. W. P. G. HARDING,
Governor Federal Reserve Board,

AUGUST 29, 1918.

DEAR GOV. HARDING: At our directors' meeting yesterday afternoon no quorum was present, this being the second time in the history of the bank we have failed to have a quorum at our directors' meeting. Consequently, we did nothing at the meeting except discuss the question of establishing a fixed discount rate for bankers' acceptances, which would be in addition to our present open split rate for transactions in these bills. I understand that Mr. Case will write you upon the subject later on.

After the directors' meeting we had a joint meeting between our executive committee and the New York clearing house committee, at which there was some little discussion of the recent action of the clearing house in establishing a compulsory charge of one-tenth of 1 per cent against bankers' acceptances payable in other cities. While there was no argument as to the merits of the case, I am inclined to think that the committee has under consideration modifying their rules as far as they apply to bankers' acceptances.

This reminds me of the scale of interest rates adopted by the New York clearing house last spring and of your statement to me over the telephone that Minneapolis is considering establishing a similar scale, with the proviso that no increases should be made at any time except upon general agreement of the members of the clearing house. Can you advise me as to what progress Minneapolis is making in this direction? When once this principle has been established we should like to discuss it with some bankers here.

Very truly, yours,

PIERRE JAY, *Chairman.*

HON. W. P. G. HARDING,
Governor Federal Reserve Board.

FEDERAL RESERVE BOARD,
Washington, August 31, 1918.

DEAR MR. JAY: Replying to your letter of the 29th instant would state that I have had some correspondence with Gov. Wold, of the Federal reserve bank of Minneapolis, with reference to having the clearing house of that city make some agreement whereby the schedule of rates on deposits now in existence shall be considered as the maximum, with the further understanding that no increases shall be made at any time except by general agreement of members of the clearing house and after consultation with the Federal Reserve Board.

I am writing Mr. Rich to-day to advise me of what has been done in the matter and will advise you as soon as I receive his reply.

Very truly, yours,

W. P. G. HARDING, *Governor.*

MR. PIERRE JAY,
Chairman Federal Reserve Bank, New York.

FEDERAL RESERVE BOARD,
Washington, September 16, 1918.

DEAR MR. JAY: Referring to your letter of recent date making inquiry as to what action has been taken by the Minneapolis Clearing House with reference to deposit rates, would state that I am advised by Mr. Rich, Federal reserve agent at Minne-

apolis, that some time ago the clearing house adopted a rule establishing a rate of 2½ per cent, and providing that no change or increase shall be made in this rate until the rule is modified by further action on the part of the clearing house.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Mr. PIERRE JAY,
Federal Reserve Agent, New York.

DECEMBER 10, 1918.

DEAR GOV. HARDING: The New York Clearing House Association is engaged, from time to time, in effecting revisions of their rules governing the collection of checks as well as time items, and consideration of these rules has bearing upon the rules of the clearing house in regard to interest rates upon deposit accounts. It is, of course, difficult to distinguish between compensation for a service rendered, like collections, and rates of interest on balances, which merge, in effect, in arranging the terms of an account.

At a meeting of the clearing house committee, which I attended yesterday, I took the liberty of pointing out one difficulty which I anticipated would be experienced in this city in the matter of rates on the balances of correspondent banks, which, as you know, are now determined by the rate of discount of this bank.

It seems to me quite likely that when we work into the period of general liquidation and when money rates ease up considerably, it will be unlikely that this bank will materially reduce its rate of discount, if at all. I should suppose that easier money conditions than now prevail would afford the opportunity for a liquidation of our discounts and loans. Under those conditions, with no change in our rates, there would be no opportunity under the rules of the clearing house to effect a reduction in the rates now allowed on correspondents' balances, whereas conservative banking at that time might render such action necessary. I can even imagine conditions arising where we might advance our rates, thus necessitating, under the present rule, an advance in the rates authorized by the clearing house rule, when, in fact, such a course might be unwise and unsound.

On the whole, I believe this whole subject of rates on balances should now be given careful consideration and policies adopted which will be an added safeguard against the troublesome time when bank loans and deposits must, in fact, be liquidated.

The point always arises in these discussions that unless the arrangements for control of interest rates allowed on accounts of correspondents is effective in other money centers, the New York banks are at a great disadvantage.

I am writing to inquire whether it may not now be possible to make a study of this whole subject of rates allowed by banks on their deposit accounts in the hope that some comprehensive plan may be adopted throughout the country and one which will be a protection against unsound methods that may develop when interest rates are lower and competition more brisk.

I believe the members of the clearing house committee would be helpful in making this study, and if you thought wise for me to do so, I might arrange to have a sub-committee meet with you in Washington to discuss the subject.

Very truly, yours,

BENJ. STRONG *Governor.*

Hon. W. P. G. HARDING,
Governor, Federal Reserve Board,

DECEMBER 14, 1918.

DEAR GOV. STRONG: I acknowledge receipt of your letter of the 10th instant, regarding the clearing-house rule as to rates upon deposit accounts. This is the matter which we discussed over the telephone a few days ago, and I wish to confirm now what I said then, that the board will be glad to discuss the subject with a committee of the clearing house here in Washington, or, if you think it would be advantageous, a committee of the board can arrange early in the new year to go to New York for the purpose of discussing the matter with the clearing-house authorities there.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Mr. BENJAMIN STRONG,
Governor Federal Reserve Bank, New York.

[Telegram.]

LAKE GEORGE, N. Y., January 6, 1919

PIERRE JAY,
Federal Reserve Bank, New York, N. Y.

Suggest arranging meeting of clearing house committee with Harding to discuss extending plan for controlling interest on balances to other cities and modifying arrangements in New York to avoid arbitrary increase in rates when ours advance. Wiggin knows our views, and favorable.

BENJ. STRONG

Personal.

DECEMBER 17, 1919.

MY DEAR MR. ———: At the last meeting which Mr. Jay and I had with the clearing-house committee, you will recall we had some discussion of the provision of the constitution of the clearing-house association governing rates of interest allowed by members of the clearing house upon out-of-town bank deposits. Since the meeting I have learned of no proposal for a reconsideration of this matter along the lines of our discussion, and am writing to ask if there is any possibility of a review of the subject being made.

Of course you understand that it is impossible for us to forecast what may from time to time be the policy of the reserve bank as to rates, but it has long seemed to me to be undesirable that the rates allowed upon these balances by New York banks should be automatically associated with the discount rate of the Federal reserve bank. Should our policy necessitate further advances in rates, the consequence would be an automatic increase in rates for out-of-town deposits, and I fear that once such advances are made by New York banks competitive rate changes will take place in other cities and the whole subject of competition for bank deposits at constantly increasing rates will again come up to bother us.

There may be a number of methods of dealing with this matter, some of them, possibly, better than the one which was suggested at our meeting; but, perhaps, I may repeat that suggestion, which certainly is based upon the useful experience of many years by the London banks. Whenever the bank rate changes in London the clearing bankers' committee meets, and, in the light of the change in the bank rate, fixes the rate to be allowed upon bankers' balances. The change is, however, not automatic, and the only thing that is automatic is the review of the situation which is made by the bankers' committee. Might it not be possible for our clearing house to adopt some similar plan, or a better one if it can be found, and, before making it the subject of a change in the constitution, ascertain in detail from the members of the clearing house whether the plan will not meet with their support?

As I believe you undoubtedly realize, the officers and directors of the Federal reserve bank consider it a part of their duty to their members to promote in every way the establishment of sounder banking practices in this district. Our proposals in this matter are designed to that end, and, I believe, meet with the hearty approval of the Federal Reserve Board.

I will be glad to learn from you what are the views of the members of the clearing-house committee, and whether it is likely that anything will be done in the matter.

Very truly, yours,

B. S.

Mr. ———,
New York City.

DECEMBER 23, 1919.

DEAR GOV. HARDING: As you know, we have made representations to the New York Clearing House committee as to the method which now prevails for determining the rate of interest allowed upon out-of-town bank balances by New York banks which are members of the clearing-house association. It has seemed to us that the provision for an automatic increase in the rate when our 90-day discount rate advances is an unwise one. A general increase in rates allowed on out-of-town bank balances by the New York banks is liable to start competition for deposits between New York and other centers—an unwholesome banking development at any time, and, I believe, particularly so at this time.

I have been sounding the sentiment of the clearing house a little bit on this matter and find that they have the feeling that, having put through the present plan upon our urgency and yours, the position of the New York banks will be a most difficult and unsatisfactory one under any other arrangement than the present, unless similar understandings are arrived at with the clearing houses in the other banking centers

of the country, principally Boston, Philadelphia, Chicago, St. Louis, and possibly Cleveland and Pittsburgh.

The feeling seems to prevail in New York that the clearing-house banks here are the only ones that have an interest understanding on out-of-town bank balances and that no further change should be made in the arrangement until they can have some assurance that other banking centers will be subjected to the same disciplinary rule. Do you think it would be possible to make some general progress in the other reserve districts? Of course, I would be most reluctant to attempt any move in this direction from New York, as we feel here that developments in other reserve districts in these matters should proceed upon recommendations made by the board rather than as the result of any influence which we can exert.

Mr. Jay and I both feel that the present situation in this regard is an unfortunate one, because while our rate in a measure controls the rates allowed by clearing-house banks, it is likewise true that our action in the matter of rates is somewhat influenced by the fact that it brings about a general change in the interest situation.

Mr. Kenzel just draws my attention to an inaccuracy due to faulty dictation in my letter of December 17 in regard to the bill market. I stated that it had been our policy to buy bills at rates below our discount rates. That was true during the period when we were developing this business, and I was referring to the policy of the past. For some time now we have, as you know, been buying bills in the open market at rates somewhat above our discount rate, notwithstanding which they keep piling in on us. Mr. Kenzel has written Mr. Strauss a further letter on this subject which I hope you will be good enough to read.

Faithfully, yours,

B. S.

Hon. W. P. G. HARDINO,
Governor Federal Reserve Board, Washington, D. C.

DECEMBER 26, 1919.

To: Mr. Strong.
From: Mr. Jay.

I have read your letter with interest. My impression is that Chicago, St. Louis, Boston, and one or two others adopted a provision identical with that which was adopted by our New York clearing house a couple of years ago, and I feel quite sure that Minneapolis at the same time adopted the exact rule which we now want the New York clearing house to adopt, namely, that our rate forms the basis for the maximum rate to be paid on bank deposits by the members of the Minneapolis clearing house, but that the maximum does not become effective unless by specific action by the members of the clearing house.

FEDERAL RESERVE BOARD,
Washington, December 27, 1919.

Subject: Readjustment of relation of interest rates on bank balances to discount rates at Federal reserve banks.

DEAR SIR: Early in 1918, as you may remember, there was a disposition on the part of large banks all over the country to indulge in sharp competition for bank balances and to offer inducements in the way of increased rates of interest. Some of the banks in New York were bidding as high as 3 per cent for balances of other banks payable on demand, and the rates offered for time deposits were higher. This led to reprisals on the part of interior banks, and the bidding for business by marking up interest rates on deposits threatened to interfere seriously with the financial operations of the Government. Finally, the clearing house banks of New York agreed to fix a rate of 2½ per cent on bank balances payable on demand, with the proviso that the interest rates would be automatically advanced or reduced one-quarter of 1 per cent with each advance or decline of one-half of 1 per cent in the 90-day rate at the Federal reserve bank of New York. This rate is now 4½ per cent, and should it be advanced at any time to 5 per cent the rate of interest paid by New York banks for out-of-town bank balances would advance automatically to 2½ per cent, and a 5½ per cent rate at the New York reserve bank would advance the interest rate on bank balances automatically to 3 per cent, and so on.

The board wishes to be free to approve such discount rates as it may deem necessary to bring about a proper control of credits, but it is anxious at the same time to avoid a disturbance of the whole banking situation such as would most likely result from an advance in the interest rate allowed on out-of-town balances by the New York

clearing house banks. The board has sounded out the New York clearing house committee in order to ascertain how it feels regarding a modification of the present rule and is informed that the committee is not disposed to act without some definite knowledge as to the course which will be pursued by the banks in other important centers.

The board has decided, therefore, to invite representative bankers from all parts of the country to meet in Washington on Tuesday, January 6, 1920, for the purpose of discussing this matter in the hope that some way will be found of abrogating the existing entangling alliance between Federal reserve bank discount rates and interest rates on deposits without endangering existing banking relationships. You are requested to bring this to the attention of the clearing house authorities in your city as well as all branch bank cities in your district and to invite each clearing house association to have a representative here on the date named.

Very truly, yours,

W. P. G. HARDING *Governor.*

(Letter to chairmen of all Federal reserve banks.)

[Telegram.]

MINNEAPOLIS, *December 31, 1919.*

PIERRE JAY, *New York.*

Rate of interest on deposits paid by Minneapolis and St. Paul banks is not based by rule on Federal reserve bank rates. Clearing house rules for both cities, however, reads as follows: "No bank shall pay its bank depositors interest on their balances in excess of the rate paid by banks in the city of Chicago as fixed by the rule of the Chicago Clearing House Association." Competition would necessarily compel Twin City banks to follow Chicago rate.

RICH, *Agent.*

[Telegram.]

WASHINGTON, D. C., *January 5, 1920.*

JAY, *New York.*

Meeting clearing house representatives will be held to-morrow in the auditorium of the New Interior Building Eighteenth and F Streets NW. at 10 a. m.

EMERSON.

(Relayed to Mr. Jay at Baltimore.)

[Telegram.]

WASHINGTON, *January 6, 1920.*

JAY, *New York.*

At the conference in Washington to-day attended by representatives of about 25 clearing houses the following resolutions were adopted:

- "Whereas the Federal Reserve Board invited the representatives of the clearing house from various parts of the country, here assembled, to attend a conference in regard to the interest rates paid on deposits throughout the country and Gov. Harding, of the Federal Reserve Board, has outlined very clearly the present financial situation and the probability of advances in rates by the Federal reserve banks; and
- "Whereas it is the opinion of the conference that the present method in several of the larger centers of the country of regulating interest on bank balances by a sliding scale based upon the 90-day Federal reserve bank discount rate is not wholly satisfactory; and
- "Whereas until more satisfactory regulations are adopted governing the rates of interest to be paid on balances it is most important that existing regulations should not be abrogated; and
- "Whereas it is the opinion of this conference that the Federal reserve banks should always be free to establish their rates of discount without reference to any clearing house regulations as to the payment of interest; and
- "Whereas it is the opinion of this conference that the payment of high rates of interest on bank or commercial balances is unsound and is bad banking, and that every effort should be made to avoid such a practice;

"Now, therefore, in order to make progress along safe and conservative lines it is requested that the Federal Reserve Board invite the clearing houses in each Federal reserve city to select three representatives from its Federal reserve district to attend a meeting to be held on or about the 23d day of January, 1920, at Chicago, Ill., to consider this whole question of interest on balances in order that some basis may be agreed upon that will be mutually satisfactory, conducive to conservative banking, and benefit the entire business and banking community."

The Federal Reserve Board has considered and approved the action of conference, and requests you to ask clearing house in your city to appoint three delegates to conference to be held in Chicago January 23, such delegates to give such representation to various sections of your Federal reserve district as your local clearing house considers appropriate. Please advise by letter names of delegates. Conference resolutions given to press to-night.

HARDING.

JANUARY 8, 1920.

JAMES A. STILLMAN, Esq.,

President Clearing House Association, New York City.

DEAR MR. STILLMAN: At the meeting of representatives of clearing houses in Washington on January 6 the following preamble and resolutions were adopted:

"Whereas the Federal Reserve Board invited the representatives of the clearing houses from various parts of the country, here assembled, to attend a conference in regard to the interest rates paid on deposits throughout the country and Gov. Harding, of the Federal Reserve Board, has outlined very clearly the present financial situation and the probability of advances in rates by the Federal reserve banks; and

"Whereas it is the opinion of the conference that the present method in several of the larger centers of the country of regulating interest on bank balances by a sliding scale based upon the 90-day Federal reserve bank discount rate is not wholly satisfactory; and

"Whereas until more satisfactory regulations are adopted governing the rates of interest to be paid on balances it is most important that existing regulations should not be abrogated; and

"Whereas it is the opinion of this conference that the Federal reserve banks should always be free to establish their rates of discount without reference to any clearing house regulations as to the payment of interest; and

"Whereas it is the opinion of this conference that the payment of high rates of interest on bank or commercial balances is unsound and is bad banking and that every effort should be made to avoid such a practice:

"Now, therefore, in order to make progress along safe and conservative lines, it is requested that the Federal Reserve Board invite the clearing houses in each Federal reserve city to select three representatives from its Federal reserve district to attend a meeting to be held on or about the 23d day of January, 1920, at Chicago, Ill., to consider this whole question of interest on balances in order that some basis may be agreed upon that will be mutually satisfactory, conducive to conservative banking, and benefit the entire banking business and banking community."

The Federal Reserve Board has considered and approved the action of the conference and has requested me to ask the New York Clearing House Association to appoint three delegates to the conference to be held at Chicago, January 23, 1920, such delegates to give such representation to the various sections of this Federal reserve district as the New York Clearing House Association may consider appropriate.

Trusting that it will be agreeable to the New York Clearing House Association to comply with the request of the Federal Reserve Board and that in due course I may receive from you the names of the delegates appointed for transmission to the board. I am,

Very truly, yours,

PIERRE JAY, *Chairman.*

JANUARY 15, 1920.

DEAR GOV. HARDING: I understand that there is a chance that the New York Clearing House will adopt some change in its regulations in regard to interest rates to-morrow. I am hoping very much that this will not militate against the meeting in Chicago. I believe that the New York Clearing House, even if it does take action in advance of the Chicago meeting, will send a delegate and invite Buffalo and one other city in the district to send a delegate.

I am very much in hopes that you will be able to get the meeting in Chicago to take some action with regard to limiting the interest to be paid on individual deposits. Now that the matter is up so squarely it seems our one great opportunity to actually secure action.

Very truly, yours,

PIERRE JAY, *Chairman.*

Hon. W. P. G. HARDING,
Governor Federal Reserve Board, Washington, D. C.

NEW YORK CLEARING HOUSE,
77-83 Cedar Street, New York, January 16, 1920.

PIERRE JAY, Esq.,
*Chairman Federal Reserve Bank of New York,
New York, N. Y.*

DEAR MR. JAY: In accordance with your request of the 8th instant, addressed to Chairman James A. Stillman, the following gentlemen have been appointed as delegates to the conference to be held at Chicago, Ill., January 23, 1920: Messrs. James S. Alexander, president National Bank of Commerce, New York, N. Y.; Charles H. Sabin, president Guaranty Trust Co., New York, N. Y.; Clifford Hubbell, president Fidelity Trust Co., Buffalo, N. Y.

Referring to your recent telephone message, I have advised these gentlemen that you will arrange for hotel accommodations at Chicago.

Very truly, yours,

W. J. GILPIN, *Manager.*

WASHINGTON, D. C., January 17.

FEDERAL RESERVE AGENT:

Please ascertain by wire if necessary current rates of interest paid by commercial banks in principal centers in your district on bank deposits, on open accounts subject to check, on time certificates and savings deposits. Please wire this information to Federal Reserve Agent Heath, Chicago, before 23d instant in order that conferees may have this knowledge before them. Please urge full attendance at conference of delegates appointed by your clearing house.

HARDING.

[Telegram.]

FEDERAL RESERVE BANK OF NEW YORK,
January 21, 1920.

WILLIAM A. HEATH,
*Federal Reserve Agent,
Federal Reserve Bank of Chicago, Chicago, Ill.*

At request of Gov. Harding and for use of clearing house conferees the following are current rates of interest paid by the commercial banks' principal centers in this district:

Albany: "Interest on bank deposits, 2½ per cent; checking accounts, 2 per cent on balances \$10,000 and over. Special time deposits, 3½ per cent and 4 per cent."

Buffalo: "Current account about 3 per cent, inactive 4 per cent, individual checking accounts, infinite variety, ranging from zero to 4 per cent on lowest quarterly balance. Time certificates, 3 to 4 per cent, according to arrangements. Savings accounts, 4 per cent."

Rochester: "Bank deposits average 3 per cent, checking account no interest. Time certificates, 3½ per cent. Savings deposits, 3½ per cent."

Syracuse: "Two per cent daily balances, 3 per cent monthly balances, 4 per cent quarterly balances, when interest is paid. Savings banks accounts and time certificates, 4 per cent. Bank accounts, 2 per cent."

Watertown: Three per cent on bank deposits subject to check, no interest on business checking accounts, and 4 per cent on savings accounts."

Clifford Hubbell unable to attend; will wire name of substitute when available.

PIERRE JAY, *Federal Reserve Agent.*

NEW YORK CLEARING HOUSE,
New York, March 8, 1920.

DEAR SIR: We beg to hand you herewith copy of a question relating to the payment of interest on deposits, and a ruling thereon made this day by the clearing house committee:

Question.—Would it be an evasion of the spirit or letter of the clearing-house constitution provision regulating the payment of interest on deposits (Art. XI) to offer or agree to pay depositors $3\frac{1}{2}$ per cent interest on all or any part of an open account, providing the depositor indicates, either orally or in writing, that a certain part of such deposit will not be needed for current account transactions; and would it be an evasion to agree to pay $3\frac{1}{2}$ per cent on the entire balance of an open account, providing some part of the account has been fixed for a stipulated time in excess of 30 days?

Ruling.—Offering or agreeing to pay $3\frac{1}{2}$ per cent interest on deposits under either of the suggested plans would be an evasion of the spirit and letter of the constitution.

Article XI, section 1, permits the payment of $3\frac{1}{2}$ per cent interest only "on any time deposit, or certificate of deposit payable by its terms later than 30 days from the date thereof."

Time deposits are deposits on which payment can not legally be required within 30 days, and the fact that a deposit, or any part of it, is not disturbed for a given period does not constitute it a time deposit. The terms of a deposit at its date determine whether it is a demand or time deposit, and any agreement or understanding to treat a deposit alternatively for the purpose of payment of interest would be an evasion of the constitutional requirement.

By order:

JAMES A. STILLMAN,
Chairman Clearing House Committee.

Gov. STRONG. Now, I realize that this is a very imperfect statement of money-market matters in New York as a preliminary to a description of the policies which were adopted by the reserve bank during all of this period. After going over what I have stated, if the committee will permit me I may want to fill in some matters that seem to be inadequately dealt with.

At previous hearings of the commission the question has been asked as to what relation was borne between volume of credit (which in turn depends to some extent upon the rate policy of the reserve system) and prices. It has been repeatedly stated, and I shall reiterate the statement, that prices are no concern of the Federal reserve system, directly. In other words, I do not think that the discount policies of the reserve bank should be determined by watching a chart or an index of the price level. Our business is credit, and if you will consider that the dealing with credit has a reaction upon prices, I will admit that it has. You can not very well effect a great contraction of credit without its having an effect upon prices.

But the important thing to consider is this, and that is that the rate of the reserve bank and its relation to prices is a reflection of conditions rather than an effort to create conditions. The reserve bank rates, as will appear from my statements, which are expressions of opinion, should be considered rather a reflection of what is going on than as a cause of what is going on in the credit market.

Now, I should like to take the liberty of reading and asking to be admitted in the record, a short extract from a report which was made by a commission which was appointed by the British Parliament, the report being commonly known as the "Cunliffe report," dated August 15, 1918, this committee having been appointed by the Parliament "to consider the various problems which will arise in connection with currency and the foreign exchanges during the period of reconstruction and report upon the steps required to bring about the restoration of normal conditions in due course, and to

consider the working of the bank act of 1844, and the constitution and functions of the Bank of England, with a view of recommending any alterations which may appear to them to be necessary or desirable." I am reading it because it has a bearing upon this question of the relation between bank rate and prices concerning which I feel very sure we do not know enough yet.

The excerpt from that report is as follows [reading]:

THE CURRENCY SYSTEM BEFORE THE WAR.

Under the bank charter act of 1844, apart from the fiduciary issue of the Bank of England and the notes of Scottish and Irish banks of issue (which were not actually legal tender), the currency in circulation and in bank reserves consisted before the war entirely of gold and subsidiary coin or of notes representing gold. Gold was freely coined by the mint without any charge. There were no restrictions upon the import of gold. Sovereigns were freely given by the bank in exchange for notes at par value, and there were no obstacles to the export of gold. Apart from the presentation for minting of gold already in use in the arts (which under normal conditions did not take place), there was no means whereby the legal-tender currency could be increased except the importation of gold from abroad to form the basis of an increase in the note issue of the Bank of England or to be presented to the mint for coinage, and no means whereby it could be diminished (apart from the normal demand for the arts, amounting to about £2,000,000 a year, which was only partly taken out of the currency supply) except the export of bullion or sovereigns.

Since the passing of the act of 1844 there has been a great development of the check system. The essence of that system is that purchasing power is largely in the form of bank deposits operated upon by check, legal-tender money being required only for the purpose of the reserves held by the banks against those deposits and for actual public circulation in connection with the payment of wages and retail transactions. The provisions of the act of 1844 as applied to that system have operated both to correct unfavorable exchanges and to check undue expansions of credit.

When the exchanges were favorable, gold flowed freely into this country and an increase of legal-tender money accompanied the development of trade. When the balance of trade was unfavorable and the exchanges were adverse, it became profitable to export gold. The would-be exporter bought his gold from the Bank of England and paid for it by a check on his account. The bank obtained the gold from the issue department in exchange for notes taken out of its banking reserve, with the result that its liabilities to depositors and its banking reserve were reduced by an equal amount, and the ratio of reserve to liabilities consequently fell. If the process was repeated sufficiently often to reduce the ratio in a degree considered dangerous, the bank raised its rate of discount. The raising of the discount rate had the immediate effect of retaining money here which would otherwise have been remitted abroad and of attracting remittances from abroad to take advantage of the higher rate, thus checking the outflow of gold and even reversing the stream.

If the adverse condition of the exchanges was due not merely to seasonal fluctuations but to circumstances tending to create a permanently adverse trade balance, it is obvious that the procedure above described would not have been sufficient. It would have resulted in the creation of a volume of short-dated indebtedness to foreign countries which would have been in the end disastrous to our credit and the position of London as the financial center of the world. But the raising of the bank's discount rate and the steps taken to make it effective in the market necessarily led to a general rise of interest rates and a restriction of credit. New enterprises were therefore postponed and the demand for constructional materials and other capital goods was lessened.

At this point he is referring to the traditional policy of the Bank of England before the war. [Continuing reading:]

The consequent slackening of employment also diminished the demand for consumable goods, while holders of stocks of commodities carried largely with borrowed money, being confronted with an increase of interest charges, if not with actual difficulty in renewing loans, and with the prospect of falling prices, tended to press their goods on a weak market. The result was a decline in general prices in the home market which, by checking imports and stimulating exports, corrected the adverse trade balance which was the primary cause of the difficulty.

When apart from a foreign drain of gold, credit at home threatened to become unduly expanded, the old currency system—

That is, the system before the war—

tended to restrain the expansion and to prevent the consequent rise in domestic prices which ultimately causes such a drain. The expansion of credit, by forcing up prices, involves an increased demand for legal tender currency both from the banks in order to maintain their normal proportion of cash to liabilities and from the general public for the payment of wages and for retail transactions. In this case also the demand for such currency fell upon the reserve of the Bank of England, and the bank was thereupon obliged to raise its rate of discount in order to prevent the fall in the proportion of that reserve to its liabilities. The same chain of consequences as we have just described followed and speculative trade activity was similarly restrained. There was therefore an automatic machinery by which the volume of purchasing power in this country was continuously adjusted to world prices of commodities in general. Domestic prices were automatically regulated so as to prevent excessive imports; and the creation of banking credit was so controlled that banking could be safely permitted a freedom from State interference which would not have been possible under a less rigid currency system.

Under these arrangements this country was provided with a complete and effective gold standard. The essence of such a standard is that notes must always stand at absolute parity with gold coins of equivalent face value, and that both notes and gold coins stand at absolute parity with gold bullion. When these conditions are fulfilled, the foreign exchange rates with all countries possessing an effective gold standard are maintained at or within the gold specie points.

The committee included, among others, Lord Cunliffe, governor of the Bank of England, chairman; Sir Charles Addis, Hongkong & Shanghai Banking Corporation; Sir John Bradbury, secretary to the treasury; G. C. Cassels, Bank of Montreal; W. H. N. Goschen, chairman of the clearing bankers' committee; Lord Inchcape, of Strathnaver; A. C. Pigou, professor of political economy, Cambridge University; and G. F. Stewart, ex-governor of the Bank of Ireland.

I am submitting that to the commission as an opinion expressed by a committee of capable, experienced British bankers and economists, whose names are appended to that report, as to the relation between the bank rate and credit and prices; and it is necessary, I think, to admit for the purpose of your discussion and your report, that one of the effects of an advance in the discount rate of the reserve banks is necessarily to restrain borrowing; and a restraint upon borrowing necessarily must have an effect in holding down a rising price market, and in time it may bring about a decline in prices. That is, viewing our rate wholly in a domestic sense, the rate policy of the reserve system, as with the Bank of England, will not be a complete thing until in later years we also have introduced the effect of movements of gold upon credit and prices in the nations, when in fact we begin to lose our reserve, because the international trade balance has gone against us and our reserve percentage as a result goes down.

We would then possibly find it necessary to increase our rate of discount, and if the Federal reserve system operates as the English banking system operated before the war, the effect of the increase of our rate and the increased cost of the credit will be exactly as described in that report. It will bring about a reduction in prices which might have advanced too high, so as to stimulate too many imports and have started a drain of gold against the country. It will reduce the price level possibly to a point where again we may export goods.

There is, of course, this difference between the American Federal reserve system and the Bank of England, and American trade and British trade, namely, that such a large proportion of British trade is international trade and such a large proportion of ours is domestic.

They are converters of raw material into manufactured materials for export, and the effect of changes in bank rate there is somewhat different from what it will be here. It has an immediate effect upon the flow of funds in and out of London. We do not know yet what effect changes in our bank rate will have in this country in that respect.

For instance, when the Bank of England advances its discount rate, those who hold bills payable in London and who find market rates advancing often find it more profitable to carry those bills to maturity rather than to discount them in the London market. That keeps a load of discounts off of the market. At the same time, when the Bank of England increases its rate of discount, as I have just described, it generally results in an advance in the rates which banks pay upon bankers' balances, which has a tendency to attract balances to London. And those are all developments consequent, to some extent, upon changes in bank rates which effect a reestablishment of equilibrium as described in the report I have just read.

Representative SUMNERS. Would not the increase of the discount rate to approximately the legal interest rate in a country district also result in a calling of the loans? Wouldn't it amount to the calling of the loans outstanding in that district?

Gov. STRONG. I think it would only do so if the effect of the increase in the reserve bank rate was to put it above the rate at which people generally were borrowing money from the banks. Take the average country bank throughout the interior of the United States. Many of them have continuously throughout this period, I have no doubt—I have not seen the absolute figures—but I have no doubt that they have continuously been realizing upon their loans to their customers considerably higher rates than those charged them by the reserve banks; that is, charged the member bank by the reserve bank. And the pressure to liquidate those loans would not be very severe if there was still a margin of profit on discounting at the reserve bank.

The CHAIRMAN. Well, that I think is true up to May, 1920. I am not so sure as to subsequent to that time.

Gov. STRONG. Well, Mr. Chairman, I hesitate to speak for any section of the country outside of New York, and I should not do so. Possibly I am guilty of surmise. But I have seen sheets of the discounts made by member banks with other reserve banks in one or two cases, where this pressure could not be very strong. On sheet after sheet, I don't think I saw any rates charged by member banks of less than 8 per cent.

Where pressure to liquidate has been exerted by the rate more than in any other section of the country is in New York, and even in New York that pressure has not arisen until comparatively recently. I mean it has not been a very insistent pressure, because right down to the present time the commercial paper rate has been continuously, and is now, above our rate. The rates which have been below our rate have been the rates for bankers' acceptances and Treasury certificates of indebtedness.

During all of this period, Mr. Chairman, since the declaration of war, as I have said, the problem of this New York call money market has been constantly before us in New York, and I think I should

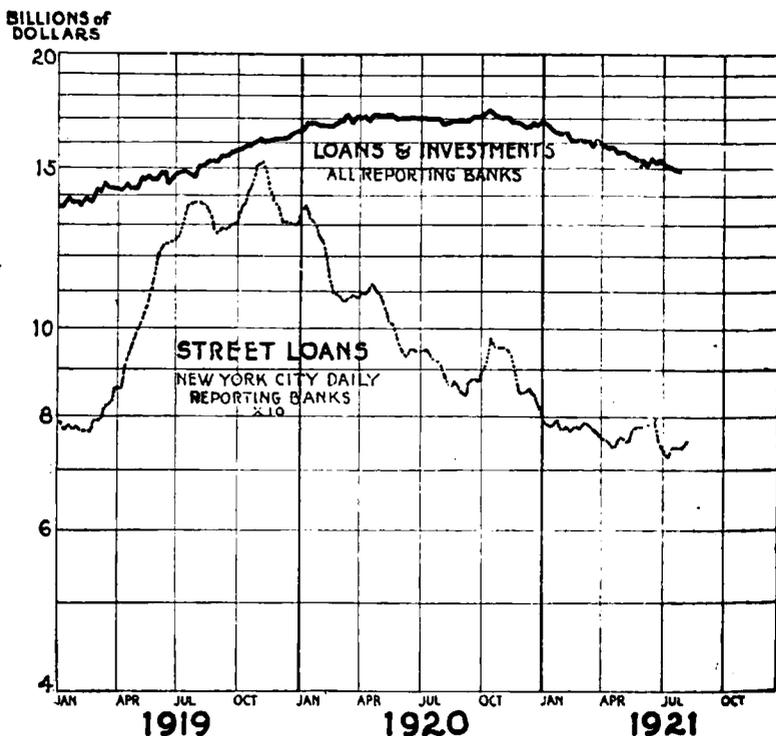
now describe in detail the measures that were taken to deal with it. And I am approaching the point where I want to submit to the commission some of the facts in regard to the policies which we adopted, taken from the records of the bank.

The CHAIRMAN. Gov. Strong, I do not want to suggest that we take an adjournment at this time, but it is now 5 o'clock. I am willing to quit whenever you are.

Gov. STRONG. I am ready to do so now. However, I am in your hands for as long as you are prepared to listen to me.

The CHAIRMAN. We will take a recess now until 10 o'clock to-morrow morning.

(Thereupon, at 5 o'clock p. m., Monday, August 8, 1921, an adjournment was taken until 10 o'clock a. m. of the following day, Tuesday, August 9, 1921.)



LOANS OF REPORTING BANKS IN THE UNITED STATES AND STREET LOANS OF NEW YORK CITY BANKS.

Street loans are those of 52 large banks reporting daily to the Federal Reserve Bank of New York, and include both loans for their own account and for the account of their correspondents. (Logarithmic scale.) Source of information: Annual reports of the Federal Reserve Board, Federal Reserve Bulletin, weekly press statements, and daily reports of banks to the Federal Reserve Bank of New York.

AGRICULTURAL INQUIRY.

TUESDAY, AUGUST 9, 1921.

CONGRESS OF THE UNITED STATES,
JOINT COMMISSION OF AGRICULTURAL INQUIRY,
Washington, D. C.

The joint commission met, pursuant to adjournment on yesterday, at 10 o'clock a. m., in room No. 70, Capitol Building, Representative Sydney Anderson (chairman) presiding.

The CHAIRMAN. The commission will come to order. Gov. Strong, you may proceed with your statement.

STATEMENT OF HON. BENJAMIN STRONG, GOVERNOR OF THE FEDERAL RESERVE BANK OF NEW YORK—Resumed.

Gov. STRONG. Mr. Chairman, in the course of yesterday's discussion of the various elements of expansion in the banking system, and since the adoption of the Federal reserve act, Congressman Mills asked a question which I do not think was fully answered by my reply, and if you will permit me I would like to make the answer a little more complete now.

You will recall that I introduced some figures indicating that the power of expansion of \$100,000 imported gold deposited in bank reserves worked out according to a classification to certain figures. I want now to distinguish between the expansion which results first from the multiplication of deposits and second through conversion of deposits into note issues of the Federal reserve bank. When the Federal reserve bank grants credit to a member bank, that credit becomes a reserve balance for the member bank, and will support an expansion of loans and deposits by the member banks as a whole in certain proportions, which can not be absolutely figured, but can be roughly figured.

Ignoring the element of notes which we find by experience bear the relation of about 3 to 2 to reserve deposits, and based upon the reserve percentages in central reserve cities, the expansion of the deposit account alone would work out roughly, say, 20 to 1, and the average, roughly, of expansion possible with all classes of member banks, central reserve cities, reserve cities, and country banks, is roughly, say, 28 to 1. But that percentage does not develop, because a part of that credit is converted by natural operation into a note currency instead of a deposit balance or deposit currency and, of course, the note currency does not provide the same basis as do reserve deposits for expansion by member banks, because notes do not serve as reserves in the vaults of member banks. The power of expansion resulting from the note issues of the Federal reserve banks, it is clear, arises when such notes are counted as actual reserve money which is only when they are held in the reserves of the nonmember State banks.

The CHAIRMAN. Is that expansion you are referring to now an actual expansion, or theoretical, based on experience?

Gov. STRONG. It is an actual expansion, Mr Chairman, but the figures I am introducing are theoretical; they are what are found to be permitted with the percentages worked out to the limits allowed by the usual reserves.

Representative TEN EYCK. Can you take these figures and work out a longer time expansion?

Gov. STRONG. I can do it.

Representative TEN EYCK. In a general way?

Gov. STRONG. I would like to introduce a table which I shall have prepared. It is not a difficult one, and when it is prepared I would like to introduce it.

Representative TEN EYCK. And it should be introduced following this point of your explanation.

Gov. STRONG. Yes, sir.

Representative TEN EYCK. It should be introduced at this point, so that it will follow immediately your explanation.

The following table shows the expansion under the national banking system which theoretically could follow the deposit of \$400,000 of gold in a national bank situated in a central reserve city, where the required reserve was 25 per cent. That bank could lend \$300,000, which, upon being withdrawn and deposited in a second national bank, would permit the lending of \$225,000. That \$225,000, upon being withdrawn and deposited in a third national bank, would permit the lending of \$168,750, and so on. The sum of all the deposits created would equal the sum of the loans and reserves, and would be four times the \$400,000 of gold originally deposited.

TABLE A.

	Deposited.	Held as reserve.	Loaned.
First National Bank.....	\$400,000.00	\$100,000.00	\$300,000.00
Second National Bank.....	300,000.00	75,000.00	225,000.00
Third National Bank.....	225,000.00	56,250.00	168,750.00
Fourth National Bank.....	168,750.00	42,187.50	126,562.50
Fifth National Bank.....	126,562.50	31,640.63	94,921.87
Ultimate theoretical expansion.....	1,600,000.00	400,000.00	1,200,000.00

Gov. STRONG. Yes. In discussing the New York Stock Exchange call-money market, the volume of loans, and so on, I think it is important to submit for the record, if the commission feels it is justified in printing it, a communication by the Federal Reserve Board, which was sent to Congress in response to a Senate resolution passed on March 8, 1920, the communication being dated March 27, 1920. It contains rather an important description and report upon the call money market by the Federal Reserve Board.

Senator HARRISON. Is that a Senate document?

Gov. STRONG. Yes, sir.

Senator HARRISON. I do not think, then, it is necessary to introduce it into the record.

The CHAIRMAN. No; it is available to all the members of the commission.

Gov. STRONG. I simply call the attention of the commission to it.

The CHAIRMAN. The members of the commission may consult it if they desire.

Senator HARRISON. It is Senate Document No. 262, Sixty-sixth Congress, second session, the subject being "Rates of interest on collateral call loans."

Gov. STRONG. I will leave it, merely calling your attention to it.

And, further, in that connection I would like to submit for the commission's consideration a chart, of which I have spare copies for the members to examine, and which was prepared for the purpose of showing the relation between the increase and decrease in the volume of loans on the New York Stock Exchange, and the increase and decrease in the volume of loans generally in the banking system. Some 800 typical banks now report once a week to the Federal reserve banks, and those reports are transmitted to the Federal Reserve Board for the purpose of making an estimate of what is occurring in credit matters in the United States. (For chart referred to see p. 626.)

Gov. STRONG. This chart contains two curves—the upper one, built up from those reports to which I have referred, shows the amount in volume of the loans and investments of all of those reporting banks; the lower curve, which has been magnified ten times in order to bring it into closer perspective on the chart, without, however, altering the proportions of the lines, shows the fluctuating volume of loans made on the New York Stock Exchange by the 52 banks in New York City which make such reports daily to us. And I wish to call the commission's attention to the important fact, disclosed by the chart, that the peak, in volume, of loans on the New York Stock Exchange was in the first part of November, 1919.

From that point it is almost a precipitate decline down to the present time, whereas the volume of all loans by all reporting banks during that period increased and did not reach their peak until October or November of 1920, nearly a year later. If any inferences are justified from this chart, they would be, I think, two; one that, as is commonly regarded to be the case, financial markets anticipate movements more promptly than other markets; and, second, that the liquidation in the New York stock market started a year earlier than the liquidation throughout the country; and the effect of it was actually to release credit for purposes such as agricultural and industrial and commercial uses.

The CHAIRMAN. It is not generally true that liquidation took place in the industrial sections very considerably earlier than it did in the country sections?

Gov. STRONG. Mr. Chairman, I think that will be completely demonstrated when the various studies that are being made are available to the commission. (See pp. 650-663.) The chart which was on the wall yesterday, showing the relations between reserve changes in the 12 reserve districts, to my mind, clearly discloses that fact. (See p. 593.)

The CHAIRMAN. Had they taken place at the same time, the expansion and the reduction of the reserves would have been very much greater at some points than it was?

Gov. STRONG. If that whole process of expansion and contraction had been coincident throughout the country, the extremes of the curves would have been very much wider. I have no doubt about that. I believe it would be possible to construct a chart showing what would have happened had those movements coincided.

Representative SUMNERS. During this period of liquidation in the stock market, what became of the stocks that were sold, which evidently had been carried as collateral?

Gov. STRONG. That question reaches right at the point of liquidation in the stock market. Stocks in a liquidating market pass from what are described as weak hands to strong hands; stocks pass from the hands of those who buy them and carry them with borrowed money to those who buy them and pay for them. And I had just suggested for the record that that matter was not very clearly brought out in yesterday's discussion. When the speculator buys a block of stock for which he pays \$120,000 and borrows \$100,000 to do so, he creates an asset and a liability upon the books of the bank that loans him the money. When liquidation takes place and that speculative owner of stock finds it necessary to sell his stock, then some one comes along with a bank balance and pays him for it, the effect of which is to eliminate from the assets of the banks a loan of \$100,000, and a deposit of \$100,000, and that is the process of liquidation.

Representative SUMNERS. Are there any records that would tend to disclose the relative proportion of stock exchange transactions which are of a speculative nature and those which represent purchases and sales as among people one of whom has some stock that he wants to dispose of and one of whom wants to buy?

Gov. STRONG. There are records which would indicate what the tendency is but which would not give absolute figures. The best evidence, Congressman, of such a movement, I believe, is found in the stock books of corporations whose stocks are dealt in on the exchange, where, in a period of liquidation, what is known as the odd-lot buyer appears in the market; then, with stock like that of the Steel Corporation and General Motors and others, you will find the number of stockholders increases tremendously in a declining market. Figures have recently been published in New York market reviews showing the changes in the number of stockholders in those two companies. And what happens is that the public, in a declining market, see that stocks are selling at a bargain and come in with the cash, buy the stock, and take it out of the stock loan account.

Now, in yesterday's discussion the inference might have been drawn from what I stated that when liquidation is forced on the stock exchange by very high rates of interest—by what may be described as panicky rates—the very existence of those rates would tend to draw money from other sources for the relief of the market, and that the high rate is the cause. Now, I do not think that is so. There will be cases, perhaps, where it will be so—where banks have money to spare and want to take advantage of these high rates. But to state what takes place in general terms and, I believe, with fair accuracy, the real relief which is afforded to the stock market in such a condition, where relief is almost unobtainable and borrowers must have money, comes from the sale of the collateral. That is what makes such a money market dangerous. And these forced sales distribute the stocks from the hands of the borrowers to the hands of new owners, who pay in full for them.

According to my observation—and I have seen it happen in New York more than once—when a bad break arises in the New York stock market, due to bad, panicky conditions, Wall Street is filled

with bargain hunters who come there to buy cheap stock, and that is the real effect on the stock market caused by panicky money rates.

Representative SUMNERS. Are those purchasers, as a rule, people who have some capital that they want to invest in an interest-bearing security, or speculators on a small scale who happen to have a little money and believe they can buy on the present market and then on an up turn cash out and make a little money?

Gov. STRONG. They are undoubtedly of both characters, but the characteristic of such a situation is that it attracts a large number of people to buy these stocks. And I may say in passing that nothing different takes place in stocks than takes place in commodities, and when one considers what policy should be adopted by the Federal reserve bank in fixing rates we have got to bear in mind that such a rate policy as furnishes an inducement to the speculator to buy in a market where goods are being sold under distress conditions does not afford real relief to the man that needs it, in my opinion.

The CHAIRMAN. Concretely, then, if you were to adopt at this time a low-rate policy in respect to Government bonds—suppose, for instance, that the Federal Reserve Board should establish a rate of $3\frac{1}{2}$ per cent for rediscounts on Government paper, what would be the effect of the adoption of such a policy during the period of liquidation?

Gov. STRONG. I hesitate to prophesy absolutely what would be the effect. I can point out one of the dangers, however, of such a policy. Take the case of the crops that are now being produced at a cost very much below what last year's crop cost. The sentiment of the country, whether justified or not—and personally I do not think it is justified—has undoubtedly led many people, especially the farmers, to believe that there will not be enough credit to take care of an orderly marketing of their crops, so that they can pay their loans at the banks. Now, let us say that the sentiment prevails to such an extent that immediately the crop is made and immediately it is harvested it goes to the central markets; in the case of wheat it goes to the elevators in the central markets, and in the case of cotton it goes directly to the ports and concentration points. Suppose we made a rate of discount which enables the speculative buyer on the market to come into the market and buy those stocks of farm produce, I think you are giving the speculator the means at a very low cost to enable him to accumulate those stocks of farm produce. I think that is the danger. I do not want to prophesy that it will happen, and I do not prophesy that it will happen, because, personally, I believe there is going to be ample credit to take care of this next crop.

Developing that point a little further, take last year's crop of cotton compared to this year's, and assume that cotton last year was financed upon the basis of a cost reflected in the price of 40 cents per pound; and cotton this year has got to be financed at a cost reflected in a price of 12 cents per pound. Last year's cotton crop, roughly figured, required a credit three or four times as large as this year's crop. Last year's crop was on a \$2,000,000,000 basis, and this year's crop is on a \$500,000,000 basis.

Representative TEN EYCK. That is always the case in times of high prices?

Gov. STRONG. That is always the case in times of high prices. The difficulty last year was the cost at which the crop had been produced,

and the difficulty of making loans large enough to carry the producers after the decline took place.

Senator LENROOT. Governor, do I understand that the same percentage of credit will be extended at the high peak as is extended now?

Gov. STRONG. No, sir; I can not answer that.

Senator LENROOT. If it was not, it would not be four times the amount it was last year.

Gov. STRONG. It would not be four times as much; but I used those figures simply to illustrate the relationship between the two—between a low-priced crop and a high-priced crop.

Senator LENROOT. There would not be that same relationship, however.

Gov. STRONG. No, sir; last year's crop was 13,500,000 bales, approximately, and this year's crop is estimated at approximately eight and a quarter million bales.

Senator LENROOT. I would like to ask a question about this chart. This [indicating] represents street loans of eight or ten billion dollars; this is magnified ten times? (See page 626.)

Gov. STRONG. Yes; the volume is, but the relative amount of increase is not magnified. It merely raises that line on the chart.

Senator LENROOT. The actual figures show \$16,000,000,000; that would be an increase of \$8,000,000,000. But this is magnified ten times; so the actual increase is about \$800,000,000.

Gov. STRONG. Yes; I could give you the exact figures reported to us daily, Senator.

Senator LENROOT. Just to take your chart so that anyone that reads the record may understand it—as a matter of fact, the actual increase, as shown by the increases from January to November on street loans is \$800,000,000, approximately?

Gov. STRONG. It is approximately that; yes, sir.

Senator LENROOT. Is that an unusual expansion?

Gov. STRONG. It is impossible to answer that, because we have not had the data upon which to make a comparison. The only data which we have showing the fluctuation of loans on the New York Stock Exchange are those which we began to get in November, 1918, when these reports were first sent to us, and we have no data showing the volume of the loans, for example, as in such a period of expansion previous to this as the one which culminated in 1907, when a similar occurrence took place. We have no data for comparison.

Senator LENROOT. In your judgment, did that expansion from January to November in itself have any effect or was it one of the causes of the break which afterwards followed?

Gov. STRONG. I think it was one of the causes of the break, in the sense, Senator, that that market, with all other markets, commodities, and everything else, got top-heavy. It had got too high in the burst of speculation that raged not only over this country but over the whole world.

Senator LENROOT. Then if this expansion had not occurred, the break would probably not have been as great; if this particular expansion had not occurred, the break would not have been as great?

Gov. STRONG. On this market?

Senator LENROOT. Generally.

Gov. STRONG. Yes; that applies to all markets.

Senator LENROOT. But the expansion, I take it, from this chart, was greater than the ordinary expansion during that same period, relatively speaking?

Gov. STRONG. Yes; the rise in the values was greater than—

Senator LENROOT (interposing). No; the rise in volume of street loans was very much greater than the rise in credit generally, as shown by the chart?

Gov. STRONG. Yes; it is so shown by the chart; yes, sir. I would like to pursue that a little further, to be very certain that that is the fact.

Senator LENROOT. Yes.

Gov. STRONG. Of course, these reports, Senator, are made from figures submitted by only 800 banks, and that would exclude the percentage or volume of expansion which took place in the agricultural sections, which we regard as very much greater than in the commercial sections.

Senator LENROOT. This particular expansion seems to be very much greater than the general expansion of credit during that period. Could that have been controlled so as to have prevented it, in part, at least?

Gov. STRONG. I hope to make a full report on the measures that were taken, Senator, on that matter.

Senator LENROOT. I will not press it now, then.

Representative TEN Eyck. The fact that the street loans started to drop in October—I think the peak was in October—

Gov. STRONG (interposing). It was, in fact, November 3.

Representative TEN Eyck. Is that the reason why loans and investments started to increase at that time, due to the speculator and the weak investor starting to sell his stock, or transferring them from a broker's loan to a banker's loan, which then would become an investment by buying their stock out and out, but still owing the bank for part of it; is that one of the reasons why that line for loans and investments started to rise or increase?

Gov. STRONG. Loans and investments?

Representative TEN Eyck. Yes; loans and investments.

Gov. STRONG. I should say that the cause of the earlier decline in the stock market, and consequently the earlier decline in the volume of loans, which are interrelated, of course, arose in very large part from the nervousness of holders of speculative stocks at the peak of the rise in the stock market, and consequently in the rise of the loan account, because they were afraid there was not going to be enough credit to support the speculation. And when I come to describe what happened in that period, I think you will appreciate they had reason to feel uneasy.

Representative TEN Eyck. I think I know the reason, and think I appreciate the situation at that time. But at this particular time, the loan account, through investments, increased, while the loan account on the street decreased. I wondered whether there was any relation between them, on account of transfers from one condition to the other. You know, often a man buys stock on the market and leaves it with his broker, and then comes a time when he says, "I guess I had better get this out of the broker's hands and buy it out-

right." At the same time he does not put up much more money, but borrows money at the bank, and puts the stock up, at the bank, as collateral, and the bank holds it, instead of the broker; is that not a fact?

Gov. STRONG. Yes, sir.

Representative TEN EYCK. I wondered whether that had any relation to this situation?

Gov. STRONG. Of course, banks do not buy stocks, as a rule.

Representative TEN EYCK. I am not talking about banks; I am talking of the individual investor who buys his stock through a broker, and the broker may have carried him five months or two months or one month, but there comes a time when he says to himself, "I think I had better take this stock out of the market and buy it out and out," but in doing so he goes to his bank, where he has credit, and borrows enough money to take that stock up, and puts the stock up as collateral in that bank. Now, when he does that, that loan comes in the line of loans and investments, does it not?

Gov. STRONG. Yes, sir.

Representative TEN EYCK. Is that not one of the reasons why that line ran up and increased while the other one was going down, or is that so small that it made no difference?

Gov. STRONG. I would have to surmise in order to answer your question, until we have had time to analyze the account which is shown on the chart as "loans and investments of all reporting banks." But, surmising only, I think what happened was that the demand for agricultural and industrial accommodations increased throughout that period so rapidly that, as shown on the charts, our reserve percentage constantly decreased, and it was the outside pressure for accommodation to take care of this volume of commodities, with the increased pressure that was put on the money market, that was one of the causes of the liquidation. The rise in the money market simply indicates one of the elements causing liquidation in the stock market.

Representative TEN EYCK. I appreciate that; but doesn't this have something to do with it?

Gov. STRONG. I think it may, Congressman, but I could not say without analyzing the figures, and I do not like to surmise where we are in a position to get the actual figures.

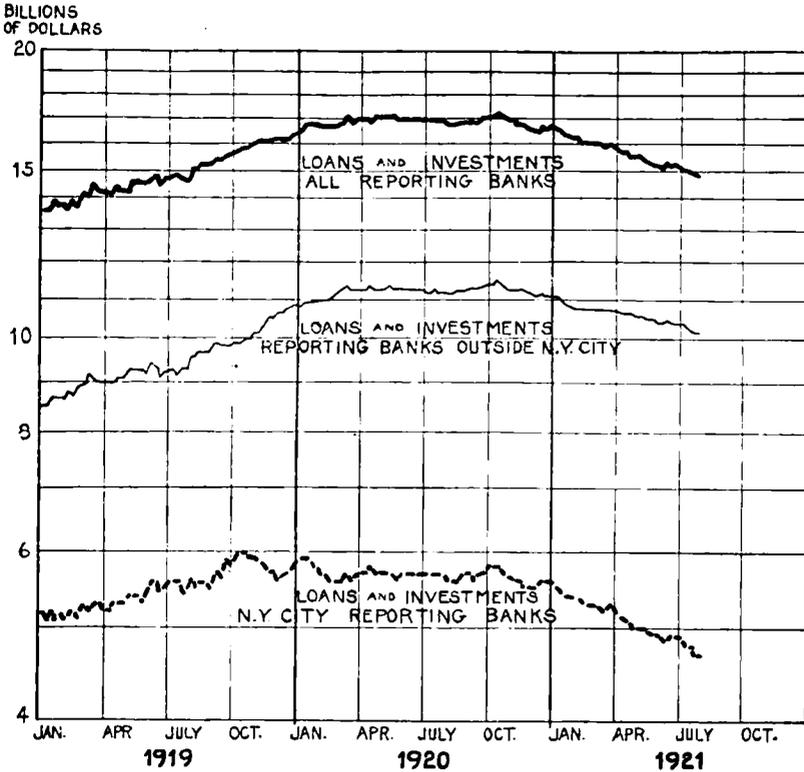
There is still another chart relating to this matter, which bears three curves. (See opposite page.) One shows the total loans and investments of the New York City reporting banks—the 70 banks to which I have referred; the second is a similar curve showing the loans and investments of all banks outside of New York City reporting to us; the third curve shows the loans and investments of all reporting banks, including the New York City banks. I also offer a chart comparing the decline in deposits of New York City banks with the decline in deposits in the 800 banks of the whole country. (See p. 636.)

I do not think there is any necessity for commenting upon those charts, unless something is suggested by them to the members of the commission.

Gov. STRONG. In connection with that first chart, which includes all loans, including stock exchange loans, the point that you raised, Congressman Ten Eyck, should have been made clear. It was stupid of me not to do it. In the first chart which I submitted, the curve which shows the loans and investments of all reporting banks, the upper curve, includes the street loans of the New York City daily reporting banks.

Representative TEN EYCK. I see.

Gov. STRONG. And the significance of that is that notwithstanding the decline in the volume of the street loans the other curve continued



LOANS OF REPORTING BANKS IN NEW YORK CITY AND THE UNITED STATES.

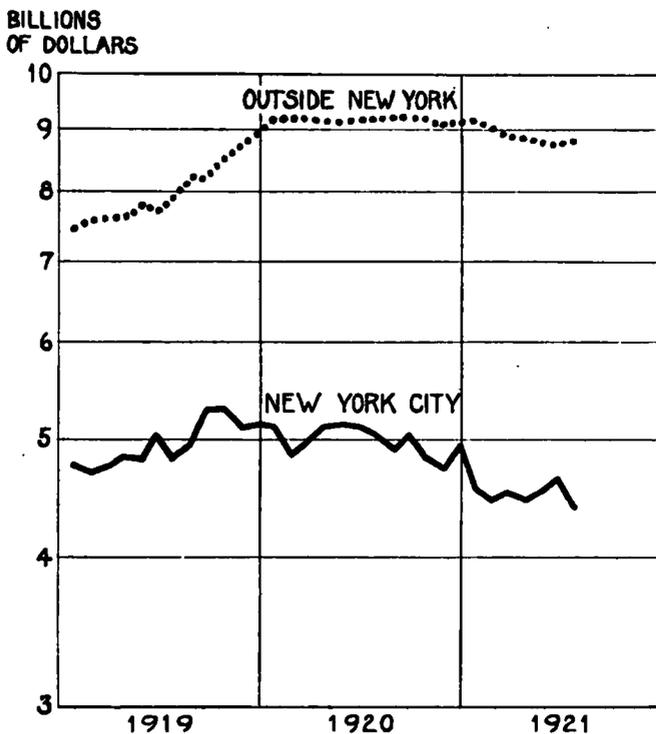
Logarithmic scale.

Source of information: Annual reports of the Federal Reserve Board, Federal Reserve Bulletin, and weekly press statements.

to go up, showing that the release of credit effected by the reduction of credit on the New York Stock Exchange was taken up by other classes of loans in the banks of the country.

Representative SUMNERS. You stated a moment ago that the effect of a high interest rate in the money market was to cause a speculator to turn his investment loose, and that the stock turned loose by the speculator under a high interest rate was absorbed by the investors throughout the country. Is there anything to show how much money during that sort of a situation comes in from the country at large in order to absorb these shares of stock pressed upon the market by the high interest rate?

Gov. STRONG. I know of no means of getting at the absolute data, Congressman, but certain information can be obtained which would throw some partial light upon that question. The effect upon the loan account in a declining market arises from two causes. As stock values decline, those who have bought them on margin must put up more margin and draw upon their bank accounts, which has a tendency to reduce the loan account. And then the class of investor I speak of comes in and buys stocks outright, and that also reduces the loan account. The two together would result in gradually paying for stocks which had formerly been carried on loans.



BANK DEPOSITS IN NEW YORK CITY AND OUTSIDE.

Total deposits of reporting banks in New York City and in the United States outside New York City the last week of each month. (Logarithmic scale.)
Source of Information: Federal Reserve Bulletin and weekly press statements of the Federal Reserve Board.

Representative SUMNERS. There is an opinion very widespread throughout the country that the custom of dealing in these stocks by speculative investors, resulting in such fluctuations of interest rates and purchases and sales has a general disorganizing and demoralizing effect upon the volume of available money scattered throughout the country; have you any data with reference to that, or any opinion with reference to it?

Gov. STRONG. I think possibly the Senate document to which I have alluded will give some information.

Representative SUMNERS. Very well.

Gov. STRONG. Now, in regard to the general organization of the New York stock exchange money market. We have had many discussions with the officers of the New York stock exchange, looking to a better organization of that matter. The stock exchange is a necessary part of the financial organization of the country, and it seems to me the correct attitude to assume toward it is to reduce it to such a condition of management by the authorities of the exchange, if you please, that extreme developments in money rates, and so on, will not be a disturbing element. As you know, in the London market they have what is known as term settlements, fortnightly settlements, and they do not make loans, as we do, from day to day, in New York.

The Stock Exchange, as I have disclosed in the data I have submitted, is making a study of these matters, on which they have made considerable progress, in order to economize in the amount of credit required to conduct the New York Stock Exchange business. The first step taken, some years ago, was to establish the New York Stock Exchange clearing house. The result is that only the net amount of a given stock bought and sold on a given day is actually paid for. That has the effect of very much reducing the amount of credit to be employed in conducting the day's transactions. Then, recently, there has been perfected a plan by which stock exchange loans are cleared. I am unable to give you a clear idea of it, however, without more study, but it is also spoken of in these documents. Its effect will be to reduce the volume of credit required.

And the third step, which may be developed by the exchange authorities, may be to inaugurate some form of term settlement. Now, that is a difficult thing to bring about in the New York Exchange. It is different from the situation in the London market, because in New York we have only one class of broker. In London they have two classes, the jobber and the broker. The broker enters into negotiations with the jobber, and gives his obligation to the jobber, and therefore there is an obligation behind an obligation. Now, it may be that in the evolution of the New York Stock Exchange something of that kind may be worked out. And I am assured by the authorities of the exchange that they are working diligently, so as to perfect arrangements to avoid these fluctuations in rates for call money.

I have personally felt, however, that the Federal reserve bank of New York and its rate are pretty well emancipated from the workings of the New York Stock Exchange, because of the feeling among lenders that they prefer those kinds of securities, which are available for discount at the Federal reserve bank, in case of need.

In order to throw further light upon the question of the amount of funds which flow into New York and out of New York from other Federal reserve banks, which I understand is a matter of considerable interest to the commission, on July 29 a questionnaire was sent—

Senator HARRISON (interposing). This year?

Gov. STRONG. July 29 of this year, a questionnaire was prepared and sent to the 52 leading banks and trust companies of New York City with which the Federal reserve bank of New York has had continuous relationship during the period of strain in the money market. You will remember I referred to the "money committee" which was

formed, and many of these banks are still cooperating with us in carrying out the policies originally undertaken by that committee.

The basis of such a table as I am now presenting must be fair, in order that the data obtained may be fair. And I think I should read to the commission the letter which was sent out with the questionnaire, in order to indicate just what kind of replies might be expected to this inquiry. [Reading:]

JULY 29, 1921.

MY DEAR MR. ———: It is desirable to assemble certain data as of November 15, 1920, showing accommodation then given by banks in New York City to banks, firms, corporations, etc., located entirely or principally in other Federal reserve districts and the amount of the deposits carried by them in New York City banks on that date. The names of individual banks reporting figures to us will be held in strict confidence and only total figures will be used. These total figures will be transmitted to Gov. Strong, who is now in Washington.

It is realized that the gathering of this material will impose much work on the banks, but I trust that you will see fit to use the best endeavors of your institution in its preparation. A blank form is attached which gives the details of the information desired. It is understood that there will be many cases where it will be difficult to determine fairly whether or not depositors or borrowers may be considered principally to be within or outside this Federal reserve district. In such cases it is expected that each bank will use its own judgment, but the general principle to be observed is that the object of this inquiry is to make a fair disclosure of the amount of out-of-district balances carried in New York and the amount of money loaned to out-of-district borrowers.

We request a response by noon on Tuesday, August 2, and thank you for your cooperation in this matter.

Yours, very truly,

J. H. CASE, *Deputy Governor.*

Senator HARRISON. Why was November 15 selected?

Gov. STRONG. It was selected because it coincides with the call made by the Comptroller of the Currency for the condition of the banks on that date; and reference was made by him in some of his correspondence to some figures made as of that date, which I think were brought out in a rather illuminating fashion by Congressman Mills when he cross-examined the comptroller. The result of this questionnaire is rather important, Mr. Chairman, and I leave it for insertion in the record, if the commission desires to have it printed.

The CHAIRMAN. Without objection, it may be inserted in the record.

(The tables referred to are as follows:)

Loans to correspondents located outside second district and loans and investments of daily reporting banks, as of Nov. 15, 1920.

Loans to banks.....	\$249,465,965
Loans to railroads and public-service corporations.....	44,041,716
(a) Agricultural loans.....	\$91,427,466
(b) Industrial loans.....	796,872,155
(c) All other loans.....	193,469,448
Total of (a), (b), and (c).....	1,081,769,069
Total loans outside second district.....	1,375,276,750
Total loans and investments.....	5,444,680,000

Deposits of correspondents located outside of second district and total borrowings from Federal reserve bank, as of Nov. 15, 1920.

Deposits of banks	\$564, 173, 936
Deposits of railroads and public-service corporations	76, 837, 303
(a) Agricultural deposits	\$24, 677, 482
(b) Industrial deposits	501, 852, 738
(c) All other deposits	110, 910, 239
Total of (a), (b), and (c)	637, 440, 459
Total deposits outside second district	<u>1, 278, 451, 698</u>
Total borrowings from Federal reserve bank	880, 640, 000

Gov. STRONG. As I say, Mr. Chairman, the result of this questionnaire discloses that out-of-town bank deposits carried by the banks responding to the questionnaire amounted to a total of \$564,000,000; the deposits of railroads and public-service corporations amounted to \$77,000,000. I am reading the nearest amount, in round figures, in millions of dollars. Agricultural deposits amounted to \$24,000,000. Industrial deposits amounted to \$502,000,000. All other deposits amounted to \$111,000,000. The total amount of agricultural, industrial, and all other deposits amounted to \$637,000,000. And the total amount of all deposits, including the banks and public service corporations and railroads amounted to \$1,278,000,000. At the date of this report these reporting banks were borrowing from the Federal reserve bank of New York \$881,000,000.

Senator HARRISON. The banks in New York were borrowing eight hundred and some odd millions?

Gov. STRONG. Yes; the banks in New York were borrowing this.

Senator HARRISON. And as I caught the figures, the banks outside of New York had on deposit some \$560,000,000.

Gov. STRONG. \$564,000,000.

Now, the loans of like class among all New York City banks at that time were as follows: Loans to banks outside of New York City, \$249,000,000; loans to railroads and public service corporations, \$44,000,000; agricultural loans, \$91,000,000; industrial loans, \$797,000,000; all other loans, \$194,000,000. The total of agricultural, industrial, and all other loans, \$1,082,000,000. The total of all loans outside of the district, \$1,375,000,000. And the total of all loans and investments, including those within the district, was \$5,445,000,000.

The contrast brought out by these figures, which, I think, are as accurate as can be prepared, if the banks followed, as I believe they did, instructions to present a fair showing on this question, is that the total of all deposits made in New York banks by institutions, business corporations and banks outside of the district is \$1,278,000,000; and the total of loans made by all banks in New York to borrowers outside of the district is \$1,375,000,000.

Senator HARRISON. If I caught the figures right, the banks outside of New York had deposited in the banks in New York \$564,000,000, and the banks in New York had rediscounted and loaned to banks outside of New York \$240,000,000?

Gov. STRONG. Yes; the actual figures are \$249,465,965.

I should call the commission's attention to another thing in connection with these figures, however. Notwithstanding that the

Federal reserve banks perform a great variety of services for their members, aside from loaning them money when they need it, the Federal reserve banks are nevertheless not in a position to perform many other services which their members require, and large balances are consequently carried with correspondent banks in the central reserve cities and the reserve cities as compensation for services rendered—services which we are unable to render under the law.

Senator HARRISON. You could not give us the figures as to the loans carried for the stock exchange?

Gov. STRONG. I could by sending out another questionnaire; that is, not with absolute accuracy, but it would give a fair showing.

Senator HARRISON. Do you think the proportion is about the same?

Gov. STRONG. Well, I think the proportion of figures of this character by the small banks is negligible. For instance, there are one or two banks to whom we sent this questionnaire that have no loans or deposits of the character indicated at all. And when we come to the small banks in New York City, we will find they have no deposits from and no loans to out-of-town borrowers. They would be a negligible factor. They would increase the total somewhat, but by a very small amount.

Senator HARRISON. What per cent of the banks in New York City belong to the Federal reserve system, and what per cent does not; I presume you have stated that already?

Gov. STRONG. I have not stated it. But my recollection is that 90 per cent in resources of all the banks in the district belong to the Federal reserve system, and 10 per cent do not.

Senator LENROOT. That is, in resources, and not in number?

Gov. STRONG. Yes; in resources, not in number.

Senator LENROOT. It is the resources that are important.

Gov. STRONG. I have charts and tables with some figures attached, going with some detail into these matters. They show, for instance, in one chart loans placed for correspondents by New York banks on the stock exchange, and the balance carried in their accounts that are not loaned. (See p. 644.) There is a comparison of the amount that the New York banks are loaning on their own account on the New York Stock Exchange, and the amount they are loaning for correspondents. (See p. 645.) And there are various tables and charts, giving all of these figures with interest rates. (See also pp. 545, 546, 548-554 and 557-567.) I think the data are of sufficient importance to include in the record, if the commission desires to do so.

The CHAIRMAN. Without objection, it will be included in the record. (The charts and data referred to are printed in full, as follows:)

OUT-OF-DISTRICT DEPOSITS IN NEW YORK CITY BANKS AND LOANS OF NEW YORK CITY BANKS TO OUT-OF-DISTRICT BANKS, CORPORATIONS, FIRMS, ETC.

The accommodation granted during the height of the credit demand by New York City banks to banks, corporations, firms, etc., in other Federal reserve districts, and the decline in deposits carried by them in New York City banks, is manifested in the following:

(A) The deposits of New York City banks declined more rapidly than the deposits of banks elsewhere in the country.

(B) The deposits of New York City banks declined more in proportion to the decline of their loans than did the deposits of banks in the country as a whole.

(C) The balances of correspondent banks with New York City banks and the amount of stock market loans placed for the account of correspondent banks (forming

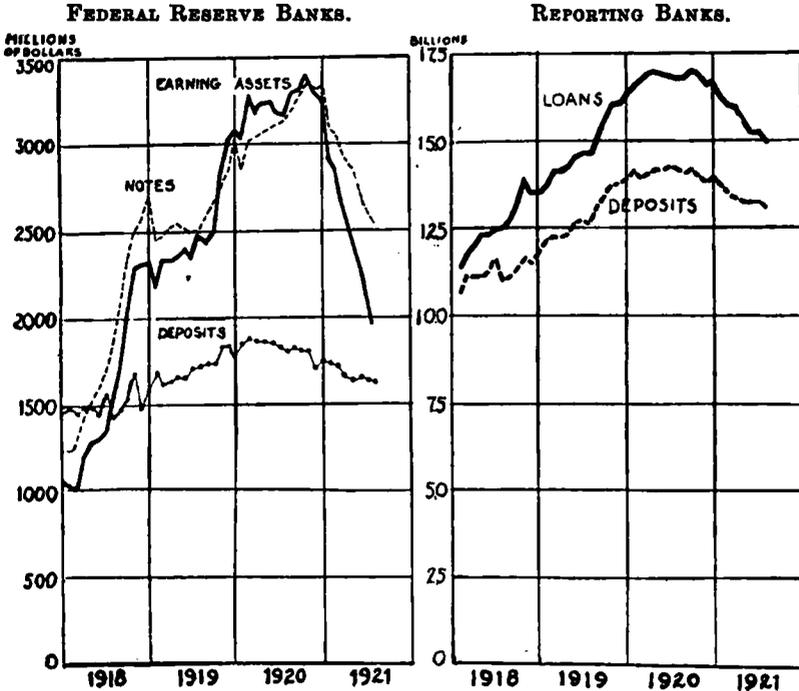
a substantial part of interior funds placed in New York) declined rapidly during 1920, with minor fluctuations.

(D) In November, 1920, the loans to out-of-town correspondents by six of the largest New York City banks were reported by them to be larger than ever before, even before the establishment of the Federal reserve system.

(E) On February 14, 1921, the loans to banks, railroads and corporations outside New York State by the five New York City banks which were then the largest borrowers at the Federal reserve bank, were \$280,000,000 more than their borrowings at the reserve bank.

THE DECLINE IN DEPOSITS.

Throughout 1920 the deposits of reporting member banks outside of New York City maintained an approximately even level at about \$9,150,000,000. The deposits of New York City banks, however, in the first 11 months of the year fell \$370,000,000.



LOANS AND DEPOSITS OF REPORTING BANKS IN THE UNITED STATES COMPARED WITH EARNING ASSETS, NOTE CIRCULATION, AND MEMBER BANK RESERVE DEPOSITS OF ALL FEDERAL RESERVE BANKS.

Source of information: Annual reports of the Federal Reserve Board, Federal Reserve Bulletins, and weekly press statements.

By December 31 a decline in the deposits of all banks in the country was practically entirely accounted for by the loss of deposits in New York City banks. On that day, in spite of a normal end-of-the-year accumulation of funds in New York, the deposits of the 72 New York City banks which report weekly to the Federal Reserve Board were \$505,000,000 below their high point reached on September 19, 1919.

In 1921 the deposits of banks outside the city began to decline, but at a much slower rate than in New York City. By the middle of February, 1921 (Feb. 11) the deposits of New York City banks had declined \$961,000,000 from their high point as against a decline of \$59,000,000 from maximum of banks elsewhere in the country. There were heavy daily losses in the gold settlement fund and the New York reserve bank sold acceptances to other Federal reserve banks to offset those losses in part.

The accompanying diagram shows the movement of deposits in New York City banks and in banks outside New York City as of the last reporting date of each month in 1919, 1920, and in 1921 up to July 13. (See p. 636.)

THE DECLINE IN DEPOSITS COMPARED WITH THE DECLINE IN LOANS.

The loans of the reporting banks throughout the country corresponded closely in their rate of increase and decrease from month to month during 1920, and until May, 1921, the rates of decrease were closely the same. Since that time loans have continued to decrease but deposits have remained practically stationary, due largely to the accumulating base of gold—that is, gold imports have about offset the decline in deposits resulting from the extinguishment of loans. (See p. 641.)

In New York City, however, the decrease in deposits was proportionately greater than the decrease in loans and it is only very recently that there has been substantial correspondence between them. (See pp. 635 and 636.)

The following table gives a detailed comparison for 1920 and 1921. The figures are as of the last reporting day of each month, and in the case of the reporting banks in all districts covers only the period from October 15, 1920, inasmuch as that was the date on which the loans of those banks reached their maximum:

Percentage decline from maximum.

Date.	All districts.		New York City.	
	Loans.	Deposits.	Loans.	Deposits.
1919.				
Sept. 26.....				2.1
Oct. 31.....			0.9	2.1
Nov. 28.....			5.4	6.0
Dec. 26.....			4.1	5.5
1920.				
Jan. 30.....		2.4	4.2	5.9
Feb. 27.....		4.0	6.2	10.2
Mar. 26.....		3.3	4.9	8.6
Apr. 30.....		2.6	4.4	5.6
May 28.....		2.3	5.8	4.9
June 25.....		2.1	5.3	5.5
July 30.....		2.7	5.9	7.4
Aug. 27.....		3.4	5.6	10.0
Sept. 24.....		2.4	4.3	7.1
Oct. 29.....	1.5	3.8	5.6	10.7
Nov. 26.....	3.2	5.6	8.0	12.7
Dec. 31.....	3.1	3.8	6.6	9.3
1921.				
Jan. 28.....	5.9	6.2	10.5	16.1
Feb. 25.....	6.9	7.5	12.0	18.6
Mar. 25.....	7.5	8.1	13.9	16.7
Apr. 27.....	9.7	8.9	16.5	17.5
May 25.....	11.2	8.8	18.6	16.8
June 29.....	11.4	8.6	18.5	14.7

Deposits, loans and investments, and borrowings of reporting member banks in the second Federal reserve district (last week of each month).

(In thousands of dollars.)

	New York City banks.			All reporting banks.		
	Demand, time, and Government deposits.	Loans and investments.	Borrowings.	Demand, time, and Government deposits.	Loans and investments.	Borrowings.
1919.						
Jan. 31	4,780,579	5,160,252	462,357	5,234,911	5,699,532	523,729
Feb. 28	4,722,772	5,275,659	645,905	5,205,256	5,834,938	507,567
Mar. 28	4,752,151	5,204,842	540,207	5,224,244	5,763,538	606,898
Apr. 25	4,838,420	5,275,698	470,008	5,333,626	5,848,525	537,321
May 29	4,810,063	5,265,697	362,531	5,348,911	5,905,650	638,733
June 27	5,076,619	5,343,348	455,384	5,517,819	5,872,402	523,837
July 25	4,839,894	5,283,299	577,403	5,306,784	5,831,149	643,373
Aug. 29	4,981,605	5,428,749	557,828	5,501,618	6,028,111	626,964
Sept. 26	5,322,831	5,738,025	524,873	5,837,080	6,345,434	599,395
Oct. 31	5,319,828	5,788,916	687,019	5,836,698	6,396,771	780,965
Nov. 24	5,106,804	5,467,708	715,606	5,628,144	6,077,936	789,347
Dec. 26	5,136,856	5,459,894	675,775	5,672,846	6,060,867	735,032
1920.						
Jan. 30	5,117,480	5,427,677	704,573	5,666,471	6,036,420	758,720
Feb. 27	4,880,932	5,194,194	784,403	5,435,721	5,870,159	851,650
Mar. 26	4,968,579	5,205,240	732,768	5,580,018	5,896,511	800,377
Apr. 30	5,117,876	5,303,386	663,390	5,752,166	5,997,679	723,022
May 28	5,171,002	5,349,412	609,590	5,804,330	6,048,234	671,709
June 25	5,134,745	5,352,991	611,843	5,766,789	6,048,831	674,144
July 30	5,032,121	5,270,483	683,814	5,665,284	5,974,472	746,121
Aug. 27	4,909,444	5,199,795	814,059	5,527,642	5,908,657	876,573
Sept. 24	5,051,443	5,287,850	749,027	5,674,051	5,989,001	806,915
Oct. 29	4,852,858	5,115,162	881,607	5,433,436	5,812,315	946,248
Nov. 26	4,746,322	4,990,827	803,266	5,371,282	5,685,321	874,332
Dec. 31	4,930,824	5,117,645	765,922	5,567,336	5,809,488	831,782
1921.						
Jan. 28	4,558,242	4,813,393	825,610	5,220,685	5,528,252	873,478
Feb. 25	4,461,581	4,736,491	799,558	5,115,596	5,443,945	848,613
Mar. 25	4,526,056	4,804,660	605,390	5,175,706	5,509,333	658,141
Apr. 29	4,482,116	4,707,560	507,840	5,142,604	5,413,362	567,851
May 25	4,523,051	4,601,980	405,338	5,171,442	5,303,714	453,528
June 29	4,638,788	4,699,688	283,174	5,283,491	5,395,609	338,457
July 20	4,369,492	4,483,063	312,670	5,007,815	5,175,707	360,082

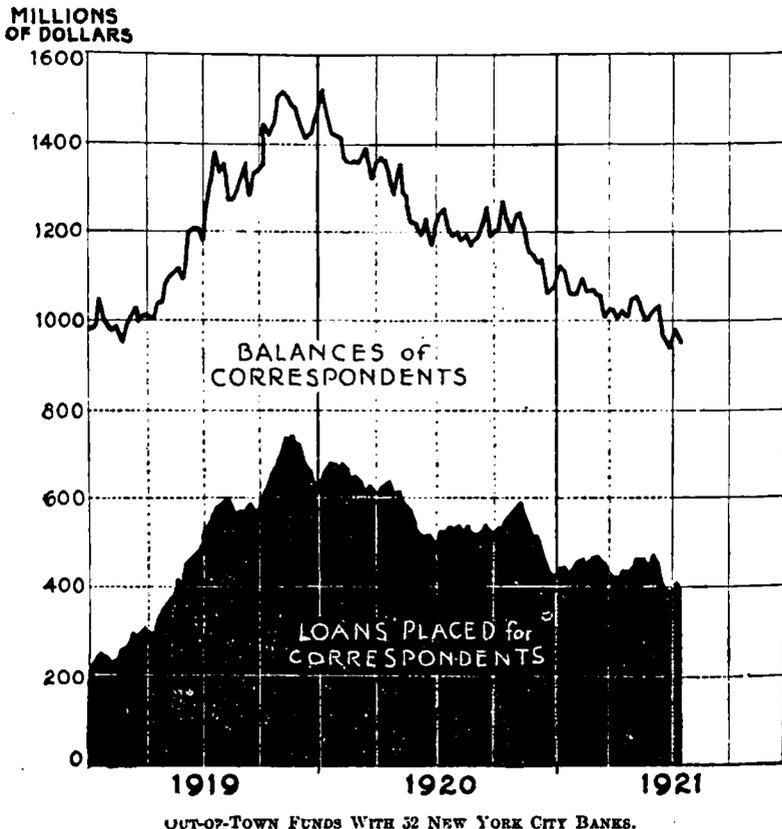
On February 11, 1921, the deposits of the 72 New York City member banks which report weekly to the Federal reserve bank were 18 per cent below the high point reached on September 19, 1919. The total loans of these same banks on the same day showed a decline of 12 per cent from the high point reached on October 10, 1919. In the country as a whole, however, member banks reported that their deposits and loans had both declined 7 per cent from maximum. Whereas there was equality of decline in loans and deposits in the country as a whole, there was inequality of decline in loans and deposits in New York.

The following explanation of this inequality appeared in the Monthly Review of the Federal reserve agent at New York for March 1:

"This is due in great measure to the fact that there has been a marked tendency for loans to shift from other parts of the country to New York, the financial center. As pressure to liquidate has increased in other Federal reserve districts upon banks, corporations, and individuals, a growing demand for loans has been manifested in New York, from those districts. Much of this demand has been upon banks of large resources in New York City doing a nation-wide business. Not only have they given accommodation in large amounts to banks and corporations in other parts of the country, but the balances which banks ordinarily keep with them have been drawn down. From January 1 to February 19 the deposits of the leading New York City banks declined \$515,000,000, of which about \$110,000,000 represents the drawing down of deposits in New York City by out-of-town bank correspondents, and is in addition to the accommodation New York City banks have given to banks and corporations in the interior."

BALANCES AND LOANS OF OUT-OF-TOWN CORRESPONDENTS.

Early in January of 1920 the balances of out-of-town correspondents with New York City banks amounted to about \$840,000,000 and the loans placed for them on the stock exchange amounted to about \$680,000,000, making a total of about \$1,520,000,000. These balances and loans, forming together a substantial part of funds from the interior placed in New York City, declined \$450,000,000. During 1921 this decline has continued but at a slightly slower rate, as illustrated in the accompanying diagram. Whether by withdrawal of balances or in the reduction of loans placed for the account of out-of-town banks, in either case, movement of funds away from New York has resulted. At present (July 20) the amount of loans placed for out-of-town correspond-

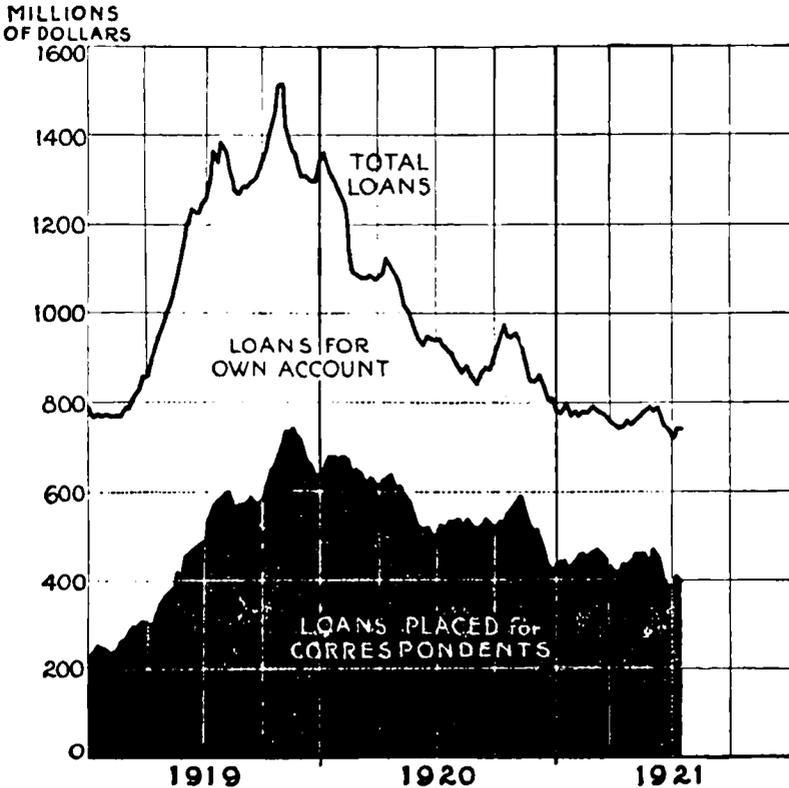


White area shows balances of out-of-town correspondents each week in 52 New York City banks and dark area shows street loans placed by these New York City banks for out-of-town correspondents. Source of information: Daily reports to the Federal reserve bank of New York.

ents is below \$400,000,000 and lower than at any time since the spring of 1919; and the total of balances and loans is \$175,000,000 less than on January 7, 1921, and about \$550,000,000 less than in January, 1920.

There is naturally a close interrelation between the rates on the stock exchange for call money and the supply of funds but it was not until the volume of street loans had begun to decline in 1919 that the highest rates for that year were reached. On the two accompanying diagrams the volume of loans placed for out-of-town banks and the volume of loans placed by New York City banks for their own account are shown in comparison with the average call loan rates. (See pp. 545 and 546.) In 1919

the lessening of the supply began in late October and was reflected some two weeks later in an average rate in excess of 14 per cent. In the closing weeks of the year out-of-town banks withdrew money which had been placed on call to the amount of about \$110,000,000. While city banks made up a part of the funds so withdrawn the average rate rose nearly to 20 per cent for a few days and shortly thereafter sharply declined. Early in the year the volume of loans placed on call by New York City



STREET LOANS OF 32 NEW YORK CITY BANKS.

White area shows loans outstanding each week for their own account, and dark area amount outstanding each week for the account of correspondents.

Source of Information: Daily reports to the Federal reserve bank of New York.

banks for their own account declined more than \$250,000,000, going much below the amount placed by them for their out-of-town correspondents. This withdrawal was reflected in an average rate late in January of 1920 of about 14 per cent. Throughout 1920, with occasional fluctuations, the volume of stock exchange loans declined but rates fluctuated within substantially the same limits throughout the rest of the year, reflecting the decreased activity of the market.

Balances of out-of-town correspondents and street loans placed for their account (daily reporting banks, New York City).

[000 omitted.]

Date.	Balances of out-of-town correspondents.	Loans for account of correspondents.	Total.	Date.	Balances of out-of-town correspondents.	Loans for account of correspondents.	Total.
1919.				1920.			
Jan. 3.	\$758,528	\$219,743	\$978,271	Apr. 23.	\$686,988	\$637,423	\$1,324,411
Jan. 10.	753,031	232,371	985,402	Apr. 30.	674,307	603,902	1,278,209
Jan. 17.	798,664	250,983	1,049,647	May 7.	734,840	612,984	1,347,824
Jan. 24.	751,374	213,551	964,925	May 14.	690,000	595,339	1,285,339
Jan. 31.	740,304	237,705	978,009	May 21.	693,691	582,552	1,276,243
Feb. 7.	741,838	235,099	976,937	May 28.	671,811	549,647	1,221,458
Feb. 14.	742,671	241,588	984,259	June 4.	694,284	525,078	1,219,362
Feb. 21.	602,957	259,231	862,188	June 11.	676,840	518,140	1,194,980
Feb. 28.	720,879	263,838	984,717	June 18.	702,109	522,549	1,224,658
Mar. 7.	725,036	280,309	1,005,345	June 25.	661,792	506,467	1,168,259
Mar. 14.	735,467	290,399	1,025,866	July 2.	721,138	501,173	1,222,311
Mar. 21.	708,552	290,291	998,843	July 9.	709,558	527,929	1,237,487
Mar. 28.	702,916	304,894	1,007,810	July 16.	728,969	519,536	1,248,505
Apr. 4.	710,898	300,479	1,011,377	July 23.	690,970	530,085	1,221,055
Apr. 11.	710,360	295,400	1,005,760	July 30.	658,397	533,568	1,191,965
Apr. 18.	720,693	319,976	1,040,669	Aug. 6.	671,575	530,470	1,202,045
Apr. 25.	704,690	339,661	1,044,351	Aug. 13.	653,897	525,463	1,179,360
May 2.	715,406	367,057	1,082,463	Aug. 20.	659,126	533,259	1,192,385
May 9.	729,627	371,891	1,101,518	Aug. 27.	653,876	513,507	1,167,383
May 16.	732,457	383,169	1,115,626	Sept. 3.	675,173	513,805	1,188,978
May 23.	706,329	414,687	1,121,016	Sept. 10.	698,513	527,171	1,225,684
May 29.	684,909	408,795	1,093,704	Sept. 17.	713,809	540,546	1,254,355
June 6.	746,148	455,018	1,201,166	Sept. 24.	659,990	529,292	1,189,282
June 13.	738,110	466,413	1,204,523	Oct. 1.	678,724	522,042	1,200,766
June 20.	726,461	477,484	1,203,945	Oct. 8.	668,930	534,087	1,203,017
June 27.	704,299	478,168	1,182,467	Oct. 15.	729,093	535,968	1,265,061
July 3.	763,938	493,052	1,256,990	Oct. 22.	683,255	549,010	1,232,265
July 11.	771,471	536,136	1,307,607	Oct. 29.	642,349	559,004	1,201,353
July 18.	804,469	569,238	1,373,707	Nov. 5.	660,544	573,923	1,234,467
July 25.	741,085	578,651	1,319,736	Nov. 12.	650,577	589,403	1,239,980
Aug. 1.	785,577	588,680	1,374,257	Nov. 19.	639,701	560,875	1,200,576
Aug. 8.	729,437	601,057	1,330,494	Nov. 26.	631,990	521,640	1,153,630
Aug. 15.	763,843	590,699	1,354,542	Dec. 3.	633,115	514,408	1,147,523
Aug. 22.	710,790	557,934	1,268,733	Dec. 10.	615,898	518,700	1,134,598
Aug. 29.	693,747	575,198	1,268,945	Dec. 17.	647,785	485,854	1,133,639
Sept. 5.	709,773	580,874	1,290,647	Dec. 24.	620,733	441,618	1,062,351
Sept. 12.	723,244	591,016	1,314,260	Dec. 31.	643,461	426,764	1,070,225
Sept. 19.	772,026	581,390	1,353,416				
Sept. 26.	705,826	577,989	1,283,815	1921.			
Oct. 3.	747,737	583,805	1,331,542	Jan. 7.	682,460	439,615	1,122,075
Oct. 10.	727,646	612,701	1,340,347	Jan. 14.	677,231	445,224	1,122,455
Oct. 17.	790,521	650,501	1,441,022	Jan. 21.	669,709	445,040	1,114,749
Oct. 24.	755,068	666,382	1,421,450	Jan. 28.	625,872	431,483	1,057,355
Oct. 31.	759,025	689,550	1,448,575	Feb. 4.	622,614	438,036	1,060,650
Nov. 7.	768,269	736,295	1,504,564	Feb. 11.	605,053	456,349	1,061,402
Nov. 14.	782,638	735,446	1,518,084	Feb. 18.	631,439	463,908	1,095,347
Nov. 21.	766,565	740,896	1,507,461	Feb. 25.	616,420	450,838	1,067,258
Nov. 28.	769,363	725,936	1,495,299	Mar. 4.	613,958	458,772	1,072,730
Dec. 5.	763,127	716,671	1,479,798	Mar. 11.	599,632	463,862	1,063,494
Dec. 12.	755,418	677,820	1,433,238	Mar. 18.	603,319	459,031	1,062,350
Dec. 19.	754,815	657,326	1,412,141	Mar. 25.	558,628	451,065	1,009,693
Dec. 26.	779,277	639,923	1,419,200	Apr. 1.	589,055	436,347	1,025,402
				Apr. 8.	599,979	425,722	1,025,702
1920.				Apr. 15.	582,650	427,072	1,009,722
Jan. 2.	820,436	634,566	1,455,002	Apr. 22.	578,384	440,797	1,019,181
Jan. 9.	825,476	670,474	1,495,950	Apr. 29.	571,206	440,318	1,011,524
Jan. 16.	838,867	681,581	1,520,448	May 6.	603,897	447,041	1,050,938
Jan. 23.	780,582	677,785	1,458,367	May 13.	595,526	461,066	1,056,594
Jan. 30.	749,061	674,628	1,423,689	May 18.	575,499	460,765	1,036,264
Feb. 6.	740,735	681,323	1,422,058	May 25.	545,749	456,103	1,001,852
Feb. 13.	743,235	669,833	1,413,068	June 1.	570,594	434,884	1,005,478
Feb. 20.	713,842	649,919	1,363,761	June 8.	551,709	427,624	979,333
Feb. 27.	707,460	648,785	1,356,245	June 15.	573,125	457,758	1,030,883
Mar. 5.	720,834	638,108	1,358,942	June 22.	537,369	422,662	960,031
Mar. 12.	730,397	625,741	1,356,138	June 29.	539,035	395,260	934,295
Mar. 19.	748,787	636,795	1,385,582	July 6.	589,413	404,784	994,197
Mar. 26.	699,004	621,822	1,320,826	July 13.	557,224	384,766	941,990
Apr. 2.	744,387	611,567	1,355,954	July 20.	555,975	393,373	949,348
Apr. 9.	737,226	627,192	1,364,418				
Apr. 16.	729,112	631,726	1,360,838				

Trust loans, New York City daily reporting banks.

[000 omitted.]

	Loans for account of correspondents.	Loans for own account.	Total.		Loans for account of correspondents.	Loans for own account.	Total.
1919.				1920.			
Jan. 3	\$219,743	\$574,258	\$794,001	Apr. 16	\$631,726	\$491,943	\$1,123,669
Jan. 10	232,371	542,194	774,565	Apr. 23	637,423	465,848	1,103,271
Jan. 17	250,083	530,256	780,339	Apr. 30	603,902	484,963	1,088,865
Jan. 24	243,551	532,983	776,534	May 7	612,984	451,120	1,064,104
Jan. 31	237,705	539,619	777,324	May 14	595,339	424,317	1,019,656
Feb. 7	235,699	535,833	771,532	May 21	582,532	422,589	1,005,441
Feb. 14	241,588	531,748	773,336	May 28	549,647	420,932	970,579
Feb. 21	259,231	513,367	772,592	June 4	525,078	419,756	944,834
Feb. 28	263,538	529,797	793,635	June 11	518,140	412,899	931,039
Mar. 7	280,309	512,587	792,896	June 18	522,549	429,518	952,067
Mar. 14	290,399	530,786	821,185	June 25	506,467	437,983	944,160
Mar. 21	290,291	540,647	830,938	July 2	501,173	436,978	938,161
Mar. 28	304,804	556,052	860,946	July 9	527,929	419,020	946,949
Apr. 4	300,479	559,589	860,068	July 16	519,536	404,412	923,948
Apr. 11	295,400	564,708	860,108	July 23	530,085	386,577	916,662
Apr. 18	319,976	624,890	944,866	July 30	533,568	379,260	912,828
Apr. 25	339,661	628,076	967,737	Aug. 6	530,470	354,660	885,130
May 2	367,057	629,266	996,323	Aug. 13	525,463	337,922	863,385
May 9	371,891	650,524	1,022,415	Aug. 20	533,259	346,633	879,892
May 16	383,169	679,151	1,062,320	Aug. 27	513,507	348,993	862,500
May 23	411,687	692,979	1,107,666	Sept. 3	613,805	329,419	943,224
May 29	406,795	738,197	1,146,992	Sept. 10	527,171	344,389	871,560
June 6	455,048	750,295	1,205,343	Sept. 17	540,546	341,276	881,822
June 13	466,413	771,914	1,238,327	Sept. 24	629,292	346,408	975,700
June 20	477,484	770,949	1,228,393	Oct. 1	522,042	373,802	895,344
June 27	478,168	768,065	1,246,233	Oct. 8	534,083	390,412	924,495
July 3	493,052	771,792	1,264,834	Oct. 15	535,868	437,206	973,074
July 11	536,136	770,355	1,306,691	Oct. 22	549,010	400,078	949,088
July 18	569,238	797,343	1,366,581	Oct. 29	559,004	393,850	952,854
July 25	578,651	758,611	1,337,262	Nov. 5	573,923	390,703	964,626
Aug. 1	588,690	795,699	1,384,369	Nov. 12	589,403	346,143	935,546
Aug. 8	601,057	766,073	1,367,130	Nov. 19	560,875	326,377	887,152
Aug. 15	590,699	740,854	1,331,553	Nov. 26	521,640	328,451	850,091
Aug. 22	557,931	724,714	1,282,648	Dec. 3	514,408	337,987	852,395
Aug. 29	575,198	890,918	1,266,116	Dec. 10	516,700	346,741	863,441
Sept. 5	590,874	709,869	1,280,743	Dec. 17	485,954	352,146	838,100
Sept. 12	594,016	698,327	1,292,343	Dec. 24	441,618	365,928	807,546
Sept. 19	581,390	719,652	1,301,042	Dec. 31	426,764	387,228	813,992
Sept. 26	577,989	735,035	1,313,024				
Oct. 3	583,805	771,206	1,355,011	1921.			
Oct. 10	612,701	763,988	1,376,689	Jan. 7	439,615	346,098	785,713
Oct. 17	650,501	766,792	1,417,293	Jan. 14	445,224	335,606	780,830
Oct. 24	666,392	784,954	1,451,336	Jan. 21	445,040	356,992	802,032
Oct. 31	696,550	821,825	1,511,175	Jan. 28	431,483	340,656	772,139
Nov. 7	736,295	781,971	1,518,266	Feb. 4	438,036	344,420	782,456
Nov. 14	735,146	687,450	1,422,896	Feb. 11	456,349	312,710	769,059
Nov. 21	740,896	627,218	1,368,114	Feb. 18	463,908	313,143	777,051
Nov. 28	725,936	633,911	1,359,847	Feb. 25	450,838	331,555	782,393
Dec. 5	716,071	695,416	1,312,087	Mar. 4	458,772	334,583	793,355
Dec. 12	677,820	630,520	1,308,340	Mar. 11	463,862	319,197	783,059
Dec. 19	657,326	611,643	1,268,969	Mar. 18	459,031	312,352	771,383
Dec. 26	639,923	662,531	1,302,504	Mar. 25	451,065	313,957	765,022
				Apr. 1	436,347	320,714	757,061
				Apr. 8	425,732	325,920	751,643
				Apr. 15	427,072	317,086	744,158
				Apr. 22	440,797	307,428	748,225
				Apr. 29	440,318	323,327	763,645
				May 6	447,041	307,531	754,572
				May 11	461,068	309,338	770,406
				May 18	460,765	320,831	781,596
				May 25	456,103	323,385	779,488
				June 1	434,884	358,471	793,355
				June 8	472,624	313,602	786,226
				June 15	457,758	358,666	796,424
				June 22	422,692	331,966	754,561
				June 29	395,260	348,709	743,969
				July 6	384,738	359,683	724,471
				July 13	408,764	332,994	741,658
				July 20	393,373	346,277	739,650
Jan. 2	634,566	714,756	1,349,322				
Jan. 9	670,474	694,443	1,364,917				
Jan. 16	681,581	640,560	1,322,141				
Jan. 23	677,785	624,520	1,302,305				
Jan. 30	674,628	606,367	1,280,995				
Feb. 6	681,323	556,322	1,237,645				
Feb. 13	669,833	484,171	1,154,004				
Feb. 20	649,919	444,435	1,094,354				
Feb. 27	648,785	442,461	1,091,246				
Mar. 5	638,108	435,811	1,073,919				
Mar. 12	625,741	450,963	1,076,734				
Mar. 19	636,786	452,001	1,088,796				
Mar. 26	621,822	459,019	1,080,841				
Apr. 2	611,567	475,442	1,087,009				
Apr. 9	627,192	461,618	1,088,840				

BORROWING BY INTERIOR BANKS IN NEW YORK.

By the autumn of 1920 New York City banks were feeling an unprecedented demand for loans from out-of-town banks. This was described in a letter written by the assistant Federal reserve agent at New York to Gov. Harding under date of November 27, in which the results of inquiries made at nine of the largest banks in New York were given. Five of these banks reported a demand from interior banks above any in their experience, even before the Federal reserve system was established; one bank reported unusually heavy demands but less than before the Federal reserve system was established, and three banks reported demands to be about as usual, though coming, in some instances, from small banks unable to secure accommodation from near-by correspondents. The summary results of the inquiry were as follows:

Bank 1.—Loans to interior banks heavier than ever before, larger even than before the Federal reserve was organized. Large number of banks borrowed which had never done so before.

Bank 2.—Demand from interior banks has been extremely heavy, and above previous periods. Requests from both large and small banks. Some banks had never borrowed here before, and felt humiliated, it was said, to be obliged to borrow at this time.

Bank 3.—Loans to banks are almost twice the previous high—were 41.5 millions in September, compared with 22 millions last September. Furthermore, instead of reaching a peak at September, it has been practically a level, and there has been almost no reduction.

Bank 4.—Unprecedented demands from interior banks. Illustration of unusual conditions is shown in the fact that recently a depositing bank which had not borrowed in 40 years asked for money; another which had not borrowed in 26 years came in to-day; banks began borrowing later this year than has been usual.

Bank 5.—Demands heavier than ever before. Many new banks sought to open borrowing accounts, and others who already had accounts but had never used them have asked for money. Lately these loans have tended to decrease.

Bank 6.—Demand from interior banks has been more than usual, but has not been excessive. Was said to be not as heavy as before the Federal reserve was organized. Much of the demand upon this bank has been from the cotton States.

Bank 7.—On the whole demand from interior banks has not been in unusually heavy volume. Occasionally individual banks have requested more than they are entitled to.

Bank 8.—Amount lent to interior banks has been about as usual. In past month, however, there has been an increased demand from small banks in the Northwest—many banks asked which had never borrowed before. Larger banks apparently have borrowed at their Federal reserve banks. Heavier demands from smaller banks indicate that their near-by correspondents, from whom they normally borrow, are filled up.

Bank 9.—Loans to interior banks reported not greater than ever before.

In his acknowledgment Gov. Harding said that he would bring the letter "to the attention of the other members of the board," of whom the Comptroller of the Currency was one.

The same situation is referred to in a letter to Gov. Harding from the assistant Federal reserve agent, under date of January 27, in which it was said that "several of the largest banks tell us that they are receiving numerous requests for loans from banks in other districts, particularly in the agricultural sections. It appears from what they tell us that those correspondent banks, feeling the pressure of their local Federal reserve banks, are paying off their loans with them and are transferring those loans to their New York correspondents, in some instances using the same collateral which they had pledged with the Federal reserve banks."

LOANS TO INTERIOR CORPORATIONS, ETC.

On February 15 Mr. Jay sent to Gov. Harding a tabulation of reports received from five of the largest banks in New York City, giving the total of their loans to out-of-town correspondents as of the day previous. Loans to banks outside New York State aggregated \$97,000,000, loans to corporations outside New York State aggregated \$645,000,000, and loans to railroads \$49,000,000, a total of \$791,000,000. It appeared also on that date that the total borrowings of these banks at the Federal reserve bank of New York aggregated \$511,000,000, some \$280,000,000 less than their loans to banks and corporations outside the State. In addition, these banks had suffered a loss of deposits since January 1 amounting to \$240,000,000. A copy of this statement follows, with, however, the addition of a column showing the balances on February 14 of out-of-town correspondents and supplementary tables showing the pertinent figures of the same banks since the beginning of 1920.

Out-of-town loans and balances of out-of-town correspondents, five large New York City banks.

[In millions of dollars.]

	Loans to banks outside New York State.	Loans to corporations outside New York State.	Loans to railroads.	Total.	Balances of out-of-town correspondents.	Total borrowings at Federal reserve bank.	Loss in deposits since Jan. 1, 1921.
Bank A	31	196	8	235	64	150	63
Bank B	5	51	11	67	37	79	63
Bank C	20	89	4	113	82	85	44
Bank D	31	178	16	225	62	100	42
Bank E	10	131	10	151	35	97	28
Total	97	645	49	791	280	511	240

All under date of February 14, 1921.

Deposits, balances of out-of-town correspondents, total loans and investments, and borrowings of five large New York City banks.

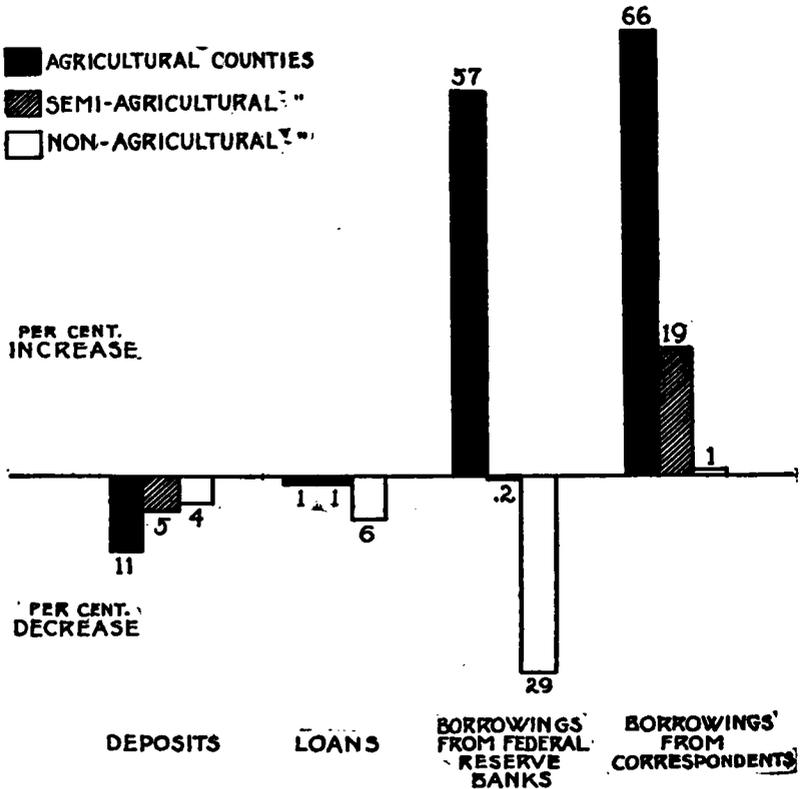
[In millions of dollars.]

	Deposits.	Balances out-of-town correspondents.	Total loans and investments.	Borrowings from Federal reserve bank.
Bank A:				
Jan. 2, 1920	527	80	500	72
Apr. 2, 1920	543	81	517	65
July 2, 1920	530	73	488	102
Oct. 1, 1920	519	75	483	97
Jan. 7, 1921	490	70	441	126
Apr. 1, 1921	461	61	426	69
July 20, 1921	401	58	378	74
Bank B:				
Jan. 2, 1920	232	41	336	70
Apr. 2, 1920	190	47	267	39
July 2, 1920	215	42	326	71
Oct. 1, 1920	223	40	315	57
Jan. 7, 1921	192	42	319	94
Apr. 1, 1921	189	38	286	59
July 20, 1921	198	35	246	20
Bank C:				
Jan. 2, 1920	369	119	391	53
Apr. 2, 1920	341	96	396	67
July 2, 1920	300	93	332	82
Oct. 1, 1920	285	89	326	108
Jan. 7, 1921	291	88	308	87
Apr. 1, 1921	242	74	243	87
July 20, 1921	235	70	239	40
Bank D:				
Jan. 2, 1920	302	85	344	91
Apr. 2, 1920	303	74	316	39
July 2, 1920	271	71	297	31
Oct. 1, 1920	281	68	299	55
Jan. 7, 1921	277	65	292	85
Apr. 1, 1921	316	62	332	.....
July 20, 1921	254	55	276	.....
Bank E:				
Jan. 2, 1920	478	43	499	109
Apr. 2, 1920	449	39	461	63
July 2, 1920	449	42	445	78
Oct. 1, 1920	464	40	482	52
Jan. 7, 1921	390	39	401	118
Apr. 1, 1921	375	32	408	78
July 20, 1921	327	28	345	55

Gov. STRONG. And further—to continue on this same subject—I referred to another study which is being made, and which will not be completed for several days. (It is here inserted as follows:)

AGRICULTURAL AND INDUSTRIAL LIQUIDATION MAY 4, 1920, TO APRIL 28, 1921.

The following tables give an analysis of reports to the Comptroller of the Currency and the Federal Reserve Board from about 9,500 banks throughout the country which are members of the Federal reserve system. The purpose of the analysis was to ascertain what changes took place during the year ended April 28, 1921, in the loans of banks in agricultural communities as compared with the loans of banks in nonagri-



PER CENT CHANGE BETWEEN MAY 4, 1920, AND APRIL 28, 1921, IN LOANS AND DISCOUNTS, TOTAL DEPOSITS, AND BORROWINGS OF MEMBER BANKS IN AGRICULTURAL, SEMIAGRICULTURAL, AND NON-AGRICULTURAL COUNTIES.

Columns above the line show increases and columns below the line decreases. Source of information: Reports of condition of national bank to the Comptroller of the Currency, and reports of member State banks and trust companies to the Federal Reserve Board.

cultural communities. While loans by country banks are often made for uses other than to finance farmers, and many loans by city banks are made to move crops and for other purposes intimately connected with agriculture, it is felt that the figures compare with fair accuracy the liquidation of industrial and agricultural loans.

All counties in the country were grouped in three classes—agricultural, semiagricultural and nonagricultural. Counties were classified as agricultural when the value of their products according to data obtained from the 1920 census reports, the Geological Survey, the Bureau of Soils, and all other available sources was estimated to be not less than 80 per cent agricultural, as semiagricultural when their products were between 50 and 80 per cent agricultural; and as nonagricultural when their products were less than 50 per cent agricultural.

The summary table below shows that between May 4, 1920, and April 28, 1921, the loans and discounts of banks in agricultural counties throughout the country declined \$36,500,000, or slightly more than 1.2 per cent; the loans and discounts of banks in semiagricultural counties declined \$18,700,000, or 1.3 per cent; and the loans and discounts of banks in nonagricultural counties declined \$827,100,000, or 5.6 per cent. The borrowings from the Federal reserve banks by banks in agricultural counties increased \$127,600,000, or 56.6 per cent; borrowings by banks in semiagricultural counties remained practically stationary; and borrowings by banks in nonagricultural counties declined \$629,100,000, or 28.5 per cent.

Increase or decrease in loans, borrowings,¹ and deposits of member banks, 1920-21.

[Amounts in millions of dollars.]

	Agricultural counties.		Semiagricultural counties.		Nonagricultural counties.		Total.	
	Amount.	Per cent.	Amount.	Per cent.	Amount.	Per cent.	Amount.	Per cent.
Loans and discounts.....	- 36.5	- 1.2	- 18.7	- 1.3	- 827.1	- 5.6	- 882.3	- 4.5
Borrowings from Federal reserve banks.....	+127.6	+57.6	- 0.3	- 0.2	-629.1	-28.5	- 501.8	-19.5
Borrowings from other banks.....	+ 45.2	+65.7	+ 6.1	+19.0	+ 0.5	+ 0.6	+ 51.8	+27.3
Total deposits.....	-411.8	-11.1	- 87.7	- 5.2	-665.7	- 4.4	-1,165.2	- 5.7

¹ Bills payable and rediscounts.

In partial explanation of the relatively heavy demand upon the Federal reserve system by banks in agricultural counties, it appears that their loss in total deposits was 11.1 per cent, as against a loss of 4.4 per cent by banks in nonagricultural counties.

Between May 4, 1920, and April 28, 1921, member banks show a total liquidation of loans amounting to \$882,000,000, of which \$827,000,000, or 94 per cent, is shown for banks in nonagricultural counties, while the liquidation in agricultural and semiagricultural counties amounted to only about \$55,000,000. An analysis of the changes in loans by Federal reserve districts shows few important reductions for banks in agricultural counties, the largest reduction being reported for banks in the Kansas City district, where loans were reduced by about \$53,000,000. On the other hand, banks in the Richmond and Atlanta districts showed somewhat larger loans this year than a year ago. In the semiagricultural counties no important changes are reported for any of the Federal reserve districts. In the nonagricultural counties the volume of liquidation has been material in every Federal reserve district, except Cleveland, which reports a 10 per cent increase in loans.

The contrast between the banks in agricultural and nonagricultural counties is even more pronounced when borrowings from the Federal reserve banks are compared. These borrowings increased for banks in agricultural counties by about 128 millions, or 57 per cent, particularly heavy relative increases being shown for the Atlanta, Dallas, and Minneapolis districts. In the semiagricultural counties the amount of loans from Federal reserve banks shows practically no changes for the year, substantial increases in the Richmond and Atlanta districts being offset by a reduction of 10 millions in the Cleveland district. In nonagricultural counties the reduction of borrowings from Federal reserve banks is universal for all the districts, except Cleveland. For the system as a whole, the reduction in borrowings from Federal reserve banks amounted to about 502 millions; for banks in nonagricultural counties the reduction was 629 millions, which was offset in part by an increase of 128 millions in the borrowings of banks in agricultural counties.

Figures for the several Federal reserve districts are shown in the following table:

Increase or decrease in loans and in borrowings¹ from Federal reserve banks by districts.
1920-21.

[Amounts in millions of dollars.]

LOANS AND DISCOUNTS.

Federal reserve district.	Agricultural counties.		Semiagricultural counties.		Nonagricultural counties.		Total.	
	Amount.	Per cent.	Amount.	Per cent.	Amount.	Per cent.	Amount.	Per cent.
Boston.....	- 0.7	- 2.1	+ 1.6	+ 7.7	- 36.2	- 2.7	- 35.3	- 2.5
New York.....	+15.0	+10.2	+ 5.4	+ 7.1	-426.1	- 7.8	-405.7	- 7.1
Philadelphia.....	+ 9.6	+11.0	+ 1.5	+ 4.5	- 27.8	- 2.8	- 16.7	- 1.5
Cleveland.....	- 1.6	- 1.0	+ 7.5	+ 2.0	+109.8	+ 9.5	+108.7	+ 6.7
Richmond.....	+ 4.7	+ 2.4	- 0.5	- 0.3	- 9.3	- 1.7	- 5.1	- 0.6
Atlanta.....	+ 4.4	+ 2.9	+ 5.1	+ 4.5	-58.7	-12.1	- 49.2	- 6.6
Dallas.....	-22.8	- 6.3	- 2.3	- 2.2	- 29.9	-12.6	- 55.0	- 7.5
Chicago.....	-16.4	- 2.4	-17.4	- 6.0	-132.3	- 6.3	-166.1	- 5.4
St. Louis.....	- 3.8	- 1.9	- 0.6	- 1.6	- 73.7	-11.8	- 78.1	- 9.1
Minneapolis.....	-19.1	- 4.8	- 4.6	- 6.1	- 40.7	-12.0	- 64.4	- 8.0
Kansas City.....	-52.9	-13.0	- 9.0	-10.4	- 75.4	-13.4	-137.3	-13.0
San Francisco.....	+47.1	+13.2	- 5.5	- 4.3	- 17.7	- 1.8	+ 24.0	+ 1.6
Total.....	-36.5	- 1.2	-18.7	- 1.3	-827.1	- 5.6	-882.3	- 4.5

BORROWINGS FROM FEDERAL RESERVE BANKS.¹

Boston.....	+ 0.3	+ 11.8	+ 0.6	+61.6	- 29.3	-23.6	- 28.5	-22.3
New York.....	+ 0.7	+ 9.3	+ 0.3	+ 4.5	-206.9	-26.5	-205.9	-25.9
Philadelphia.....	- 1.9	-17.9	- 0.2	- 6.3	- 73.3	-35.0	- 75.4	-32.7
Cleveland.....	- 1.0	-13.7	-10.0	-34.0	+ 15.0	+15.0	+ 4.0	+ 8.9
Richmond.....	+ 6.9	+ 39.4	+ 4.7	+26.9	- 8.5	- 9.8	+ 3.0	+ 6.5
Atlanta.....	+ 16.2	+120.3	+ 9.6	+96.6	- 29.9	-32.0	- 4.1	- 3.5
Dallas.....	+ 22.0	+ 93.0	- 3.8	-25.3	- 24.0	-60.5	- 5.8	- 7.4
Chicago.....	+ 25.9	+ 45.1	- 0.2	- 0.7	-117.9	-32.0	- 92.2	-20.0
St. Louis.....	+ 6.8	+ 42.0	- 1.8	-46.9	- 80.5	-59.1	- 75.5	-46.3
Minneapolis.....	+ 18.3	+102.2	- 0.4	- 7.4	- 30.5	-46.9	- 12.6	-14.3
Kansas City.....	+ 11.3	+ 51.4	- 1.8	-23.9	- 41.6	-42.6	- 32.1	-25.2
San Francisco.....	+ 22.0	+ 75.3	+ 2.8	+50.0	- 1.6	- 1.8	+ 23.2	+18.6
Total.....	+127.6	+ 56.6	- 0.3	- 0.2	-529.1	-28.5	-501.8	-19.3

¹ Bills payable and rediscounts.

A comparison of borrowings with the so-called basic line is presented in the next table. On April 28, 1921, the borrowings of member banks from Federal reserve banks in agricultural counties were in excess of the so-called basic line in the southern and middle and far western districts, with the exception of Kansas City. In semi-agricultural counties borrowings were below the basic line in all the districts except those of Richmond, Atlanta, and Chicago; while in the nonagricultural counties all the districts, except Richmond and Atlanta, reported borrowings below the basic line.

Borrowings¹ from Federal reserve banks, compared with "basic line" on Apr. 28, 1921.

[Amounts in millions of dollars.]

Federal reserve district.	Agricultural counties.			Semiagricultural counties.			Nonagricultural counties.		
	Borrowings.	Basic line.	Ratio of borrowings to basic line.	Borrowings.	Basic line.	Ratio of borrowings to basic line.	Borrowings.	Basic line.	Ratio of borrowings to basic line.
Boston.....	2.5	4.6	54.3	1.5	2.9	51.7	95.2	181.1	51.7
New York.....	8.8	24.6	35.8	6.4	10.7	59.8	374.1	1,083.0	33.0
Philadelphia.....	8.6	15.7	54.8	3.6	8.4	56.3	136.2	171.0	78.6
Cleveland.....	6.3	21.6	29.2	19.3	57.6	33.5	114.5	180.7	63.4
Richmond.....	24.3	19.9	122.1	22.1	12.7	174.0	78.3	68.8	113.2
Atlanta.....	29.6	15.9	186.2	19.4	12.4	156.5	63.6	55.0	113.2
Dallas.....	45.8	31.3	11.5	11.2	15.7	71.3	15.7	28.7	54.7
Chicago.....	83.4	72.2	115.5	33.1	31.6	104.7	250.3	300.1	83.4
St. Louis.....	23.0	22.2	103.6	2.0	4.2	47.6	55.7	88.8	62.7
Minneapolis.....	36.1	33.3	108.4	4.7	7.7	61.0	34.5	39.6	85.6
Kansas City.....	33.3	45.1	73.8	5.8	11.0	52.7	56.1	72.9	72.0
San Francisco.....	51.2	41.4	123.6	8.5	18.6	45.7	103.8	145.5	71.5
Total.....	353.1	355.8	99.2	137.6	191.4	71.9	1,577.8	2,418.1	65.2

¹ Bills payable and rediscounts.

The following tables give figures for the country and for the several Federal reserve districts:

Loans and discounts.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
District 1, Boston:				
Agricultural.....	\$35,246,397	\$34,523,411	- \$722,986	- 2.05
Semiagricultural.....	21,287,534	22,915,168	+ 1,627,634	+ 7.65
Nonagricultural.....	1,332,045,856	1,295,870,067	- 36,175,789	- 2.72
District 2, New York:				
Agricultural.....	146,502,212	161,462,092	+ 14,959,880	+10.21
Semiagricultural.....	76,443,410	81,890,480	+ 5,447,070	+ 7.13
Nonagricultural.....	5,494,705,478	5,068,604,081	-426,101,397	- 7.75
District 3, Philadelphia:				
Agricultural.....	87,168,244	96,755,983	+ 9,587,739	+11.00
Semiagricultural.....	33,249,202	34,735,874	+ 1,486,672	+ 4.47
Nonagricultural.....	1,003,740,244	975,930,105	- 27,810,139	- 2.77
District 4, Cleveland:				
Agricultural.....	162,495,912	160,846,267	- 1,649,645	- 1.02
Semiagricultural.....	367,791,599	375,296,122	+ 7,504,523	+ 2.04
Nonagricultural.....	1,062,185,432	1,168,025,917	+100,840,485	+ 9.49
District 5, Richmond:				
Agricultural.....	197,334,413	202,080,747	+ 4,746,334	+ 2.41
Semiagricultural.....	147,165,715	146,680,925	- 484,790	- 0.33
Nonagricultural.....	552,045,667	542,706,143	- 9,339,524	- 1.69
District 6, Atlanta:				
Agricultural.....	150,312,605	154,720,320	+ 4,407,715	+ 2.93
Semiagricultural.....	113,330,013	118,438,699	+ 5,108,686	+ 4.51
Nonagricultural.....	494,068,946	425,350,339	- 68,738,607	-12.13
District 7, Chicago:				
Agricultural.....	691,857,488	675,480,514	- 16,376,974	- 2.37
Semiagricultural.....	291,935,614	274,549,428	- 17,386,186	- 5.96
Nonagricultural.....	2,107,685,822	1,975,210,711	-132,375,111	- 6.28
District 8, St. Louis:				
Agricultural.....	200,058,067	196,212,740	- 3,845,327	- 1.92
Semiagricultural.....	34,878,827	34,306,868	- 571,959	- 1.64
Nonagricultural.....	623,916,781	550,231,539	- 73,685,242	-11.81
District 9, Minneapolis:				
Agricultural.....	395,160,240	376,032,213	- 19,128,027	- 4.84
Semiagricultural.....	76,255,595	71,630,394	- 4,625,201	- 6.07
Nonagricultural.....	338,463,580	297,796,372	- 40,667,208	-12.02
District 10, Kansas City:				
Agricultural.....	406,677,903	353,818,589	- 52,859,314	-13.00
Semiagricultural.....	86,990,778	77,963,042	- 9,027,736	-10.38
Nonagricultural.....	564,857,395	489,432,025	- 75,425,370	-13.35
District 11, Dallas:				
Agricultural.....	359,995,120	337,216,517	- 22,778,603	- 6.33
Semiagricultural.....	106,505,803	104,207,690	- 2,298,113	- 2.16
Nonagricultural.....	237,410,342	207,492,900	- 29,917,442	-12.60
District 12, San Francisco:				
Agricultural.....	357,339,094	404,449,654	+ 47,110,560	+13.18
Semiagricultural.....	128,267,356	122,812,963	- 5,454,423	- 4.25
Nonagricultural.....	990,285,886	972,600,149	- 17,685,737	- 1.79

Federal reserve districts Nos. 1-12, inclusive.

CONSOLIDATED FIGURES.

[Agricultural counties, 2,266; semiagricultural counties, 344; nonagricultural counties, 432.]

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Capital and Surplus:				
Agricultural.....	\$565,851,159	\$622,632,805	+ \$56,781,646	+ 10.03
Semiagricultural.....	260,271,224	279,222,125	+ 18,950,901	+ 7.28
Nonagricultural.....	2,316,463,732	2,500,537,567	+ 184,133,835	+ 7.95
Demand deposits:				
Agricultural.....	2,344,847,419	1,875,394,464	- 469,452,955	- 20.02
Semiagricultural.....	1,064,827,547	924,878,262	- 139,949,285	- 13.14
Nonagricultural.....	11,424,109,317	10,273,585,103	-1,150,524,214	- 10.07
Time deposits:				
Agricultural.....	1,370,399,728	1,428,095,281	+ 57,695,553	+ 4.21
Semiagricultural.....	620,055,519	672,256,585	+ 52,201,066	+ 8.42
Nonagricultural.....	3,757,603,504	4,242,397,896	+ 484,794,392	+ 12.90
Loans and discounts:				
Agricultural.....	3,190,147,695	3,153,599,047	- 36,548,648	- 1.15
Semiagricultural.....	1,484,101,476	1,465,427,653	- 18,673,823	- 1.26
Nonagricultural.....	14,791,336,429	13,964,270,348	- 827,066,081	- 5.59

Federal reserve districts Nos. 1-12, inclusive—Continued.

CONSOLIDATED FIGURES—Continued.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	\$107,432,200	\$225,448,719	+\$118,016,519	+109.55
Semiagricultural.....	87,192,400	88,115,662	+ 20,923,262	+ 31.11
Nonagricultural.....	1,150,219,942	926,372,874	- 223,847,068	- 19.46
2. Bills payable—				
Agricultural.....	118,070,897	127,606,396	+ 9,535,499	+ 8.08
Semiagricultural.....	70,755,579	49,513,281	- 21,242,298	- 30.02
Nonagricultural.....	1,056,640,863	651,431,741	- 405,209,122	- 38.35
Total—				
Agricultural.....	225,503,097	353,055,115	+ 127,552,018	+ 56.56
Semiagricultural.....	137,947,979	137,628,943	- 319,036	- .23
Nonagricultural.....	2,206,860,805	1,577,804,615	- 629,056,190	- 28.50
Basic lines:				
Agricultural.....	419,665,631	355,783,620	- 63,882,011	- 15.22
Semiagricultural.....	201,556,825	191,382,822	- 10,174,003	- 5.05
Nonagricultural.....	2,665,573,169	2,418,094,644	- 247,478,525	- 9.28
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	16,880,548	22,822,426	+ 5,941,878	+ 35.20
Semiagricultural.....	10,878,673	8,744,015	- 2,134,658	- 19.62
Nonagricultural.....	28,527,797	20,826,087	- 7,701,700	- 27.00
2. Bills payable—				
Agricultural.....	51,989,480	91,292,460	+ 39,302,980	+ 75.60
Semiagricultural.....	21,061,122	29,251,709	+ 8,190,587	+ 38.94
Nonagricultural.....	60,396,765	68,604,848	+ 8,208,083	+ 13.59
Total—				
Agricultural.....	68,870,028	114,114,886	+ 45,244,858	+ 65.70
Semiagricultural.....	31,939,795	37,995,724	+ 6,055,929	+ 18.98
Nonagricultural.....	88,923,562	89,430,945	+ 507,383	+ .57

FEDERAL RESERVE DISTRICT NO. 1—BOSTON.

[Agricultural counties, 13; semiagricultural counties, 6; nonagricultural counties, 47.]

Capital and surplus:				
Agricultural.....	\$8,272,250	\$8,608,000	+ \$335,750	+ 4.06
Semiagricultural.....	5,736,000	6,040,500	+ 304,500	+ 5.31
Nonagricultural.....	239,362,525	249,137,810	+ 9,775,285	+ 4.09
Demand deposits:				
Agricultural.....	28,716,445	21,953,785	- 6,762,660	- 23.55
Semiagricultural.....	15,807,740	13,987,561	- 1,820,179	- 11.51
Nonagricultural.....	1,163,502,137	1,013,339,297	- 150,162,840	- 12.91
Time deposits:				
Agricultural.....	18,379,585	21,659,443	+ 3,279,858	+ 17.85
Semiagricultural.....	9,817,259	12,244,237	+ 2,426,978	+ 24.72
Nonagricultural.....	286,001,277	356,924,562	+ 70,923,285	+ 24.80
Loans and discounts:				
Agricultural.....	35,246,397	34,523,411	- 722,986	- 2.05
Semiagricultural.....	21,287,534	22,915,168	+ 1,627,634	+ 7.65
Nonagricultural.....	1,332,045,856	1,295,870,067	- 36,175,789	- 2.72
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	909,110	925,454	+ 16,344	+ 1.80
Semiagricultural.....	199,979	614,536	+ 414,557	+ 207.30
Nonagricultural.....	87,017,404	71,236,987	- 15,780,417	- 18.13
2. Bills payable—				
Agricultural.....	1,285,200	1,527,000	+ 241,800	+ 18.81
Semiagricultural.....	700,100	840,300	+ 140,200	+ 20.03
Nonagricultural.....	37,447,250	23,915,700	- 13,531,550	- 36.13
Total—				
Agricultural.....	2,194,310	2,452,454	+ 258,144	+ 11.75
Semiagricultural.....	900,079	1,454,836	+ 554,757	+ 61.63
Nonagricultural.....	124,464,654	95,152,687	- 29,311,967	- 23.55
Basic lines:				
Agricultural.....	4,488,890	4,585,862	+ 96,972	+ 2.16
Semiagricultural.....	2,802,469	2,910,106	+ 107,637	+ 3.84
Nonagricultural.....	193,812,328	184,057,371	- 9,754,957	- 5.05

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 1—BOSTON—Continued.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	\$52,071	\$191,944	+ \$139,873	+ 268.62
Semiagricultural.....	10,900	35,286	+ 24,386	+ 223.82
Nonagricultural.....	596,897	381,783	- 215,114	- 36.04
2. Bills payable—				
Agricultural.....	645,000	683,000	+ 38,000	+ 5.89
Semiagricultural.....	521,200	399,500	- 121,700	- 23.35
Nonagricultural.....	2,532,365	3,999,625	+ 1,467,260	+ 57.94
Total—				
Agricultural.....	697,071	874,944	+ 177,873	+ 25.52
Semiagricultural.....	532,100	434,796	- 97,304	- 18.29
Nonagricultural.....	3,129,262	4,381,408	+ 1,252,146	+ 40.01

FEDERAL RESERVE DISTRICT NO. 2—NEW YORK.

[Agricultural counties, 27; semiagricultural counties, 11; nonagricultural counties, 37.]

Capital and surplus:				
Agricultural.....	\$33,087,400	\$34,935,044	+ \$1,847,644	+ 5.58
Semiagricultural.....	13,206,700	13,937,650	+ 730,950	+ 5.53
Nonagricultural.....	771,875,840	846,310,652	+ 74,434,812	+ 9.64
Demand deposits:				
Agricultural.....	133,030,148	121,108,205	- 11,921,943	- 8.96
Semiagricultural.....	58,785,437	54,840,359	- 3,945,078	- 6.71
Nonagricultural.....	4,752,948,657	4,300,239,036	- 452,709,621	- 9.52
Time deposits:				
Agricultural.....	101,676,070	130,622,890	+ 28,946,820	+ 28.47
Semiagricultural.....	48,796,033	56,276,546	+ 7,480,515	+ 15.33
Nonagricultural.....	710,611,341	819,785,225	+ 109,173,884	+ 15.36
Loans and discounts:				
Agricultural.....	146,502,212	161,462,092	+ 14,959,880	+ 10.21
Semiagricultural.....	76,443,410	81,890,490	+ 5,447,070	+ 7.13
Nonagricultural.....	5,494,705,478	5,088,604,061	- 426,101,397	- 7.75
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	1,332,835	1,357,143	+ 24,308	+ 1.82
Semiagricultural.....	1,214,473	2,665,366	+ 1,450,893	+ 119.47
Nonagricultural.....	289,202,499	263,940,856	- 25,261,643	- 8.73
2. Bills payable—				
Agricultural.....	6,728,900	7,450,100	+ 721,200	+ 10.72
Semiagricultural.....	4,881,512	3,705,387	- 1,176,125	- 24.09
Nonagricultural.....	491,779,045	310,163,148	- 181,615,897	- 36.93
Total—				
Agricultural.....	8,061,735	8,807,243	+ 745,508	+ 9.25
Semiagricultural.....	6,095,985	6,370,753	+ 274,768	+ 4.51
Nonagricultural.....	780,981,544	574,104,004	- 206,877,540	- 26.49
Basic lines:				
Agricultural.....	24,244,344	24,612,228	+ 367,884	+ 1.64
Semiagricultural.....	11,029,595	10,716,628	- 312,967	- 2.84
Nonagricultural.....	1,225,587,227	1,082,965,358	- 142,621,869	- 11.64
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	243,591	255,263	+ 11,672	+ 4.79
Semiagricultural.....	25,300	187,738	+ 162,438	+ 642.05
Nonagricultural.....	7,892,112	219,889	- 7,672,223	- 97.21
2. Bills payable—				
Agricultural.....	1,686,136	1,167,000	- 519,136	- 30.79
Semiagricultural.....	85,000	359,894	+ 274,894	+ 323.40
Nonagricultural.....	5,020,303	7,402,818	+ 2,382,515	+ 47.46
Total—				
Agricultural.....	1,929,727	1,422,263	- 507,464	- 26.30
Semiagricultural.....	110,300	547,632	+ 437,332	+ 396.49
Nonagricultural.....	12,912,415	7,622,707	- 5,289,708	- 40.97

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 3—PHILADELPHIA.

[Agricultural counties, 25; semiagricultural counties, 6; nonagricultural counties, 29.]

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Capital and surplus:				
Agricultural.....	\$27,372,800	\$30,494,356	+ \$3,121,556	+ 11.40
Semiagricultural.....	11,506,260	11,568,500	+ 62,240	+ .54
Nonagricultural.....	236,993,169	245,028,780	+ 8,035,611	+ 3.39
Demand deposits:				
Agricultural.....	70,993,990	67,767,159	- 3,226,831	- 4.55
Semiagricultural.....	32,870,265	30,175,321	- 2,694,944	- 8.20
Nonagricultural.....	874,053,814	813,577,170	- 60,476,644	- 6.92
Time deposits:				
Agricultural.....	71,207,370	90,538,842	+ 19,331,472	+ 27.15
Semiagricultural.....	26,431,648	31,397,672	+ 4,966,024	+ 18.79
Nonagricultural.....	265,063,769	325,297,618	+ 60,233,849	+ 22.72
Loans and discounts:				
Agricultural.....	87,168,244	96,755,963	+ 9,587,739	+ 11.00
Semiagricultural.....	33,249,202	34,735,874	+ 1,486,672	+ 4.47
Nonagricultural.....	1,003,740,244	975,930,105	- 27,810,139	- 2.77
Borrowings from Federal Reserve Bank:				
1. Rediscouts—				
Agricultural.....	836,939	927,346	+ 90,407	+ 10.80
Semiagricultural.....	319,647	522,307	+ 202,660	+ 63.40
Nonagricultural.....	78,528,101	52,877,674	- 25,650,427	- 32.66
2. Bills payable—				
Agricultural.....	9,637,900	7,677,070	- 1,960,830	- 20.34
Semiagricultural.....	3,524,312	3,078,100	- 446,212	- 12.66
Nonagricultural.....	130,957,653	83,293,252	- 47,664,401	- 36.40
Total—				
Agricultural.....	10,474,839	8,604,416	- 1,870,423	- 17.86
Semiagricultural.....	3,843,959	3,600,407	- 243,552	- 6.34
Nonagricultural.....	209,485,754	136,170,926	- 73,314,828	- 35.00
Basic lines:				
Agricultural.....	14,440,520	15,702,125	+ 1,261,605	+ 8.74
Semiagricultural.....	6,194,480	6,353,875	+ 159,395	+ 2.57
Nonagricultural.....	169,591,624	171,002,525	+ 1,410,901	+ .83
Borrowings from correspondents:				
1. Rediscouts—				
Agricultural.....	175,882	74,958	- 100,924	- 57.38
Semiagricultural.....	15,000	30,000	+ 15,000	+100.00
Nonagricultural.....	119,121	198,565	+ 79,444	+ 66.69
2. Bills payable—				
Agricultural.....	722,000	1,024,000	+ 302,000	+ 41.83
Semiagricultural.....	117,082	284,125	+ 167,033	+142.65
Nonagricultural.....	2,368,000	3,289,800	+ 921,800	+ 38.93
Total—				
Agricultural.....	897,882	1,098,958	+ 201,076	+ 22.39
Semiagricultural.....	132,082	314,125	+ 182,033	+137.81
Nonagricultural.....	2,487,121	3,488,365	+ 1,001,244	+ 40.26

FEDERAL RESERVE DISTRICT NO. 4—CLEVELAND.

[Agricultural counties, 86; semiagricultural counties, 29; nonagricultural counties, 54.]

Capital and surplus:				
Agricultural.....	\$36,214,685	\$37,848,633	+ \$1,633,948	+ 4.51
Semiagricultural.....	74,917,162	78,196,000	+ 3,278,838	+ 4.36
Nonagricultural.....	224,890,946	252,926,167	+ 28,035,221	+ 12.47
Demand deposits:				
Agricultural.....	138,912,426	122,511,396	- 16,401,028	- 11.51
Semiagricultural.....	274,235,533	267,063,212	- 7,152,321	- 2.61
Nonagricultural.....	824,543,630	811,961,063	- 12,582,567	- 1.53
Time deposits:				
Agricultural.....	62,404,230	67,875,004	+ 5,470,774	+ 8.77
Semiagricultural.....	153,122,016	170,265,748	+ 17,143,732	+ 11.20
Nonagricultural.....	507,875,592	608,819,277	+ 100,943,685	+ 19.88
Loans and discounts:				
Agricultural.....	162,495,912	160,816,267	- 1,679,645	- 1.02
Semiagricultural.....	367,791,599	375,296,122	+ 7,504,523	+ 2.04
Nonagricultural.....	1,062,185,432	1,163,025,917	+ 100,840,485	+ 9.49

AGRICULTURAL INQUIRY.

657

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 4—CLEVELAND—Continued.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	\$4,074,545	\$3,275,484	- \$799,061	- 19.61
Semiagricultural.....	18,242,725	14,804,486	- 3,438,239	- 18.85
Nonagricultural.....	52,031,805	72,834,947	+ 20,803,142	+ 39.98
2. Bills payable—				
Agricultural.....	3,278,750	3,067,142	- 211,608	- 6.45
Semiagricultural.....	11,023,500	4,507,887	- 6,515,613	- 59.11
Nonagricultural.....	47,498,890	41,653,570	- 5,845,320	- 12.31
Total—				
Agricultural.....	7,353,295	6,342,626	- 1,010,669	- 13.74
Semiagricultural.....	29,226,225	19,312,373	- 9,913,852	- 34.01
Nonagricultural.....	99,530,695	114,488,517	+ 14,957,822	+ 15.03
Basic lines:				
Agricultural.....	22,948,476	21,572,590	- 1,375,886	- 6.00
Semiagricultural.....	57,743,591	57,592,245	- 151,346	- .26
Nonagricultural.....	176,950,492	180,728,303	+ 3,777,811	+ 2.13
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	520,439	528,331	+ 7,892	+ 1.52
Semiagricultural.....	316,217	536,204	+ 219,987	+ 69.57
Nonagricultural.....	72,002	348,616	+ 276,614	+ 384.18
2. Bills payable—				
Agricultural.....	2,598,247	3,312,859	+ 714,612	+ 27.50
Semiagricultural.....	2,860,000	1,379,450	- 1,480,550	- 48.14
Nonagricultural.....	2,302,216	3,433,227	+ 1,131,011	+ 49.13
Total—				
Agricultural.....	3,118,686	3,841,190	+ 722,504	+ 23.17
Semiagricultural.....	2,976,217	1,915,654	- 1,060,563	- 35.63
Nonagricultural.....	2,374,218	3,781,843	+ 1,407,625	+ 59.29

FEDERAL RESERVE DISTRICT NO. 5—RICHMOND.

[Agricultural counties, 202; semiagricultural counties, 70; nonagricultural counties, 47.]

Capital and surplus:				
Agricultural.....	\$36,999,000	\$42,213,947	+ \$5,214,947	+ 14.09
Semiagricultural.....	24,442,611	27,829,106	+ 3,386,495	+ 13.85
Nonagricultural.....	100,382,607	109,798,575	+ 9,435,968	+ 9.40
Demand deposits:				
Agricultural.....	124,127,718	101,580,310	- 22,547,408	- 18.16
Semiagricultural.....	90,117,577	70,097,435	- 20,020,142	- 22.22
Nonagricultural.....	359,688,248	327,985,681	- 31,702,567	- 8.81
Time deposits:				
Agricultural.....	103,699,419	111,529,379	+ 7,829,960	+ 7.55
Semiagricultural.....	57,925,588	60,904,448	+ 2,978,860	+ 5.14
Nonagricultural.....	162,614,835	180,788,780	+ 18,173,945	+ 11.18
Loans and discounts:				
Agricultural.....	197,334,413	202,080,747	+ 4,746,334	+ 2.41
Semiagricultural.....	147,165,715	146,680,925	- 484,790	- .33
Nonagricultural.....	552,045,667	542,708,143	- 9,339,524	- 1.69
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	5,718,617	13,348,646	+ 7,630,029	+ 133.42
Semiagricultural.....	4,079,657	12,150,615	+ 8,070,958	+ 197.83
Nonagricultural.....	39,160,699	50,509,885	+ 11,349,186	+ 28.98
2. Bills payable—				
Agricultural.....	11,710,850	10,955,167	- 755,683	- 6.45
Semiagricultural.....	13,329,800	9,949,552	- 3,380,248	- 25.36
Nonagricultural.....	47,636,300	27,744,884	- 19,891,416	- 41.76
Total—				
Agricultural.....	17,429,467	24,303,813	+ 6,874,346	+ 39.44
Semiagricultural.....	17,409,457	22,100,167	+ 4,690,710	+ 26.94
Nonagricultural.....	86,796,999	78,254,769	- 8,542,230	- 9.84
Basic lines:				
Agricultural.....	21,986,833	19,871,913	- 2,114,920	- 9.62
Semiagricultural.....	12,866,940	12,708,304	- 158,636	- 1.23
Nonagricultural.....	74,882,503	68,832,074	- 6,050,429	- 8.08

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 5—RICHMOND—Continued.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Borrowings from correspondents:				
1. Rediscunts—				
Agricultural.....	\$2,129,834	\$2,046,979	- 82,855	- 3.89
Semiagricultural.....	2,094,832	2,199,602	+ 104,770	+ 5.00
Nonagricultural.....	2,622,425	2,537,748	- 84,677	- 3.23
2. Bills payable—				
Agricultural.....	2,474,673	3,736,950	+ 1,262,277	+ 51.01
Semiagricultural.....	1,748,800	3,772,000	+ 2,023,200	+115.69
Nonagricultural.....	11,237,000	9,783,522	- 1,453,478	- 12.93
Total—				
Agricultural.....	4,604,507	5,783,929	+ 1,179,422	+ 25.61
Semiagricultural.....	3,843,632	5,971,602	+ 2,127,970	+ 55.36
Nonagricultural.....	13,859,425	12,321,270	- 1,538,155	- 11.10

FEDERAL RESERVE DISTRICT NO. 6—ATLANTA.

[Agricultural counties, 320; semiagricultural counties, 84; nonagricultural counties, 28.]

Capital and surplus:				
Agricultural.....	\$31,426,700	\$36,817,717	+ \$5,391,017	+ 17.15
Semiagricultural.....	22,581,788	26,856,552	+ 4,274,764	+ 18.93
Nonagricultural.....	71,762,971	72,188,600	+ 425,629	+ .59
Demand deposits:				
Agricultural.....	122,417,650	87,286,599	- 35,131,051	- 28.70
Semiagricultural.....	90,695,767	70,304,914	- 20,390,853	- 22.48
Nonagricultural.....	315,248,479	245,663,803	- 69,584,676	- 22.07
Time deposits:				
Agricultural.....	50,047,357	50,683,046	+ 635,689	+ 1.27
Semiagricultural.....	33,305,562	37,656,535	+ 4,350,973	+ 13.06
Nonagricultural.....	164,884,751	180,084,644	+ 15,200,893	+ 9.22
Loans and discounts:				
Agricultural.....	150,312,605	154,720,320	+ 4,407,715	+ 2.93
Semiagricultural.....	113,330,013	118,438,699	+ 5,108,686	+ 4.51
Nonagricultural.....	484,083,946	425,350,339	- 58,733,607	- 12.13
Borrowings from Federal reserve bank:				
1. Rediscunts—				
Agricultural.....	5,282,582	20,291,751	+15,009,169	+284.13
Semiagricultural.....	4,860,483	13,647,834	+ 8,787,351	+180.79
Nonagricultural.....	51,397,235	35,184,800	-16,212,435	-31.54
2. Bills payable—				
Agricultural.....	8,175,400	9,349,850	+ 1,174,450	+ 14.37
Semiagricultural.....	5,027,350	5,780,970	+ 753,620	+ 15.19
Nonagricultural.....	42,079,380	28,425,500	-13,653,880	-32.45
Total—				
Agricultural.....	13,457,982	29,641,601	+16,183,619	+120.25
Semiagricultural.....	9,887,833	19,428,804	+ 9,540,971	+ 96.59
Nonagricultural.....	93,476,615	63,610,300	-29,866,315	-31.95
Basic lines:				
Agricultural.....	20,275,720	15,865,793	- 4,409,927	- 21.75
Semiagricultural.....	14,432,213	12,390,747	- 2,041,466	- 14.15
Nonagricultural.....	64,670,705	55,049,291	- 9,621,414	- 14.88
Borrowings from correspondents:				
1. Rediscunts—				
Agricultural.....	464,519	1,522,862	+ 1,118,343	+240.75
Semiagricultural.....	1,275,683	1,690,899	+ 405,216	+ 31.76
Nonagricultural.....	1,536,223	2,598,807	+ 1,062,584	+ 69.17
2. Bills payable—				
Agricultural.....	2,423,000	7,212,457	+ 4,789,457	+197.67
Semiagricultural.....	1,613,800	4,910,084	+ 3,296,284	+204.26
Nonagricultural.....	3,851,667	8,615,643	+ 4,763,976	+123.69
Total—				
Agricultural.....	2,887,519	8,785,319	+ 5,907,800	+204.60
Semiagricultural.....	2,889,483	6,590,983	+ 3,701,500	+128.10
Nonagricultural.....	5,387,890	11,214,450	+ 5,826,560	+106.14

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 7—CHICAGO.

[Agricultural counties, 274; semiagricultural counties, 37; nonagricultural counties, 27.]

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Capital and surplus:				
Agricultural.....	\$106,862,212	\$115,110,812	+ 8,248,600	+ 7.72
Semiagricultural.....	43,073,123	45,399,250	+ 2,326,127	+ 5.40
Nonagricultural.....	290,454,700	313,372,500	+ 22,917,800	+ 7.89
Demand deposits:				
Agricultural.....	415,027,195	336,172,204	- 78,854,991	- 19.00
Semiagricultural.....	176,691,470	143,299,743	- 33,421,727	- 18.92
Nonagricultural.....	1,331,258,578	1,171,489,539	- 159,769,039	- 12.00
Time deposits:				
Agricultural.....	391,022,512	377,347,877	- 13,674,635	- 3.50
Semiagricultural.....	146,346,494	148,037,169	+ 1,690,675	+ 1.16
Nonagricultural.....	730,019,757	750,965,330	+ 20,945,573	+ 2.87
Loans and discounts:				
Agricultural.....	691,857,488	675,490,514	- 16,376,974	- 2.37
Semiagricultural.....	291,935,614	271,549,428	- 17,386,186	- 5.96
Nonagricultural.....	2,107,585,822	1,975,210,711	- 132,375,111	- 6.28
Borrowings from Federal reserve bank :				
1. Rediscounts—				
Agricultural.....	31,033,769	53,890,711	+ 22,856,942	+ 73.65
Semiagricultural.....	16,819,116	22,410,404	+ 5,591,288	+ 33.24
Nonagricultural.....	245,053,477	186,657,769	- 58,395,708	- 23.83
2. Bills payable—				
Agricultural.....	26,458,641	29,532,749	+ 3,074,108	+ 11.62
Semiagricultural.....	16,454,300	10,617,533	- 5,836,767	- 35.29
Nonagricultural.....	123,227,900	63,690,315	- 59,537,585	- 48.32
Total—				
Agricultural.....	57,492,410	83,423,460	+ 25,931,050	+ 45.10
Semiagricultural.....	33,273,416	33,057,937	- 215,479	- .65
Nonagricultural.....	368,281,377	250,338,084	- 117,943,293	- 32.03
Basic lines:				
Agricultural.....	82,153,751	72,231,008	- 9,922,743	- 12.08
Semiagricultural.....	35,618,179	31,573,819	- 4,044,360	- 11.35
Nonagricultural.....	353,034,669	300,060,802	- 52,973,867	- 15.01
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	2,287,184	6,970,987	+ 4,683,803	+ 204.78
Semiagricultural.....	4,268,369	2,056,250	- 2,212,119	- 51.83
Nonagricultural.....	3,528,847	5,802,513	+ 2,273,666	+ 64.43
2. Bills payable—				
Agricultural.....	9,331,013	16,013,818	+ 6,712,805	+ 71.94
Semiagricultural.....	4,412,500	6,060,200	+ 1,647,700	+ 37.34
Nonagricultural.....	2,777,000	6,217,204	+ 3,440,204	+ 123.88
Total—				
Agricultural.....	11,618,197	23,014,805	+ 11,396,608	+ 98.09
Semiagricultural.....	8,680,869	8,116,450	- 564,419	- 6.50
Nonagricultural.....	6,305,847	12,019,717	+ 5,713,870	+ 90.61

FEDERAL RESERVE DISTRICT NO. 8—ST. LOUIS.

[Agricultural counties, 317; semiagricultural counties, 19; nonagricultural counties, 27.]

Capital and surplus:				
Agricultural.....	\$38,693,637	\$42,187,543	+ 3,493,906	+ 9.03
Semiagricultural.....	5,443,100	6,012,000	+ 568,900	+ 11.00
Nonagricultural.....	97,391,878	100,768,931	+ 3,377,053	+ 3.47
Demand deposits:				
Agricultural.....	158,925,601	132,556,500	- 26,369,101	- 16.59
Semiagricultural.....	21,638,544	22,972,129	+ 1,666,415	+ 6.76
Nonagricultural.....	376,749,392	345,181,582	- 31,567,810	- 8.38
Time deposits:				
Agricultural.....	55,595,508	62,503,918	+ 6,908,410	+ 12.43
Semiagricultural.....	17,589,772	19,412,778	+ 1,823,006	+ 10.36
Nonagricultural.....	160,554,141	187,593,166	+ 27,039,025	+ 16.84
Loans and discounts:				
Agricultural.....	200,058,067	196,212,740	- 3,845,327	- 1.92
Semiagricultural.....	31,878,827	31,300,868	- 577,959	- 1.64
Nonagricultural.....	623,916,781	530,231,539	- 93,685,242	- 11.81

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 8—ST. LOUIS—Continued.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	\$5,151,863	\$12,752,355	+7,600,492	+147.33
Semiagricultural.....	2,342,446	992,083	-1,350,363	-58.07
Nonagricultural.....	99,830,854	36,871,729	-62,959,125	-63.07
2. Bills payable—				
Agricultural.....	11,056,900	10,261,429	-795,471	-7.19
Semiagricultural.....	1,499,500	1,056,582	-442,918	-29.54
Nonagricultural.....	36,360,714	14,822,062	-17,538,652	-48.24
Total—				
Agricultural.....	16,208,763	23,013,784	+6,805,021	+41.98
Semiagricultural.....	3,841,946	2,039,665	-1,802,281	-46.94
Nonagricultural.....	136,191,568	55,693,791	-80,497,777	-59.11
Basic lines:				
Agricultural.....	25,038,090	22,192,500	-2,845,590	-11.37
Semiagricultural.....	3,999,300	4,239,700	+240,400	+6.01
Nonagricultural.....	95,401,700	89,769,700	-5,632,000	-6.85
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	1,270,955	766,670	-504,285	-39.64
Semiagricultural.....	265,100	41,753	-223,347	-84.25
Nonagricultural.....	2,556,632	2,105,528	-451,104	-17.64
2. Bills payable—				
Agricultural.....	5,754,196	7,777,950	+2,023,754	+35.17
Semiagricultural.....	739,956	639,500	-100,456	-13.58
Nonagricultural.....	5,739,000	4,105,558	-1,633,442	-28.46
Total—				
Agricultural.....	7,025,151	8,544,620	+1,519,469	+21.63
Semiagricultural.....	1,005,056	681,253	-323,803	-32.22
Nonagricultural.....	8,295,632	6,211,086	-2,084,546	-25.13

FEDERAL RESERVE DISTRICT NO. 9—MINNEAPOLIS.

[Agricultural counties, 246; semiagricultural counties, 30; nonagricultural counties, 20.]

Capital and surplus:				
Agricultural.....	\$51,170,417	\$53,895,441	+2,725,024	+5.33
Semiagricultural.....	10,129,500	10,832,600	+703,100	+6.94
Nonagricultural.....	4,153,675	52,600,400	+4,446,725	+9.23
Demand deposits:				
Agricultural.....	190,478,969	144,795,358	-45,683,611	-23.98
Semiagricultural.....	34,940,437	32,201,548	-2,738,889	-7.54
Nonagricultural.....	192,658,135	169,001,465	-23,656,670	-12.28
Time deposits:				
Agricultural.....	235,254,371	219,090,185	-16,164,186	-6.87
Semiagricultural.....	37,349,002	38,254,529	+905,527	+2.42
Nonagricultural.....	100,719,959	111,714,098	+10,994,139	+10.92
Loans and discounts:				
Agricultural.....	395,180,240	376,032,213	-19,148,027	-4.84
Semiagricultural.....	76,255,595	71,630,394	-4,625,201	-6.07
Nonagricultural.....	338,463,580	297,796,372	-40,667,208	-12.02
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	11,567,166	26,598,515	+15,031,349	+129.95
Semiagricultural.....	2,803,175	3,186,087	+382,912	+13.66
Nonagricultural.....	53,341,417	28,205,766	-25,135,651	-47.13
2. Bills payable—				
Agricultural.....	6,300,285	9,535,788	+3,235,503	+51.35
Semiagricultural.....	2,297,300	1,534,240	-763,060	-33.22
Nonagricultural.....	11,592,000	6,256,800	-5,335,200	-46.02
Total—				
Agricultural.....	17,867,451	36,134,303	+18,266,852	+102.24
Semiagricultural.....	5,100,475	4,720,327	-380,148	-7.45
Nonagricultural.....	64,933,417	34,462,566	-30,470,851	-46.93
Basic lines:				
Agricultural.....	42,349,395	33,257,635	-9,091,760	-21.47
Semiagricultural.....	7,908,574	7,652,806	-255,768	-3.23
Nonagricultural.....	47,570,037	39,615,935	-7,954,102	-16.72

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 9—MINNEAPOLIS—Continued.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	\$1,664,863	\$1,967,709	+ 302,846	+ 18.19
Semiagricultural.....	506,441	209,639	- 296,802	- 58.61
Nonagricultural.....	271,549	176,280	- 95,269	- 35.08
2. Bills payable—				
Agricultural.....	7,644,152	15,068,720	+ 7,424,568	+ 97.13
Semiagricultural.....	3,189,786	3,020,052	- 169,734	- 18.15
Nonagricultural.....	2,508,000	1,736,100	- 771,900	- 30.78
Total—				
Agricultural.....	9,309,015	17,036,429	+ 7,727,414	+ 83.01
Semiagricultural.....	4,196,209	3,229,691	- 966,518	- 23.03
Nonagricultural.....	2,779,549	1,912,380	- 867,169	- 31.20

FEDERAL RESERVE DISTRICT NO. 10—KANSAS CITY.

[Agricultural counties, 306; semiagricultural counties, 17; nonagricultural counties, 58.]

Capital and surplus:				
Agricultural.....	\$64,289,786	\$66,885,860	+ \$2,596,074	+ 4.04
Semiagricultural.....	11,909,000	12,877,500	+ 968,500	+ 8.13
Nonagricultural.....	67,202,762	70,413,451	+ 3,210,689	+ 4.78
Demand deposits:				
Agricultural.....	326,744,776	247,678,817	- 79,065,959	- 24.20
Semiagricultural.....	66,633,299	55,629,243	- 11,004,056	- 16.51
Nonagricultural.....	397,227,592	343,035,228	- 54,192,364	- 13.64
Time deposits:				
Agricultural.....	110,122,718	100,808,240	- 9,314,478	- 8.46
Semiagricultural.....	21,069,300	22,839,949	+ 1,770,649	+ 8.40
Nonagricultural.....	112,664,623	119,112,424	+ 6,447,801	+ 5.72
Loans and discounts:				
Agricultural.....	406,677,903	353,818,589	- 52,859,314	- 13.00
Semiagricultural.....	86,960,778	77,963,042	- 9,027,736	- 10.38
Nonagricultural.....	564,857,395	499,452,025	- 65,405,370	- 13.35
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	12,597,337	24,086,167	+ 11,488,830	+ 91.20
Semiagricultural.....	5,558,595	3,675,810	- 1,882,785	- 33.87
Nonagricultural.....	70,794,424	39,181,822	- 31,612,602	- 44.65
2. Bills payable—				
Agricultural.....	9,422,362	9,245,050	- 177,312	- 1.88
Semiagricultural.....	2,094,000	2,145,475	+ 51,475	+ 2.46
Nonagricultural.....	26,838,981	16,885,169	- 9,953,812	- 37.09
Total—				
Agricultural.....	22,019,699	33,331,217	+ 11,311,518	+ 51.37
Semiagricultural.....	7,652,595	5,821,285	- 1,831,310	- 23.93
Nonagricultural.....	97,633,405	56,066,991	- 41,566,414	- 42.57
Basic lines:				
Agricultural.....	58,582,507	45,070,898	- 13,511,609	- 23.06
Semiagricultural.....	12,749,017	10,898,096	- 1,760,921	- 13.81
Nonagricultural.....	81,855,511	72,854,048	- 9,001,463	- 11.00
Borrowing from correspondents:				
1. Rediscounts—				
Agricultural.....	3,224,568	3,070,312	- 154,256	- 4.78
Semiagricultural.....	832,183	307,961	- 524,222	- 66.97
Nonagricultural.....	6,647,689	4,701,492	- 1,946,197	- 29.28
2. Bills payable—				
Agricultural.....	4,569,573	7,726,877	+ 3,157,304	+ 69.09
Semiagricultural.....	2,482,596	2,012,670	- 469,926	- 18.93
Nonagricultural.....	15,280,714	6,400,957	- 8,879,757	- 58.11
Total—				
Agricultural.....	7,794,141	10,797,189	+ 3,003,048	+ 38.53
Semiagricultural.....	3,414,689	2,320,531	- 1,094,158	- 32.04
Nonagricultural.....	21,928,403	11,102,449	- 10,825,954	- 49.37

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 11—DALLAS.

[Agricultural counties, 290; semiagricultural counties, 8; nonagricultural counties, 17.]

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Capital and surplus:				
Agricultural.....	\$75,248,655	\$83,462,028	+\$8,213,373	+ 10.91
Semiagricultural.....	16,165,000	18,637,112	+ 2,472,112	+ 15.29
Nonagricultural.....	31,468,200	37,118,950	+ 5,650,750	+ 17.96
Demand deposits:				
Agricultural.....	341,938,793	246,962,151	-94,976,642	- 27.7
Semiagricultural.....	89,411,761	78,243,196	-11,168,565	- 12.49
Nonagricultural.....	201,085,648	153,043,344	-48,032,304	- 23.90
Time deposits:				
Agricultural.....	39,300,487	40,336,907	+ 1,036,420	+ 2.64
Semiagricultural.....	17,638,809	22,970,681	+ 5,331,872	+ 30.23
Nonagricultural.....	35,713,981	41,872,140	+ 6,158,159	+ 17.31
Loans and discounts:				
Agricultural.....	359,995,120	337,216,517	-22,778,603	- 6.33
Semiagricultural.....	106,505,803	104,207,690	- 2,298,113	- 2.16
Nonagricultural.....	237,410,342	207,492,900	-29,917,442	- 12.60
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	11,736,843	35,169,074	+23,432,231	+199.65
Semiagricultural.....	6,237,641	7,052,790	+ 815,149	+ 13.07
Nonagricultural.....	16,061,135	14,102,572	- 1,958,563	- 12.19
2. Bills payable—				
Agricultural.....	11,988,069	10,613,671	- 1,374,398	- 11.46
Semiagricultural.....	8,770,500	4,160,355	- 4,610,145	- 52.56
Nonagricultural.....	23,667,950	1,601,341	-22,066,609	- 93.23
Total—				
Agricultural.....	23,724,902	45,782,745	+22,057,843	+ 92.97
Semiagricultural.....	15,008,141	11,213,145	- 3,794,996	- 25.29
Nonagricultural.....	39,729,085	15,703,913	-24,025,172	- 60.47
Basic lines:				
Agricultural.....	55,376,270	39,341,075	-16,035,195	- 28.96
Semiagricultural.....	17,983,899	15,870,301	- 2,113,598	- 12.86
Nonagricultural.....	35,902,420	28,701,104	- 7,201,316	- 20.06
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	865,069	2,055,085	+ 1,190,016	+137.56
Semiagricultural.....	86,148	516,219	+ 430,071	+ 500.00
Nonagricultural.....	1,832,560	1,428,074	- 404,486	- 26.10
2. Bills payable—				
Agricultural.....	5,776,675	12,853,572	+ 7,076,897	+122.51
Semiagricultural.....	1,625,000	3,577,759	+ 1,952,759	+120.17
Nonagricultural.....	2,261,000	5,402,700	+ 3,141,700	+138.95
Total—				
Agricultural.....	6,641,744	14,908,657	+ 8,266,913	+124.47
Semiagricultural.....	2,431,148	4,083,978	+ 1,652,830	+ 68.40
Nonagricultural.....	4,193,560	6,830,774	+ 2,637,214	+ 62.89

FEDERAL RESERVE DISTRICT NO. 12—SAN FRANCISCO.

[Agricultural counties, 160; semiagricultural counties, 27; nonagricultural counties, 41.]

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Capital and surplus:				
Agricultural.....	\$56,213,617	\$70,173,424	+\$13,959,807	+24.83
Semiagricultural.....	21,161,000	21,005,355	- 155,645	- 0.74
Nonagricultural.....	136,484,459	150,832,751	+ 14,348,292	+10.55
Demand deposits:				
Agricultural.....	293,533,708	245,021,978	- 48,511,730	- 16.53
Semiagricultural.....	109,999,717	86,073,661	- 23,926,056	- 21.75
Nonagricultural.....	635,135,007	579,064,895	- 56,070,112	- 8.83
Time deposits:				
Agricultural.....	131,690,101	155,099,550	+ 23,409,449	+17.78
Semiagricultural.....	59,664,036	51,935,991	- 7,728,045	- 12.96
Nonagricultural.....	520,879,478	579,440,632	+ 58,561,154	+11.24
Loans and discounts:				
Agricultural.....	357,339,094	404,449,654	+ 47,110,560	+13.19
Semiagricultural.....	128,267,386	122,812,963	- 5,454,423	- 4.25
Nonagricultural.....	930,295,886	972,600,149	+ 42,304,263	+ 4.55

Federal reserve districts Nos. 1-12, inclusive—Continued.

FEDERAL RESERVE DISTRICT NO. 12—SAN FRANCISCO—Continued.

	May 4, 1920.	Apr. 28, 1921.	Increase or decrease.	Per cent increase or decrease.
Borrowings from Federal reserve bank:				
1. Rediscounts—				
Agricultural.....	\$17,190,564	\$32,826,073	+ \$15,635,479	+ 90.95
Semiagricultural.....	4,614,463	6,403,344	+ 1,888,881	+ 41.84
Nonagricultural.....	67,800,892	74,768,067	+ 6,967,175	+ 10.28
2. Bills payable—				
Agricultural.....	12,027,650	18,391,380	+ 6,363,730	+ 52.91
Semiagricultural.....	1,153,405	2,096,900	+ 943,495	+ 81.80
Nonagricultural.....	37,554,800	28,990,000	- 8,564,800	- 22.81
Total—				
Agricultural.....	29,218,244	51,217,453	+ 21,999,209	+ 75.29
Semiagricultural.....	5,667,868	8,500,244	+ 2,832,376	+ 49.97
Nonagricultural.....	105,355,692	103,758,067	- 1,597,625	- 1.52
Basic lines:				
Agricultural.....	47,780,835	41,419,963	- 6,360,842	- 13.25
Semiagricultural.....	18,228,568	18,546,195	+ 317,627	+ 1.96
Nonagricultural.....	146,309,953	145,458,133	- 851,820	- .58
Borrowings from correspondents:				
1. Rediscounts—				
Agricultural.....	3,981,573	3,311,326	- 670,247	- 16.83
Semiagricultural.....	362,500	942,554	+ 580,054	+100.01
Nonagricultural.....	751,740	326,802	- 424,938	- 56.53
2. Bills payable—				
Agricultural.....	8,364,815	14,685,257	+ 6,320,442	+ 75.56
Semiagricultural.....	1,365,500	2,836,475	+ 1,470,975	+107.72
Nonagricultural.....	4,518,500	8,217,694	+ 3,699,194	+ 81.87
Total—				
Agricultural.....	12,346,388	17,996,583	+ 5,650,195	+ 45.76
Semiagricultural.....	1,728,000	3,779,029	+ 2,051,029	+118.69
Nonagricultural.....	5,270,240	8,544,496	+ 3,274,256	+ 62.13

Gov. STRONG. Mr. Chairman, when the table is completed, which will be accompanied by a column chart showing the increase in loans and deposits which have taken place by counties throughout the United States in contrast—that is, in agricultural counties in contrast with other sections of the country—it will probably develop that some important information will be disclosed. (See p. 650.) It involves an analysis of the figures reported by some 9,500 member banks—I think over 9,500 banks—and will take some time to conclude.

Senator LENROOT. I do not know as I got your statement. You said there would be reports from some 9,500 banks, and then I understood you to confine it to the agricultural sections. How many banks are there in the country?

Gov. STRONG. We are considering as agricultural banks the banks in those parts of the country which are classified by the Department of Agriculture as agricultural sections, and then we are contrasting those banks with the other banks of the country.

Senator LENROOT. Then one study gives all of the banks in the United States?

Gov. STRONG. Yes; one study will give all of the member banks in the United States, with the contrast of which I speak.

Senator HARRISON. Governor, what is included in "industrial loans"—under that head? (See tables on pp. 638 and 639.)

Gov. STRONG. I should say that as the New York banks would make up those figures they would be loans generally to the industrial concerns—manufacturing concerns—of the country with which these banks do business—that is, manufacturers, generally.

Senator HARRISON. What do you understand by "speculative loans"? Are speculative loans included in these industrial loans?

Gov. STRONG. They would be included under the heading "All other loans."

Senator HARRISON. It would not be included in the "industrial loans"?

Gov. STRONG. No; they would not.

Senator HARRISON. So the only speculative loans that you could have had at that time would be to the approximate amount of \$110,000,000?

Gov. STRONG. No, sir; I do not think that figure is correct.

Senator HARRISON. \$193,000,000; all other loans; you have \$193,000,000.

Gov. STRONG. But we have only selected from the loan account loans which we thought would be illuminating for this inquiry under these classes, and then have totaled them and given the total with other loans.

Senator HARRISON. So they would be included in the \$5,444,000,000?

Gov. STRONG. Yes, sir.

Senator HARRISON. What per cent of that would be speculative, would you say, if you can give us that?

Gov. STRONG. Well, the New York Stock Exchange loan account, which is the largest speculative loan account, I suppose, of all at that date, November 15, 1920—you will recall that November 3, 1919, was the high-water mark for those loans, but November 15, 1920, is the date of this report. The total of loans on the New York Stock Exchange, on stock-exchange collateral, of all New York City daily reporting banks, as of the latter date for their own account was about \$350,000,000, and the total of loans which those New York banks were making for their out-of-town correspondents at that date would be about \$585,000,000. (See p. 647.)

These charts, which are in the record in the document which I just handed to the reporter, are illuminating on that point, Senator. You understand, Senator Harrison, that the figures included in this table do not include loans which are made by New York banks for their correspondents. Those loans do not appear as an asset or liability on the books of the New York reporting banks.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes; you may proceed.

Gov. STRONG. At the conclusion of yesterday's hearing, I had hoped to point out that the object of discussing at such great length the various types of loans, and the rates relating to those loans, was for the purpose of assembling a picture, the significance of which the commission would understand, as to the relationship between the rates established by the Federal Reserve Bank of New York and the rates borne by the various types of loans that are currently made in the New York market. If, upon reading over the record, I find that the picture I have given is not complete or is insufficiently presented because of the length of the discussion, I hope you will permit me to make a further concise written statement of that matter.

Representative TEN Eyck. Wherever you refer to a chart, and inasmuch as the charts will not be printed into the record, I will ask you whether the charts or blue prints can not be easily made, and whether or not it would be a good idea to give us enough copies of the charts

so that each one of the members of the commission may have one of the charts in his possession when reading over the record.

Gov. STRONG. We have the master charts in our office, and if agreeable to the commission, I will have 10 sets of the charts made up with explanations attached, and furnish them to the commission.

Senator HARRISON. That would be a splendid idea.

The CHAIRMAN. Yes; that would be a very good idea, and we would be very glad to have that done.

Gov. STRONG. Now, Mr. Chairman, I think I can proceed to a discussion of the general subject of control; that is, what measures were taken by the management of the Federal reserve bank of New York to deal with the various problems which came up during the five periods which I outlined at yesterday morning's hearing.

Senator HARRISON. You have discussed the progressive rate, have you not?

Gov. STRONG. I am coming to that, Senator.

The first period, which was the period before the declaration of war, I shall completely ignore, unless the commission desires some further discussion of it.

For the second period, which was the period of our participation in the war, down to August, 1918, I think I have sufficiently described what the policy of the bank was, and I am having assembled certain records of the Liberty loan organization of New York and of the bank to indicate in general what the policy of the two organizations was during that period. In brief, let me say, we have a warehouse with tons of documents covering those transactions; but unfortunately the member of the organization who has had charge of that material happens to be away just now on vacation. However, we hope to select typical exhibits from those records which will bring out the policy which I have described as one of resisting expansion, but at the same time making these loans a success, even if it involved expansion. And with these passing words, I will say no more as to that period particularly, except as respects the activities of the so-called "money committee."

Now, I have with me the original minutes of that organization, if the commission desires to refer to them. But I think possibly I had better describe exactly what transpired. When the Liberty loan committee was organized in April, 1917, one of the first developments with which we were encountered was the tendency on the part of lenders—both New York City banks and out-of-town banks—to withdraw their loans from the stock exchange in order to invest in the new issues of securities being made by the Government. That was one motive; another motive was the fear which instantly developed that the enormous borrowings which would be imposed upon the Treasury for the purpose of conducting the war would make it necessary for the member banks to borrow very large amounts from the Federal reserve bank, and in preparation they wanted to withdraw their loans from stock exchange employment and put their funds into other loans which would be available for discount at the Federal reserve bank.

At the bank we did not feel that same concern, because the expansion which we contemplated would take place in the loan account—which we expected would take place—would have for its basis the securities of the Treasury that caused it, and would give the banks

the available collateral to support the loans as they would be eligible. But I do not think the banks quite appreciated that. And we had many inquiries, and many bankers were very much concerned as to what would be the effect on the credit situation brought about by these war loans. The tendency was at once reflected by money rates advancing on the stock exchange, and we were advised by the officers of the stock exchange that something must be done to take care of the situation on the exchange, or we would have panicky rates and a collapse.

At first, without adequate information, and without as much experience as we later gained, the Liberty loan committee, which was composed principally of the presidents of some of the large banks in New York, almost every day made up a little fund which their own institutions agreed to loan on the stock exchange in order to take care of these withdrawals. We did not want money rates to go skyrocketing, and we did not want a break in the credit and in the stock market such as I have described.

Well, after awhile it became apparent that if that continued very long the tendency would be to have the 10 or 12 large banks, a small number, take over the burden of the entire stock exchange loan account—

Senator HARRISON (interposing). You say a small amount. You have different ideas on those things from some of us; what do you mean?

Gov. STRONG. I say a small group of banks.

Senator HARRISON. About what was the amount involved?

Gov. STRONG. At that time we had no figures; some hundreds of millions. I could not say, but I refer to the stock exchange loan account.

Senator HARRISON. I see.

Gov. STRONG. So that by early fall, or midsummer, it was developed that some arrangement must be made by the banks of New York so that an adequate supply of funds would be available to the stock exchange in order to protect the interests of the Treasury. We had meetings at the bank, calling in groups of probably 10 presidents of banks over a series of days, and explained the situation to them and asked them to cooperate with us in assuring that there would be sufficient funds for stock exchange loans. It resulted, after a little preliminary experimenting, in a fund being furnished of \$100,000,000, to be placed at the disposal of the committee, of which I was chairman, and a contingent fund, only for employment in case the first fund became exhausted, of another \$100,000,000. As that account was actually operated we did not make the loans at the bank; it was simply a measure of control that was exercised over the loans made by each bank for its own account.

It was found that the operation of that account bore unevenly and unfairly on certain banks. They did not want to make these loans, but felt they were required to, in the interest of the Treasury's operation and efficiency, and did it on that account. So that we finally assembled data from all the banks that were in the habit of making these loans and made a fair apportionment of the total stock exchange loan account. At the time that apportionment was made—I am speaking from memory—I think we found there was \$450,000,000 being loaned by those New York City banks. We analyzed the character

of the business of those banks, the banks in the upper part of the city that rarely made loans on the stock exchange, as well as those which were in the habit of making them, and effected a fair division of the \$450,000,000, or thereabouts—between \$450,000,000 and \$400,000,000, I think it was—among all the large banks and trust companies.

Senator HARRISON. This was in 1919?

Gov. STRONG. This was in 1917. And then an apportionment of the increase of \$200,000,000 which I have described was made in like proportions. At that time, or shortly before, we called upon the banks to make a daily report to us of how much they were loaning on the New York Stock Exchange, so that we would know the amount.

Senator HARRISON. If they failed to do their pro rate part, did you get behind them?

Gov. STRONG. If they failed to make the loans?

Senator HARRISON. Yes.

Gov. STRONG. Yes; we did.

Senator HARRISON. They were buying some stocks and selling some stocks, were they?

Gov. STRONG. Those loans were simply replacing one set of lenders for another set of lenders on the market.

Senator HARRISON. Was there any of the speculative element in it?

Gov. STRONG. To the extent that a stock exchange loan is speculative generically, it was all speculative.

Senator HARRISON. Was there ever any arrangement among those lenders that those men would make a bearish market, or a bullish market?

Gov. STRONG. Never to our knowledge.

Senator HARRISON. So that they did not get into it to that extent?

Gov. STRONG. We were accused of it—we were accused of all sorts of things, Senator. One of the things we were accused of by one newspaper writer, who indulges in fantasy and dreams, was that we had tipped off our friends and they sold out their stocks, and then bought them back again when prices went down. We have been accused of all sorts of things.

Senator HARRISON. That would not have been possible, would it?

Gov. STRONG. Well, sir, if anybody in the Federal reserve bank did that, we would like to put him in jail.

Senator HARRISON. Of course, but it would not have been possible, would it?

Gov. STRONG. Absolutely, it would not have been possible.

Senator LENROOT. How did you arrive at this \$450,000,000; did you take the amount of loans outstanding at that time?

Gov. STRONG. We took the amount of loans outstanding at that time; yes, sir.

Senator LENROOT. What was the status of speculation at that time; did speculation in the war industry stocks run pretty high?

Gov. STRONG. Not at that time.

Senator LENROOT. It did not run high at that time?

Gov. STRONG. No, sir. Permit me to say this: Before our entrance into the war, there had been speculation in New York in what were commonly described as the "war brides," and there was no means

of controlling it. There was no machinery for the purpose. I doubt whether sentiment in the United States would have permitted the Federal reserve bank to step in and autocratically or arbitrarily control it. As soon as we were in the war a different situation arose, and I am free to confess that some very autocratic controls were set up, as they were obliged to be set up, Senator. And if they were too autocratic, you can attribute it to the fallibility of the men handling the situation. The attempt was made to exercise an influence of control, as I shall describe later.

Senator LENROOT. Now, will you describe why it was necessary to come to the relief of the stock exchange for the benefit of the Treasury?

Senator HARRISON. Go into that in detail, if you will, because that is quite important, I think.

Gov. STRONG. I would like, of course, to have the officers of the Treasury speak for themselves in those matters. It was felt that what might be described as panicky rates on the New York Stock Exchange would result in a precipitate decline in securities and uneasiness throughout the country, and cause consequent difficulty in placing certificates of indebtedness and the long-time war loans. That, in a brief word, expresses the opinion which I think prevailed at the time.

Senator LENROOT. On the other hand, to just the extent that encouragement was offered for the indulgence in speculation, to that extent it withdrew that amount of money from other and legitimate needs, did it not?

Gov. STRONG. When I come to a review of that matter from the records of the committee, I am going to point out and emphasize one thing: That the members of the New York Stock Exchange were not permitted to increase their loans beyond the amount which we found there; they were not permitted to. I express it that way from the standpoint of the committee that was exercising this control. Now, from the standpoint of the New York Stock Exchange—I must state this in fairness and in justice to the members of the New York Stock Exchange—from the standpoint of the New York Stock Exchange, never did they hesitate for one minute in doing what we asked them to do. And the exercise of this control was never questioned by the business conduct committee of the New York Stock Exchange, which put the clamps on speculation and would not permit the loans to expand.

Senator LENROOT. Then do I understand that during the war period, the actual loans were not increased beyond \$450,000,000?

Gov. STRONG. I have the actual figures here.

Senator LENROOT. Approximately?

Gov. STRONG. They were not permitted to increase beyond the amount shown on a certain day selected.

Senator LENROOT. Some time early in 1918?

Gov. STRONG. No, sir; the committee got control from the business conduct committee, I think, in August, 1918. There was no necessity for control before that. The tendency was to reduce the amount of such loans.

Senator LENROOT. I thought you said it was in 1917 that you determined on this \$450,000,000?

Gov. STRONG. Yes; but the tendency of the banks during all that period of the war was to withdraw money from the stock exchange. Had we permitted that money to be withdrawn from loans on the stock exchange to the extent that it might have been, we would have had a great difficulty to deal with. And the curtailment of loans on the New York Stock Exchange from that period until August, 1918, was automatic. Our effort was to keep enough money on the exchange to prevent a collapse in values.

Senator LENROOT. What you meant was, that it was not until August, 1918, that it was necessary to take control, I suppose?

Gov. STRONG. Yes; and you will see that as soon as the community sensed the coming success of the allied armies then the spirit of speculation developed, and the policy of the committee changed. From an effort to furnish enough money to prevent a collapse of values on the stock market our effort then was changed to restricting the amount of money going into speculation and to preventing speculation on the exchange.

Senator LENROOT. For the purpose of comparison, what is the approximate value of stock exchange loans to-day?

Gov. STRONG. Those made by the New York—

Senator LENROOT (interposing). As compared with the same loans you mentioned, \$450,000,000.

Gov. STRONG. I reported yesterday, Senator, that the loan account of New York City banks has been at times lower since the reports were made to us, but that it was \$470,000,000 as of the day before referred to.

Senator HARRISON. What was the amount prior to 1917, when you fixed \$450,000,000 as the basis?

Gov. STRONG. We have no means of telling, Senator.

Senator HARRISON. Have you any idea, so that you could estimate that?

Gov. STRONG. From the outbreak of the war, during the period when the stock exchange was closed, my belief is that the amount of the stock exchange loan account was very greatly reduced. People who had money took up their loans during that period, when there was no market for securities.

Senator HARRISON. How did you arrive at the basis of \$450,000,000?

Gov. STRONG. By the report that was made in November.

Senator HARRISON. The amount of calls at that time?

Gov. STRONG. The amount that was outstanding at that time, and we endeavored to crystallize and keep the amount at that figure.

Representative TEN EYCK. Let me ask you: When you first agreed upon \$100,000,000, and then went to \$200,000,000, and then went up to \$450,000,000, this was what you might call a reservoir of money to take the place of other money that was withdrawn?

Gov. STRONG. Exactly.

Representative TEN EYCK. But it was not placed on the market to help speculation?

Gov. STRONG. Not at all.

Representative TEN EYCK. But was used as a reservoir to take the place of other funds?

Gov. STRONG. As the money was drawn out by certain lenders it had to be replaced, and we organized by getting 65 lenders to put in

the money, in order to make up the necessary amount, and so that the large withdrawals would not reduce the amount and give us trouble.

Representative MILLS. When you say "trouble," Governor, will you define that a little further?

Gov. STRONG. Congressman Mills, whether we were right or wrong—I think we were right—I think we would have had trouble if that \$200,000,000 had been suddenly withdrawn from the New York Stock Exchange.

Representative MILLS. Let me ask you this further question: In order to market the Government securities, you have got to have a market for securities generally?

Gov. STRONG. Yes, sir.

Representative MILLS. And if there had been a collapse of prices on the New York Stock Exchange, even assuming that it might have stopped short of a panic, it might have reached the point where there was no market for securities, could it not?

Gov. STRONG. It might have done so.

Representative MILLS. And if there was no market for securities, it would have been very difficult for the United States Government to have placed large loans at a low rate of interest, would it not?

Gov. STRONG. It would have been exceedingly difficult.

Representative MILLS. So that, to permit the United States Government to place loans, it was absolutely necessary to maintain the integrity of the security market of the country, was it not?

Gov. STRONG. Yes, sir; and as you will understand, it was very difficult to maintain the securities market generally.

Senator LENROOT. Why do you say that in order to market the Government securities it was necessary to maintain a market for other securities?

Gov. STRONG. Let us suppose that all securities—investment securities—had suffered a decline because of a rise in interest rates, not only on the stock market but all over the country. The United States Government was competing with all other borrowers in the money market. Senator, as I stated yesterday, it is not the interest which is fixed by Congress on a Liberty loan which fixes the price of the credit in the market. It is the value which the market places on those securities, and had the securities been forced by these developments on the stock exchange to a much lower price, and consequently a much higher interest rate developed, it would correspondingly have caused a decline in the price of the United States Government bonds, and consequently necessitated a higher rate which the Government would have had to pay for its credit.

Senator LENROOT. Do you think there was any considerable percentage of the Liberty loans that were purchased upon an investment basis?

Gov. STRONG. Upon the basis of an investment return?

Senator LENROOT. Yes.

Gov. STRONG. Well, from such discussions as I had in that matter, and from very careful estimates and comparisons that were made throughout the entire period of the war of the investment interest basis of all types of investment securities—those matters were examined with utmost care, Senator—I think the Treasury was drawing information and advice from all sections of the country in order to establish interest rates at a level which would reasonably

insure success. But I do not mean to imply that we were relying upon the interest rate alone for success; had sole reliance been placed on that, the Government of the United States would have been obliged to pay much higher rates.

Senator LENROOT. I think so. Were not the great bulk of the loans placed on patriotic grounds, rather than on the rates promised?

Gov. STRONG. I think so. That is true after the first loan, anyway.

Senator LENROOT. I think so.

Gov. STRONG. The investors knew that we were entering upon a period of high tax rates, and that made the 3½ per cent, tax-exempt bonds attractive.

Representative TEN EyCK. Yes; but in the beginning, when they attempted to sell them, as they did, and the brokers went out to sell them in the different offices, like they had attempted to sell bonds previously, that was practically a failure.

Gov. STRONG. The investment feature was negligible alongside of the patriotic feature, as it went afterwards.

Representative TEN EyCK. After they started in on the patriotic idea, it was then that they were bought?

Gov. STRONG. I wish I felt justified in taking the time of the commission in telling you some of the romance connected with the sale of these bonds. But I feel that this is not the time, nor is it the place to put it in this record.

Senator LENROOT. Then your answer to Mr. Mills' question should not stand as you put it, that in order to market these bonds there must be a market for other securities?

Gov. STRONG. I think it had——

Senator LENROOT (interposing). Outside of the first one.

Gov. STRONG. On the investment market?

Senator LENROOT. Put it this way: Don't you believe these other bonds, whoever bought them, thereby cut himself off, by buying the other bonds, from buying the Government bonds; he cut himself off from his ability to buy Government bonds, did he not?

Gov. STRONG. Well, this security market, Senator, was important to the Treasury for another reason——

Senator LENROOT (interposing). I see that, but I am coming now to this proposition, that I do not think you want to have your answer to Mr. Mills stand just as you made it.

Gov. STRONG. There were hundreds of thousands of people in this country who converted their securities in order to buy the Government securities. Take my own case. I sold almost everything I had in order to buy these loans; otherwise I would have had to sell my securities in a declining market.

Senator LENROOT. But somebody had to buy them.

Gov. STRONG. If I had to do that, it would have involved a severe sacrifice on my part in buying these Government securities; one which I do not think should have been imposed, if we could avoid it, and we were endeavoring to avoid it.

Now, let me take one instance: In the fourth Liberty loan, the one in which we had the uneasiest times, because then everybody felt peace was at hand. We feared a loan failure in New York; we were very much afraid of it. We took the statements of the six largest life insurance companies in our district, and they are the largest in

the country—analyzed them and figured how much their cash resources were; how much their income was; how much they had invested already in previous war loans; what their liabilities were—their payments to policy holders; that is, what they were shown to be on an average. The presidents of those six life insurance companies came to my office. I explained the situation to them. They pointed out to me that they had already subscribed \$70,000,000 to the four loans, but as a result of representations we made to them they increased their subscriptions by \$180,000,000 at that one meeting. Now, the one thing we had to assure those life insurance company presidents was that if they made this subscription, and the time came when they needed to borrow the money for periods of months or years, would they be protected? Would they get the money? And we had to agree, if they made these subscriptions, and had to make borrowings from the banks, that we would take care of them, and we did. Now, what position—and I use this to illustrate the point—what position would we have been in with investors such as those and generally, had we attempted to negotiate these enormous loans at a time when security values were crumbling? I think we would have had a very serious and difficult time, Senator.

Senator HARRISON. Would your boards call in and allot certain stocks on the stock exchange; would you designate how much should be bought, and so on?

Gov. STRONG. No; I will bring all that out in what I propose to say.

Senator HARRISON. I was just curious to know whether you told them there were certain stocks they ought to take care of?

Gov. STRONG. Senator, I know the stories that were going about.

Senator HARRISON. I do not know those stories.

Gov. STRONG. I have heard them, and read them, and have had them sung and whistled to me, but I think the best treatment to accord to those stories and the authors of them is to ignore them.

Senator HARRISON. I have not heard the stories; I was curious to know the facts of the case. You stated that you gentlemen and you, yourself, in order to purchase some of these Liberty bonds, had to get rid of some of your stocks.

Gov. STRONG. I did not own any stocks; just bonds.

Senator HARRISON. Now, that money was loaned to certain people, and certain people were buying Liberty bonds. Of course, you did not designate what should be bought or sold?

Gov. STRONG. No, sir; we did not.

Senator HARRISON. There wasn't any action on that at all?

Gov. STRONG. There was not.

Senator HARRISON. All action touching this matter was approved here by the Federal Reserve Board, was it?

Gov. STRONG. Oh, I think so. Now, the theory on which the Federal reserve bank conducted business for the Treasury was, I think, generally this: That, while the Federal Reserve Board was constantly in touch with our policies and what we were doing, the Federal reserve act provides that the Secretary of the Treasury may require the Federal reserve banks to do certain things, and our contact with the Treasury was a direct contact. All of the measures and policies that were adopted were adopted as the result of the relationship direct between the Treasury and the Federal reserve

banks. Of course, the Federal Reserve Board was an important factor in the determination of the policies of the Federal reserve banks through all this period. But in selling the loans of the Treasury and placing their loans, we received our directions and undertook to formulate our policies on instructions forwarded to us direct from the Treasury; and they were not passed to us, so to speak, through the Federal Reserve Board.

Representative MILLS. Gov. Strong, in pursuing this policy which you have described, you were acting in entire accord with Mr. McAdoo, were you not?

Gov. STRONG. Oh, yes.

Representative MILLS. And dealing directly with him?

Gov. STRONG. Yes, sir. If you will permit me to proceed with this money statement, much of this inquiry which you are making will be made clear from the original documents.

The CHAIRMAN. You may proceed.

Gov. STRONG. The activities of the subcommittee of the Liberty loan committee to which I have referred as the "money committee," formally took shape in the middle of September. The first minute appears to be dated September 18, 1917; and on October 1 the following statement was given to the press by that committee [reading]:

The subcommittee of the Liberty loan committee, which has been gathering data from the banks and trust companies of this city, authorizes the following statement:

"Daily reports are now being received from all the banks and trust companies in New York City in response to the request recently sent them.

"In view of the approaching period during which large payments will be made on account of the new issue of Government bonds, the committee has considered it prudent to make arrangements with a large number of the banks and trust companies which are now filing these reports, to place at the disposal of the committee a fund to be loaned in their discretion as needed.

"The committee has pledged that a very large sum will be provided, of which over \$200,000,000 is immediately available. It is expected that by this means the credit resources of the Federal reserve bank will be made available as needed.

"The members of the committee which will have charge of the handling of this fund are as follows: James S. Alexander, George F. Baker, Walter E. Frew, Gates W. McGarran, Charles H. Sabin, Benjamin Strong, Frank A. Vanderlip, James N. Wallace, and Albert H. Wiggin.

That was generally reprinted in the press of New York on October 2.

The next statement given to the press was a statement given out after a meeting of the committee, and the statement I have here is a reprint from the New York Times of October 2, 1917, as follows [reading]:

The committee, after its meeting, authorized the following statement:

"Daily reports are now being received from all the banks and trust companies in New York City in response to the request recently sent them.

"In view of the approaching period during which large payments will be made on account of the new issue of Government bonds, the committee has considered it prudent to make arrangements with a large number of the banks and trust companies which are now filing these reports to place at the disposal of the committee a fund to be loaned in their discretion as needed.

"The committee has pledged that a very large sum will be provided, of which over \$200,000,000 is immediately available. It is expected that by this means the credit resources of the Federal Reserve Bank will be made available as needed."

Another statement given to the press had relation to the desire which we wanted to express that commercial borrowers who sold paper in the market should reduce the maturity dates of their bor-

rowings; that is, reduce the time or usance as much as possible. That statement is brief, and is as follows [reading]:

A recent letter from Gov. Harding of the Federal Reserve Board to the governors of the Federal reserve banks states that the board looks with approval upon the suggestion that commercial paper be made to run for not longer than four months, instead of six months, as is frequently the case at the present time.

This committee, in analyzing the present financial situation, considers it of utmost importance to emphasize this suggestion in every possible way. It should be made certain that the amount of commercial paper eligible for rediscount is the maximum that can be provided.

This committee believes that the financial machinery of the United States is sufficiently sound and elastic to meet the strain incident to the forthcoming war loan and subsequent loans. It feels, however, that the handling of such vast sums as are required by the present situation calls for the most careful preparation and forethought. Any method which will obviously strengthen the money situation should be adopted.

If current commercial paper is made to run for not more than four months, instead of six months, as is the present general practice, the credit situation will be greatly improved.

That statement was printed in the New York newspapers.

Now, from October, 1917, the date of the statement which I have read, until August, 1918, which is the date to which I assigned the change in conditions and consequently a change in policies—August, 1918, there were no statements made to the press; at any rate, no statements of any consequence, because during the entire time in that period we had attempted to keep stable the amount of the New York stock exchange loan account, and the efforts of the committee, I think had been successful in preventing money rates at any time during that period on the New York stock exchange from exceeding 6 per cent. With the approach, as I have stated more than once, of what was generally believed to be the successful conclusion of the war, these reports which we were receiving from the stock exchange, as well as from the member banks, began to show a tendency by the public to buy stocks for a rise. In other words, the movement of the stock exchange account began to increase, and the policy of the committee had to be changed.

Senator HARRISON. That was in August, 1918?

Gov. STRONG. August, 1918. And the policy of the committee had to change from a policy of keeping the market supplied with an adequate amount of credit; that is, replacing what was withdrawn, to a policy of restricting the amount of money employed in that manner. This statement was given to the press on August 29, 1918 [reading]:

The efforts to stabilize money rates made since the first Liberty loan was offered have met with a cheerful and sincere cooperation on the part of borrowers and lenders. The Government in prosecuting the war requires a constantly increasing amount of money and while every effort will continue to be made to maintain rates at the present level, it is thought wise, in view of the present progress of the allied armies, to point out that any disposition to indulge in speculative commitments based on borrowed money must of necessity lead to an increase in rates that will prove corrective.

That was the first statement given to the press that year, and it was generally published in the New York newspapers of August 30, 1918.

Now, prior to this we had been conducting some informal discussions on the growing tendency toward speculation on the New York Stock Exchange, with the officers of the stock exchange, and I think I should read a letter which I wrote to the president of the stock exchange on September 5, 1918, at the direction of this so-called money committee of which I was the chairman.

Senator HARRISON. I wish you would read the other list of those names.

Gov. STRONG. The names, Senator, are in this letter, and I will read the names in the course of this letter, if you will permit me.

Senator HARRISON. Yes.

Gov. STRONG. This letter is dated September 5, 1918. [Reading:]

SEPTEMBER 5, 1918.

MY DEAR SIR: As you are aware, a subcommittee of the Liberty loan committee of this district was appointed on September 5, 1917, and has undertaken certain duties in connection with the New York City money market, for the purpose of securing the most complete cooperation with the Government in its financial program by all the financial interests of the city. The members of the subcommittee are the following gentlemen: Benjamin Strong, chairman; James S. Alexander, George F. Baker, Walter E. Frew, Gates W. McGarrah, Charles H. Sabin, Frank A. Vanderlip, James N. Wallace, Albert H. Wiggin.

Senator HARRISON. Will you tell us who each one of those gentlemen is, and what he is connected with?

Gov. STRONG. Mr. Alexander is president of the National Bank of Commerce, of New York; Mr. Baker is chairman of the board of directors of the First National Bank of New York; Mr. Frew is president of the Corn Exchange Bank of New York, a State bank; Mr. Gates W. McGarrah is president of the Mechanics & Metals National Bank; Mr. Sabin is president of the Guaranty Trust Co.; Frank A. Vanderlip was president of the National City Bank; Mr. James N. Wallace, who has since died, president of the Central Union Trust Co.; Mr. Albert H. Wiggin was president of the Chase National Bank.

Senator HARRISON. Some of these gentlemen represented banks which were not members of the Federal reserve system?

Gov. STRONG. They were all members of the Federal reserve system.

Senator HARRISON. The Guaranty Trust Co. was not, was it?

Gov. STRONG. Yes, sir.

Senator HARRISON. Is it now?

Gov. STRONG. Yes; they all became members shortly after our declaration of war.

To read this again, Mr. Chairman, so as not to lose the connection. [Reading:]

SEPTEMBER 5, 1918.

MY DEAR SIR: As you are aware, a subcommittee of the Liberty loan committee of this district was appointed on September 5, 1917, and has undertaken certain duties in connection with the New York City money market, for the purpose of securing the most complete cooperation with the Government in its financial program by all the financial interests of the city. The members of the subcommittee are the following gentlemen: Benjamin Strong, chairman; James S. Alexander, George F. Baker, Walter E. Frew, Gates W. McGarrah, Charles H. Sabin, Frank A. Vanderlip, James N. Wallace, Albert H. Wiggin.

The work of the subcommittee has met with the cordial cooperation of the important interests connected with the New York money market, and there has been maintained an orderly course of affairs in which the supply of funds has been ample for the essential needs. We believe this condition can be continued. It is obvious, however, that for the present there should be devoted to the security market no additional credit beyond the funds now so used. Any tendency to expand the collateral loan account should, for the general good, under present conditions, be checked.

In order that this important situation may be handled in a way that will result in the least possible inconvenience, it is desirable that we should have a complete daily view of stock exchange loans. We recognize the disposition of the stock exchange to cooperate in every way toward contributing to the orderly conduct of the money

market and, depending upon that patriotic disposition, we now ask the governors of the stock exchange to collect, for the confidential use of this committee, daily statements from each member of the exchange showing in such detail as may be agreed upon in conference, the amount of time and call loans of each stock exchange house.

This information will be for the confidential use of the committee, in whose hands has been placed the responsibility for maintaining an orderly money market. The reports will be asked for during a temporary period. At the present time it is impossible for us to say for just how long a period they will be needed. We will be obliged if you will ask the members of the exchange to begin these reports at the earliest date practicable.

Let any possible misunderstanding arise as to the object of this request, I am directed by the committee to explain that this is only one of a number of measures being undertaken by the committee with the object of exercising, by mutual understanding among the institutions and firms in this city, such reasonable and necessary control of the employment of credit as will insure no interference with the financial operations of the Government in conducting the war.

Accurate information as to the amount of bank credit being employed for stock-exchange purposes will be useful in attaining these objects.

I am also directed by the committee to express its cordial appreciation of the spirit of cooperation which has always been shown by the officers and members of the stock exchange in matters of this kind, which feeling is shared by the officers of the Federal reserve bank.

Very truly, yours,

BENJAMIN STRONG,

Chairman of the Liberty Loan Subcommittee on Money.

H. G. S. NOBLE, Esq.,

President New York Stock Exchange, New York, N. Y.

This letter was given to the press by the officers of the New York Stock Exchange and was published in the newspapers of that city. In fact, the copy which I have read is a reprint from a copy published in the New York Times on September 7, 1918.

Now, in that period with which this letter deals, and subsequent to that period, we found that the speculative tendency was rather insistent and was becoming exceedingly difficult to control, and a great many measures were discussed as to how absolute direct control could be applied to prevent an enlargement of the loan account. And the first and most natural suggestion was that an increase in the amount of margins required by the banks for such loans would be an effective brake; that would require more money to enable speculators to buy stocks on a margin. So another letter was addressed to the president of the New York Stock Exchange, which I believe the "money committee" itself gave to the press, the letter being dated October 24, 1918. I am reading from a reprint which appeared in the New York Herald on October 25, 1918. [Reading:]

The reports now being made by the members of the New York Stock Exchange disclose a considerable increase in the loan account, although advices from the money committee have been that, having due regard to the financial requirements of the Government, there should be no increase in borrowings for stock-exchange purposes.

The financing of the fourth Liberty loan will impose a burden upon the credit resources of the country materially larger than the financing of any previous loan, and the future financial requirements of the Government will impose further heavy burdens upon the money markets.

RECOMMENDS 30 PER CENT MARGIN.

In view of the current increase in the amount of stock-exchange loans, the money committee deems it necessary now to take steps to prevent a further expansion of such loans and forthwith will recommend to the banks that for the time being a 30 per cent margin be required on all regular loans instead of the customary 20 per cent margin, and a corresponding increase in margin on other loans, these increases to be made effective on and after Monday, November 4, 1918. The committee later may find it desirable to recommend a further increase in margin.

It is hoped that this measure will prove effective and that advances in money rates may be avoided.

The banks have made favorable terms for loans growing out of subscriptions to and secured by bonds of the fourth Liberty loan, and the recommendations of this committee are not to be construed in any way as referring to such transactions.

It should be understood clearly that the present recommendation or any future recommendation by the money committee is not to be construed as expressing any views as to values represented by current prices of securities, but is designed solely to conserve the public interest by preventing, in so far as possible, undue speculation at a time when the credit resources of the country must be marshaled for the use of the Government in carrying out its war program.

At your suggestion we are inclosing with this, under sealed cover, a list showing the increases and decreases in the total loans of each reporting member of the exchange since the date when reports were first completely made, and desire to express our appreciation of your proffered cooperation.

A carbon copy of this letter which was in our file contains this paragraph:

A copy of this letter is being given to the press, and I would thank you to promptly make known the contents hereof to the members of the stock exchange.

That paragraph was not in the article published in the press.

The minutes of the money committee of October 24, 1918, recite that the money committee proposed to give publicity to the letter recommending the increase of margins on stock exchange loans.

The CHAIRMAN. What are the general margins?

Gov. STRONG. The usual margins are 20 per cent on loans on what is known as mixed collateral; that is, a certain proportion of railroad bonds and stocks, and a certain proportion of industrial bonds and stocks. On loans secured wholly by industrial stocks it was 25 per cent. The effect of this letter was to increase the margin of collateral for loans on mixed collateral to 30 per cent, and on loans secured wholly on industrial stock collateral to 37½ per cent.

In reply to this letter, as I recall—I do not have it before me—we received an acknowledgement from the president of the stock exchange indicating that they understood and would accede to this requirement which was asked by the banks. They subsequently met us, however, and told us that it worked a great hardship on a number of their members; that it did not bear equally on all of the members. That is to say, a small house did not have the means and could not furnish the margin over what the customer furnished for his account, as the larger houses did, and the tendency was to have all the business of the stock exchange drift to the larger and richer houses, and the smaller houses were feeling it. And a good many discussions of that matter were held with the officers of the stock exchange, until finally, on November 30, 1918, this letter was addressed to me by the president of the stock exchange; and while I can not give you any information as to how it was made public, I presume it was given to the press by the officers of the stock exchange, because it was printed in the New York Times on December 5, 1918, as follows [reading]:

NEW YORK, November 30, 1918.

BENJAMIN STRONG, Esq.,

Governor Federal Reserve Bank, New York, N. Y.

DEAR SIR: The importance of keeping the volume of loans upon securities from increasing at the present time is thoroughly understood and appreciated by the financial community. It would seem, therefore, that the money committee's requirement of a margin of from 30 to 37½ per cent on stock exchange loans has ceased to be necessary.

This requirement works many hardships and produces serious injustices, and, believing as they do that the influence of the banks and of the exchange is amply able to control the situation without it, the stock exchange committee, of which I am chairman, would urge that the money committee consider the advisability of having this additional margin requirement withdrawn.

Hoping that the money committee will give this request favorable consideration, I am,

Yours, very sincerely,

H. G. S. NOBLE, *President.*

That communication was considered by the "money committee," and the following reply was sent to President Noble, which also is a reprint from the New York Times of December 5, 1918. The letter is dated December 4, 1918, and is as follows [reading]:

MY DEAR SIR: Your letter of November 30 was submitted to the money committee at its regular meeting, held yesterday afternoon.

There has been no change in the situation to justify an increase in the total of the stock exchange loan account, and it is not probable that additional funds will be available for stock exchange loans so long as the Government continues to be a borrower on the present large scale. Nevertheless, as your letter states that the exchange is amply able to control the situation without continuing the requirement by the lending banks of additional margin, as outlined in the committee's letter of October 24, 1918, the committee has decided to accede to the request contained in your letter of November 30, and will at once communicate with the associated banks in this city to that effect.

In the event of developments necessitating such action, the committee will request the associated banks to exact requirements for additional margin.

Very truly, yours,

BENJAMIN STRONG,
*Chairman subcommittee on money of the
Liberty Loan Committee, for the committee.*

H. G. S. NOBLE, Esq.,
President New York Stock Exchange, New York, N. Y.

Subsequent to the letter of December 4, which I have just read, I was advised by the president of the stock exchange that the business conduct committee of the exchange was taking absolute control of the matter and whenever the reports which were made daily showed that any member of the stock exchange, or any firm was increasing its loan account, it was called to appear before the business conduct committee and required to make explanation of the cause of the increase; and, in point of fact, during the period of control, which was exercised by the business conduct committee of the exchange, I do not recall that the loan account, as reported by the members of the exchange, increased at all. They held it down by direct contact with their members.

The arrangement, however, between the "money committee" and the associated banks of New York was made for limited periods from time to time, and the period in which these letters were written expired by limitation of the agreement on January 10, 1919; and, of course, in the meantime the armistice had been signed, and the demand was developing all over the country to relax these war-time requirements. "Let business go back to its normal procedure," was everywhere demanded and the demand by the members of the New York Stock Exchange became very insistent. I think the demand by the public was very insistent that these artificial controls that had been introduced during the war should be discontinued. This was represented very strongly to the Liberty loan organization, and in view of these representations, on December 30, the following

statement was authorized for release to the press by the "money committee." [Reading:]

In view of the approach of the time when the arrangement on the part of the banks to furnish money for the purpose of stabilizing rates on stock exchange loans would expire by limitation, namely, January 10, 1919, it was deemed wise by the subcommittee on money of the Liberty loan committee to confer with the officials of the Treasury, that their wishes as to an extension of the present arrangement might be known.

Such conference was had, and the Treasury has written as follows:

"The Treasury requests the subcommittee on money of the Liberty loan committee to continue its operations in aid of the Government's financial requirements, on the one hand to prevent an increase in the rate for call money, and on the other hand to prevent expansion of the loan account."

Acting in accordance with the expressed wish of the Treasury, the subcommittee on money has arranged with the banks to continue the present arrangement and has arranged with the authorities of the stock exchange that they shall continue to exercise control to prevent expansion of the aggregate loan account.

That statement was widely published in the New York newspapers on December 31, 1918.

Speaking simply from hearsay, because I left New York for a short period in the winter of 1919, what transpired subsequently and during the month of January was that these representations became increasingly so urgent that we had no longer any right, without warrant of law, to continue to exercise this control over the stock exchange. The representations which were submitted directly to the "money committee" by the stock exchange authorities and members of the exchange became so strong that they were transmitted to the officers of the Treasury Department by the members of the committee, and it was decided, after most careful consideration, that a justification for continuing this control no longer existed. I was not at these meetings, so I can not speak from my own memory, but I speak from what was repeated to me, that after the most careful deliberation, and in agreement between the officers of the Treasury and the money subcommittee of the Liberty loan committee, and after the Treasury had very reluctantly, so far as I can gather—certainly reluctantly—agreed, it was decided that the money committee must be disbanded and its control discontinued. And following that decision, on January 24, 1919, a statement was given to the press in relation to that decision. This was authorized at a meeting of the "money committee" held on January 24, 1919, as follows [reading]:

STATEMENT FOR THE PRESS.

JANUARY 24, 1919.

A meeting of the subcommittee on money of the Liberty loan committee was held to-day after which the following statement was made:

Last December when the arrangement whereby the New York banks have been furnishing funds to stabilize rates on loans on stock exchange collateral was about to expire, the committee inquired whether the Treasury Department wished an extension of the arrangement then in force and were requested by it to continue their operations in aid of the Government's financial requirements.

Acting in accordance with the wish of the Treasury, thus expressed, the subcommittee on money arranged with the New York banks to continue the arrangement then existing until after the next Government loan and with the authorities of the stock exchange to continue exercising control of the loan account to prevent its expansion in the aggregate.

This week, however, the officials of the stock exchange, in a written communication to the money committee, having stated that the conditions have so changed that "there is now nothing to indicate the probability of a speculative movement which would absorb large amounts of money," the subcommittee on money at its meeting to-day gave full consideration to this statement, and, after consultation with and the approval of the Treasury Department, reached the following conclusions:

1. That control by the stock exchange committee may for the present be suspended.
 2. That the stock exchange authorities be requested to continue to receive from members of the exchange daily reports of their borrowings until after the next Liberty loan is placed.
 3. That the definite arrangements made with a large group of New York banks to furnish funds for stock exchange loans, if and as required, should now be terminated.
- The money committee desires to acknowledge and record its appreciation of the hearty cooperation which the members of the stock exchange and the New York banks have given it during the past months and feels confident that should it hereafter become necessary, in the interest of Government financing, to reestablish the control of money for stock exchange loans and for the stabilization of money rates, the stock exchange authorities and the New York banks will again unite, with a patriotic purpose, to lend full support to the Treasury Department.

The CHAIRMAN. This letter marks the relinquishment of the control of the money committee over the money market in New York?

Gov. STRONG. Yes; this was a statement given to the press. It was a matter of very active discussion by interested parties and in the press at that time as to what the policy of the money committee would be. And the members of that committee were insistent in their dealings with the stock exchange authorities that every action of this character which the committee took should be immediately made public. They felt that it was for their protection that it should be made public.

The CHAIRMAN. At this time it was known that the Government would probably have to float another loan, was it not?

Gov. STRONG. Yes; that was the loan which we were looking forward to as the Victory loan.

The CHAIRMAN. What difference was there in the situation in regard to that loan as respects the prior loans which permitted this change of policy at this time?

Gov. STRONG. I think the principal difference, Mr. Chairman, was the difference in the spirit of the country; it was tired of being harassed by control in everything it did. The people wanted to get along to "business as usual," and the action of the committee which, of course, was always taken in conference with the officers of the Treasury who were interested in these activities, was, I think, largely in response to an insistent public demand; and even now, in the light of future events, I doubt very much whether that type of control which was exercised by this committee and by the business conduct committee of the exchange could be justified when there was no war. There was no warrant of law for the things that we were doing. These are matters of opinion which I would like to discuss frankly with the commission. My own belief at the time, personally, and my belief at this time is that had it been possible for us to have continued that type of arbitrary control, it would have been a good thing to do it. It was one of the controls exercised during the war period which was exceedingly effective and beneficial. And we always regarded, and frequently stated, that a change between war and peace had only occurred in a military sense, and had not occurred in a financial sense; that the same influences of war which necessitated the controls in financial matters would continue after the war ended, and if public opinion had permitted it—I think I should fairly express my own opinion—it might have been a good thing to continue it.

The CHAIRMAN. Apparently on the basis of the chart which you have submitted, and on the basis of the shares traded in on the New

York Stock Exchange, immediately following the release of this control, there was a very marked tendency toward increasing the amount of call money on the New York market, both by New York banks and out-of-town banks; and also a very marked increase in the number of transactions on the stock exchange.

Gov. STRONG. Yes.

The CHAIRMAN. Indicating very markedly increased speculation?

Gov. STRONG. Yes; it was in anticipation of that development, symptoms of which arose in August, 1918, that led the money committee to change its policy from a policy of insuring that money withdrawn from the stock exchange would be replaced to a policy of restraint and restriction upon the movement of money that was to be loaned on the stock exchange. I think this control was most effectively exercised, so far as we were capable of exercising it, during the period that commenced some time in September, 1917, and ended in the latter part of January, 1919.

The CHAIRMAN. Well, of course, the policy with respect to the exercise of control over the money market during the war and the release of that control was no different than the general policy that was followed throughout the administration of the Government; there was a relaxation of all control; the War Industries Board and the other organizations adopted general policies at that time, and those policies were policies of releasing the people and the industries of the country from war-time control.

Gov. STRONG. Mr. Chairman, I do not think it is possible to-day to restore the atmosphere of those days and give you a picture of the public feeling which was aroused at what was regarded as the arbitrary and high-handed behavior of this money committee. To illustrate: I had an anonymous correspondent apparently residing in Reading, Pa., who wrote me more than once—because my name happened to be attached to these statements—that if I did not look out they would blow me up; that no one had any right to exercise these powers as to how much money was to be loaned on the stock exchange. Of course, it was written by an ignorant person, and must be regarded as coming from such a source, but it gives evidence of the feeling of the people at that time. I remember one postal card I received where the warning was emphasized by a liberal use of red ink in the message which was written.

The CHAIRMAN. Your policy was influenced by the sentiment of the country at this time and not by any belief on your part or on the part of the Treasury that speculation at this period was desirable?

Gov. STRONG. I think I should state it a little differently, Mr. Chairman. In conversation with the Treasury officials, and in correspondence with the officers of the Treasury, those conversations and that correspondence indicate that they would have liked to have the control continue. At the meetings of the money committee in New York, meeting in my absence, I think each one felt that the time had come to discontinue this control. In fact, a subcommittee went to Washington to discuss the matter and recommended that it be removed. All of this was conveyed to me where I was at the time by telephone. And I expressed the opinion that if it could be continued, it should be continued.

Of course, I am speaking from memory. I have not looked over my personal correspondence to see whether I wrote that, but I

think perhaps I did. But you must not attach too much importance to my expressions at that time, because I was away resting, and I was not in the atmosphere where these gentlemen were. The situation was sufficient to convince these men on the ground, and the officers of the Treasury themselves, who were, however, reluctant to assent to it, that it was necessary to withdraw the control.

The CHAIRMAN. Was the policy at this time at all influenced by the signing of the armistice, and the fact that 4,000,000 men would be brought back to this country and into the industries of the country from France, and those who were in the cantonments here at home, and they would be, presumably, out of employment, and the prospect of a readjustment from a war to a peace basis?

Gov. STRONG. That was in mind. And my notes would have brought me to that later, but it will come up now as well as later on. If you recall, there developed, immediately after the 1st of January, a strong feeling that we were facing a reaction in business because of declining prices, and because of cancellations of contracts for goods, and because the Government was canceling contracts in vast amounts, and there was a vast amount of unemployment because of men being thrown out of employment by the discontinuance of the war industries. The men coming home from the cantonments and from France were also thrown into the labor situation, and there was a great deal of unemployment and unrest. And the whole country was looking forward to a period of great depression and recession, and I think the consensus of opinion was that these controls were unnecessary; that our export trade was going to vanish, and that we were in for a real business depression. Such was the feeling at that time.

I would like, also, to explain the point of view of the members of this committee. Now, it was not my point of view, because I had a more official responsibility in this matter than these volunteers had. But you can not take a group of eight men, bank presidents in New York, and form them into a volunteer organization of this character and put upon them the responsibilities which they were assuming toward the stock market and the money market—they themselves being large lenders of money in their own institutions—without subjecting them to criticism. Their motives were questioned; bitter attacks were made on this committee that they were influencing the stock market; and I think I should state frankly that it was in the minds of these men who had come forward as volunteers, without any official relation to the financial operations of the Treasury, that they were assuming responsibilities that they wanted to relinquish at the very earliest opportunity. If you will read the comments in the press of those days, you will realize the very vulnerable position in which these men placed themselves. And I think it is only natural that they were desirous of being relieved from that responsibility.

The CHAIRMAN. If there is nothing further at this time, the commission will take a recess until 2 o'clock this afternoon.

(Whereupon, at 12 o'clock and 30 minutes p. m., the commission stood on recess until 2 o'clock p. m. of the same day.)

AFTER RECESS.

At 2 o'clock p. m. the commission reassembled, pursuant to the taking of a recess.

The CHAIRMAN. The commission will come to order. Gov. Strong, you may proceed with your statement.

STATEMENT OF HON. BENJAMIN STRONG, GOVERNOR OF THE FEDERAL RESERVE BANK OF NEW YORK—Resumed.

Gov. STRONG. Mr. Chairman, at the conclusion of the morning session I had about finished the description of the affairs and policies of what was known as the money committee in New York. And I now would like to offer for the commission's examination—I would like to have the document returned—the original minutes of the committee which have been sent down from New York, for the purpose of examination if needed.

The CHAIRMAN. The Chair will detail somebody to examine the minutes and make a report on them.

Gov. STRONG. I would also like to state in a few words, in résumé, just what the policy of that committee was, which I am afraid may have been obscured by the lengthy discussion.

The policy of the committee at the outset, from the time of its organization until August, 1918, was to insure that where funds were withdrawn from loans upon the New York Stock Exchange a supply was available to take the place of what was withdrawn for the purpose of protecting the security market and the money market of New York City in the interest of the Treasury.

The CHAIRMAN. I think that what some of us do not quite understand is this: The purpose of Government in finances seems to be that this money was all in one pocket, and it did not make any particular difference whether the money necessary to run the stock exchange came from one place or another.

Gov. STRONG. But it was necessary that the amount of funds required to maintain a security market would be provided. And, if the money committee had not provided the amounts which were being withdrawn, then we would have had no security market, and in my opinion, a serious time in placing the Government loans. And it was its policy from the time that it began to function in August, to prevent the absorption of a large amount of credit by the security market, which we believed would interfere again with the orderly marketing of the Government's loans.

I also want to make clear for the record, Mr. Chairman, what I am afraid may not have been stated at any time, that the Federal reserve bank of New York does not make any loans upon securities of that character at all. The law does not permit it. It is not the function of the bank.

All that the governor of the Federal reserve bank did, as the chairman of that money committee, was to facilitate the organization by the banks of New York of measures which were regarded by the Federal reserve bank and by the Treasury as essential to the protection of that situation.

And the actual physical direction and handling of these loan transactions was not conducted by the Federal reserve bank. One

member of the committee was designated as the agent of the committee to conduct such business as was conducted, in a way, or by way of advising the various participating banks as to the action to be taken.

Representative MILLS. You really acted as fiscal agent for the Treasury Department, rather than as members of the Federal reserve system, if I can make that distinction.

Gov. STRONG. Yes, but this, Mr. Mills, was an outgrowth of the Liberty loan organization as distinguished from the technical fiscal agency position which the bank itself occupied.

Representative MILLS. Yes, perhaps that was not an accurate description. But, you personally were acting more as an agent of the Treasury Department than you were as governor of the New York reserve bank.

Gov. STRONG. Yes, sir. Now, I occupied three positions during that period. As governor of the Federal reserve bank my responsibilities were the direction of the more distinctly fiscal agent's business transacted by the bank for the Government. And then, as chairman of the Liberty loan committee I was in a position of direct agent of the Treasury rather than as an officer of the bank. And, as chairman of this subcommittee of the Liberty loan committee again, I was acting, I think, in that capacity more as direct personal agent of the Treasury than as governor of the bank, although the scheme of organization of all of these matters in all districts was to center it as much as possible under the direction or personal control of the bank by having its officers active in these organizations.

Representative MILLS. Well, in other words, it was their idea to have these activities centered in the banks, which were the fiscal agents of the Treasury Department?

Gov. STRONG. Yes, sir; they all had to be coordinated in that way. If they had not been, we would have had no end of confusion in these various activities which all had to be brought to a focus for the purpose of control.

Representative SUMNERS. What relations do these securities market sustain to the money supplied all industries, both in connection with their operation and their expansion?

Gov. STRONG. Well, in totals expended, in figures, Mr. Sumners, I think it is rather small. For instance, the loan account now of the New York Stock Exchange is something over \$700,000,000, as reported by the reporting banks. The total of bank assets in the United States is \$45,000,000,000.

The importance of the New York money market is not in the volume of transactions, or the amount of credit which it employs, but it is more in the importance which it gains by being the focus, if you please, of the money markets of the country, where some influence upon the money markets and money rates is exerted—where some influences are exerted.

Representative SUMNERS. What I am trying to get at is whether or not the New York Stock Exchange is the place where securities which have to be sold in order to raise money required are to a considerable extent taken and are—

Gov. STRONG (interposing). Should be protected?

Representative SUMNERS. Effected—let me state my question again. I should have spoken a little louder. What I am trying to

ascertain is whether or not the New York Stock Exchange is the market place where the securities of the various corporations and industries are sold, the sale of which securities affords the money for the operation of these industries and their expansions.

Gov. STRONG. That is so. The security markets—that is, the markets through which the raising of new capital for the industries of the country is effected—are and must be the markets where the greatest amount of capital naturally gravitates; I mean that is the point where the flow of funds concentrates for the purpose of investment and reinvestment to a greater extent than in any other market in the country.

That is especially true of the money centers of the world—London, Paris, Berlin, Tokyo—and I think also we must all recognize that it is not a man-made affair. It is a natural law, I think more primarily due to the fact that the great flow of foreign and domestic commerce of the United States is into and out of the port of New York than to any other factor.

Representative SUMNERS. The theory, at least, of the economic function of the exchange is that it provides a meeting place for the persons who want to buy and the people who want to sell these securities?

Gov. STRONG. Yes, sir.

Representative SUMNERS. And the sales of the securities are found to be necessary from time to time in order to acquire the necessary capital for starting new enterprises and maintaining established enterprises, in developing established enterprises?

Gov. STRONG. It is an essential part of the machinery for purposes of that nature, if you please, and has contributed to the development of the resources of the country by the direction of the flow of capital into new enterprise. That is where the management, if you please, is undertaken, for a commission or for a brokerage, for this direction of the stream of savings of the Nation into new enterprises.

Representative SUMNERS. As I understand, the criticism is not with reference to those transactions which are essential for the distribution of the securities of the industries, but with reference to what is regarded as abuses resulting in speculation and the unnecessary utilizations of the country's credit and money by the speculators.

Gov. STRONG. The criticism certainly arises from the fact that people do go to that market to make speculative transactions in securities and derive profits, as some people have expressed it, without performing any work, getting something for nothing, getting something by the rise in the value of the stock that they buy with borrowed money.

Of course, this leads us into the whole subject of the philosophy of speculation and the difference between speculation and investment, where the demarcation line lies, between what is legitimate and illegitimate buying on borrowed money.

I will not assume to express a very definite opinion on that subject, but there appears in every transaction, almost, undertaken by business men, to a greater or less degree, the element of speculation, and I would regard the element of speculation as least in those transactions where the element of human labor is exercised in a great degree in production. The labor of the farmer on the one-horse farm or the one-

mule farm probably represents the least speculative production that can be described, because that farm is operated by the direct labor of the owner or the tenant and his family, and what is produced there is almost all by labor.

At the other end of the line is the minimum of effort or labor that produces profit, that of making capital reproduce itself by judicious investment in enterprise—and that is expressed in its extreme form in the purchase of securities speculatively.

Merely as an expression of my own views—many men differ from me in this—it seems to me that even in its most extreme and what you might say its most objectionable form speculation nevertheless has its place in the great economic fabric of the country; it is to some extent justified as being the means by which things find their natural values.

Whether or not the country could get along without the stock exchange I will not venture a very strong opinion; but I think that the country would be deprived of a very important organization—a market place, if you please, where securities are traded in and finally find their way back to the investors, where they permanently rest.

Representative MILLS. There would not be anything like as easy a new market for the securities for investment purposes, even if the investor did not know he had a ready market in which he could dispose of his securities?

Gov. STRONG. It would be very difficult. That is one function, Mr. Mills, of a market place which stabilizes the values of things. It is a significant fact that, since the earliest times, the tendency in trade has been continually for those people trading in certain things to group together, and in the bazaars of India to-day you will find all of the jewelry markets in one place, all of the silk in another, and all of the money brokers in another. They gravitate together because that makes a market, and markets make values certain.

Representative TEN Eyck. Will you tell us at this point the comparative volume of business done on the stock exchange as regards to sales of new securities and new promotions in comparison with the exchange of securities which are already known in the market and securities of going concerns and business industry?

Gov. STRONG. Well, as an indication of the value, one of the first requirements that is made in placing a new issue of securities—the most common requirement—is that it shall be listed upon the New York Stock Exchange and that it shall be in that way subjected to the influence of this market, which will give it a stable quotation that people can rely upon.

The second purpose served is that people know generally that the affairs of the company whose securities are listed have some supervision and that their statements are examined before they are listed.

They also know that there will be a quotation upon which a certain degree of reliance can be definitely placed in buying and selling and lending and in trading, and in relying upon those figures it is like any other market place, like a produce exchange or a wheat pit.

Representative TEN Eyck. When a man promotes a new business or a new industry you do not place those securities immediately upon the stock exchange, they are not listed upon the stock exchange, are they?

Gov. STRONG. I have no figures on that, but they can be obtained.

Representative TEN EYCK. Just in a general way, I want to obtain some idea as to whether or not the large majority of people promote their industries and get them to a certain standard where they can be placed upon the exchange.

Gov. STRONG. Well, I would not venture a guess as to the figures, but I would say generally that a very preponderating proportion of securities issued in the United States representing developed enterprises are listed on the New York Stock Exchange. And that does not only apply to enterprises, but it applies also to the bonds of the United States Government. It is the great market for United States bonds, and later on I propose to introduce figures to show the extent to which that market is employed right now for the purpose of fixing the market value, if you please, in the securities of the United States.

Representative SUMNERS. But, it is not used for the purpose of floating loans of the United States Government?

Gov. STRONG. What?

Representative SUMNERS. The exchange is not used by the Government as a fiscal agent, as a place of flotation?

Gov. STRONG. Only in the case of Liberty loans. The Stock Exchange as a body was organized to sell the bonds both to their customers and to the public generally. The entire exchange was organized to do that. It was a part of the Liberty loan machinery.

Representative SUMNERS. Those sales were not on the floor?

Gov. STRONG. Yes; they had sales right on the floor. They had very big sales and sold many millions of dollars of bonds right on the floor. Of course, those were the original sales of the bonds at par. And when we were given word from the United States Government, at the direction of the Treasury, that trading in the bonds was permitted on the exchange—whenever the arrangement was made that it should be permitted—trading was done in those bonds. That, after each loan, was arranged after conference with the Secretary of the Treasury.

Reference has been made a number of times to the activities of the bank in connection with the revenues and disbursements of the Treasury during the war period. I have with me a statement furnished by the Treasury showing classified receipts of the United States Government, exclusive of the principal of the public debt, by months, from April 6, 1917, to June 30, 1921, as published in daily Treasury statements. And a similar statement showing the classified disbursements of the United States Government, exclusive of the principal of the public debt, for the same period, as published in the Treasury daily statements, which will very graphically exhibit in a brief statement, if the commission cares to print it, just what problem war financing was.

I also have the assembled figures in the form of preliminary financial statements of the United States Government from the period from April 6, 1917, to June 30, 1921.

In the first table we have the receipts and disbursements and in the second table the public debt and expenditures.

The CHAIRMAN. Without objection the tables referred to will be printed in the record. The chair hears none.

(The tables referred to above are printed in the record in full, as follows:)

Preliminary financial statement of the United States Government for the period from Apr. 6, 1917, to June 30, 1921.

[On the basis of daily Treasury statements.]

RECEIPTS AND DISBURSEMENTS.

Net balance in the general fund Apr. 5, 1917.....	\$92,317,710.27
Receipts, exclusive of principal of public debt, Apr. 6, 1917, to June 30, 1921.....	21,703,777,058.01
Public debt receipts Apr. 6, 1917, to June 30, 1921.....	73,103,425,416.72
Total.....	94,899,520,185.00

Disbursements, exclusive of principal of public debt, Apr. 6, 1917, to June 30, 1921.....	43,946,740,585.23
Public debt disbursements Apr. 6, 1917, to June 30, 1921.....	50,403,101,494.01
Net balance in the general fund June 30, 1921.....	549,678,105.76
Total.....	94,899,520,185.00

PUBLIC DEBT AND EXPENDITURES.

Total disbursements for war period, exclusive of principal of public debt.....	\$43,946,740,585.23
Total receipts for war period, exclusive of principal of public debt.....	21,703,777,058.01

Excess of disbursements over receipts for war period.....	22,242,963,527.22
Debt decrease Dec. 31, 1920, on account of fractional currency lost and destroyed.....	4,842,066.45
Total.....	22,238,121,460.77

Total gross debt June 30, 1921.....	23,977,450,552.54
Total gross debt Apr. 5, 1917.....	1,281,968,696.28

Gross debt increase for war period.....	22,695,481,856.26
Net balance in the general fund June 30, 1921... \$549,678,105.76	
Net balance in the general fund, Apr. 5, 1917... 92,317,710.27	

Net increase in balance in general fund..... 457,360,395.49

Net debt increase for war period..... 22,238,121,460.77

Classified receipts of the United States Government, exclusive of the principal of the public debt, by months, from Apr. 6, 1917, to June 30, 1921, as published in daily Treasury statements.

	Customs.	Income and profits tax.	Miscellaneous internal revenue.	Miscellaneous revenue, including Panama Canal.	Total.
Apr. 6 to 30, 1917.....	\$17,863,547.22	\$24,075,386.24	\$33,387,512.86	\$6,119,713.64	\$83,446,159.96
May, 1917.....	28,660,148.60	107,601,090.34	50,009,778.45	11,996,371.78	198,269,309.17
June, 1917 (revised).....	18,686,805.14	105,230,281.19	56,993,915.16	14,814,156.47	285,725,157.96
Total, Apr. 6 to June 30, 1917.....	65,210,500.96	326,906,757.77	142,391,206.47	32,930,241.89	567,438,707.09
July, 1917.....	15,805,129.91	9,478,880.98	50,885,959.22	7,747,666.17	83,927,636.28
August, 1917.....	15,902,255.99	4,248,091.69	43,922,598.77	10,423,584.41	74,496,530.86
September, 1917.....	15,201,388.70	6,026,475.01	41,265,393.95	13,616,104.84	76,109,362.50
October, 1917.....	13,647,946.24	5,987,904.91	50,318,414.27	20,504,025.14	90,458,291.56
November, 1917.....	11,935,389.41	6,720,898.26	81,536,702.42	39,297,787.35	139,490,777.44
December, 1917.....	11,217,214.10	13,725,534.51	61,425,075.62	18,661,246.19	105,029,070.43
January, 1918.....	12,163,216.06	11,428,560.88	61,665,347.96	18,099,084.97	103,356,209.87
February, 1918.....	12,019,441.74	13,200,936.38	59,115,478.32	14,762,583.25	99,098,439.69
March, 1918.....	18,106,373.13	31,424,027.09	89,635,237.66	17,583,640.17	156,749,278.05
April, 1918.....	16,445,531.99	83,012,299.95	93,112,711.68	16,747,600.64	209,319,144.26
May, 1918.....	19,325,706.94	342,104,736.75	135,081,929.01	97,633,678.29	594,746,110.99
June, 1918.....	17,598,789.28	1,786,647,885.43	104,052,171.39	23,473,167.88	1,931,772,013.78
Total for fiscal year 1918.....	179,998,383.49	2,314,006,291.84	872,028,020.27	298,550,169.10	3,664,582,864.70

Classified receipts of the United States Government, exclusive of the principal of the public debt, by months, from Apr. 6, 1917, to June 30, 1921, as published in daily Treasury statements—Continued.

	Customs.	Income and profits tax.	Miscellaneous internal revenue.	Miscellaneous revenue, including Panama Canal.	Total.
July, 1918.....	\$15,837,889.72	\$497,496,376.62	\$105,948,066.11	\$22,594,804.69	\$641,877,137.14
August, 1918.....	14,175,802.76	30,795,666.13	83,736,123.50	23,544,439.33	152,252,031.72
September, 1918.....	12,719,024.43	36,308,166.21	89,005,937.44	13,851,525.72	151,884,653.80
October, 1918.....	11,453,096.69	30,136,620.58	93,327,251.94	16,683,790.75	151,580,759.96
November, 1918.....	12,583,861.29	28,820,184.49	99,743,394.83	169,946,822.58	310,994,263.19
December, 1918.....	9,681,907.59	61,916,648.37	117,658,493.35	14,645,224.92	203,902,264.23
January, 1919.....	12,732,514.54	43,141,373.49	112,287,675.18	27,681,278.13	195,842,541.34
February, 1919.....	14,979,078.02	30,341,342.50	94,310,163.04	23,128,580.27	162,759,163.83
March, 1919.....	17,876,270.46	1,129,821,269.04	118,240,897.00	31,910,506.72	1,297,848,946.22
April, 1919.....	20,141,496.97	107,696,034.35	135,059,064.46	159,655,714.78	422,552,300.56
May, 1919.....	20,896,644.65	50,614,139.20	115,265,091.71	92,496,335.12	279,262,210.68
June, 1919.....	21,380,290.27	971,665,466.31	131,919,143.11	56,505,264.07	1,181,500,563.76
Total for fiscal year 1919.....	184,457,867.39	3,018,783,687.29	1,296,501,291.67	652,514,290.08	5,152,257,136.43
July, 1919.....	20,498,245.83	44,043,414.30	110,038,601.29	53,201,441.60	227,781,703.02
August, 1919.....	21,063,662.06	28,618,312.08	113,817,095.93	105,052,760.89	268,548,830.96
September, 1919.....	24,724,214.48	944,897,366.34	140,757,151.39	32,176,712.96	1,142,555,445.17
October, 1919.....	24,276,476.04	34,903,495.13	139,333,735.95	54,596,048.11	267,109,755.23
November, 1919.....	27,389,468.44	45,556,651.10	113,896,464.23	54,544,178.14	241,385,761.91
December, 1919.....	23,826,407.45	905,307,590.08	125,797,975.12	37,759,624.94	1,092,691,397.57
January, 1920.....	28,628,890.50	46,729,771.16	136,085,229.74	43,887,135.23	255,338,026.67
February, 1920.....	26,778,848.11	49,276,050.40	118,657,904.94	34,814,497.32	229,527,340.77
March, 1920.....	34,377,633.56	918,879,463.52	117,251,490.30	28,532,046.38	1,099,040,623.76
April, 1920.....	27,917,794.24	105,823,389.13	107,873,045.02	75,644,098.00	317,258,320.39
May, 1920.....	29,129,227.36	76,508,712.17	108,538,599.91	43,324,835.88	257,501,375.32
June, 1920.....	34,301,738.32	744,411,072.34	128,026,003.05	399,097,794.34	1,305,836,608.05
Total for fiscal year 1920.....	322,902,650.39	3,944,949,287.75	1,460,082,296.91	966,631,163.83	6,664,565,388.88
July, 1920.....	30,694,297.30	64,917,691.90	107,670,917.32	27,083,618.93	230,366,525.45
August, 1920.....	29,327,518.83	59,551,871.46	144,710,931.34	164,810,344.05	398,400,665.68
September, 1920.....	24,036,208.77	716,183,757.45	147,344,343.27	23,742,762.32	911,307,071.81
October, 1920.....	25,599,595.60	55,685,825.49	122,805,403.43	15,943,990.45	220,034,804.97
November, 1920.....	21,884,850.58	61,193,604.70	124,868,247.10	67,474,109.87	275,420,812.25
December, 1920.....	18,584,794.65	670,671,179.54	122,664,468.74	120,098,954.39	931,989,397.32
January, 1921.....	17,485,532.78	54,222,322.41	111,432,952.10	34,186,441.81	217,328,249.10
February, 1921.....	21,152,665.92	70,511,047.03	111,599,939.74	45,299,962.09	248,563,614.78
March, 1921.....	29,203,977.43	727,543,549.04	95,867,254.03	69,012,822.22	921,627,602.72
April, 1921.....	40,417,183.94	108,380,928.20	90,985,753.69	56,386,799.99	296,170,665.82
May, 1921.....	25,485,133.15	52,282,908.39	94,812,476.67	51,145,840.68	223,706,398.89
June, 1921.....	24,722,632.06	664,920,472.13	115,617,135.85	44,756,912.09	750,017,152.12
Total for fiscal year 1921.....	308,564,391.00	3,206,046,157.74	1,390,379,823.28	719,942,588.89	5,624,932,960.91
RECAPITULATION.					
Apr. 6 to June 30, 1917.....	65,210,500.96	326,906,757.77	142,391,206.47	32,930,241.89	567,438,707.09
Fiscal year 1918.....	179,998,383.49	2,314,006,291.84	872,028,020.27	298,550,169.10	3,664,582,864.70
Fiscal year 1919.....	184,457,867.39	3,018,783,687.29	1,296,501,291.67	652,514,290.08	5,152,257,136.43
Fiscal year 1920.....	322,902,650.39	3,944,949,287.75	1,460,082,296.91	966,631,163.83	6,664,565,388.88
Fiscal year 1921.....	308,564,391.00	3,206,046,157.74	1,390,379,823.28	719,942,588.89	5,624,932,960.91
Grand total.....	1,061,133,793.23	12,810,662,182.39	5,161,382,628.60	2,670,568,453.79	21,703,777,058.01

Classified disbursements of the United States Government, exclusive of the principal of the public debt, by months, from Apr. 6, 1917, to June 30, 1921, as published in daily Treasury statements.

	Ordinary, including special except foreign loans.	Foreign loans.	Total.	Deficit.	Surplus.
Apr. 6 to 30, 1917.	\$79,213,777.20	\$200,000,000.00	\$279,213,777.20	\$195,767,617.24	
May, 1917.	119,065,555.96	407,500,000.00	526,565,555.96	328,298,166.79	
June, 1917 (revised).	132,607,295.39	277,500,000.00	410,107,295.39	124,382,137.43	
Total Apr. 6 to June 30, 1917.	330,886,628.55	885,000,000.00	1,215,886,628.55	648,447,921.46	
July, 1917.	209,810,845.97	452,500,000.00	662,310,845.97	575,383,209.69	
August, 1917.	279,457,364.14	478,000,000.00	757,457,364.14	682,960,833.28	
September, 1917.	350,378,285.60	396,000,000.00	746,378,285.60	670,268,923.19	
October, 1917.	463,668,752.52	480,700,000.00	944,368,752.52	833,910,461.96	
November, 1917.	511,152,057.53	471,929,750.00	983,081,807.53	848,591,030.09	
December, 1917.	613,211,859.32	492,000,000.00	1,105,211,859.32	1,000,152,788.90	
January, 1918.	720,156,045.69	370,200,000.00	1,090,356,045.69	989,099,535.82	
February, 1918.	687,686,985.74	325,000,000.00	1,012,686,985.74	913,588,546.05	
March, 1918.	838,283,809.24	317,500,000.00	1,155,783,809.24	999,044,531.19	
April, 1918.	927,787,779.23	287,500,000.00	1,215,287,779.23	1,005,068,834.97	
May, 1918.	1,064,195,233.65	421,000,000.00	1,508,195,233.65	913,449,122.66	
June, 1918.	1,269,873,702.42	242,700,000.00	1,512,573,702.42		\$419,198,311.38
Total for fiscal year 1918.	7,958,672,721.14	4,738,029,750.00	12,696,702,471.14	9,032,119,606.44	
July, 1918.	1,264,797,654.44	343,485,000.00	1,608,282,654.44	966,405,517.30	
August, 1918.	1,526,233,223.02	279,250,000.00	1,805,513,223.02	1,653,261,191.30	
September, 1918.	1,275,114,285.27	282,150,000.00	1,557,264,285.27	1,405,379,631.47	
October, 1918.	1,175,762,260.99	189,100,000.00	1,364,862,260.99	1,513,281,501.03	
November, 1918.	1,636,299,611.23	278,949,697.70	1,935,249,308.93	1,624,255,045.74	
December, 1918.	1,671,923,855.18	389,052,000.00	2,060,975,855.18	1,857,073,591.25	
January, 1919.	1,672,100,149.87	290,250,800.00	1,962,350,949.87	1,766,508,108.49	
February, 1919.	1,044,516,601.32	145,397,302.30	1,189,913,903.62	1,027,154,739.79	
March, 1919.	1,057,461,785.51	322,350,000.00	1,379,811,785.51	81,962,539.29	
April, 1919.	1,010,319,698.11	409,608,608.27	1,428,928,306.38	1,006,376,005.82	
May, 1919.	917,425,614.44	194,911,857.29	1,112,337,471.73	833,075,261.05	
June, 1919.	754,639,949.83	54,750,000.00	809,389,949.83		372,110,613.93
Total for fiscal year 1919.	15,035,624,689.47	3,479,255,265.56	18,514,879,955.03	13,362,622,818.60	
July, 1919.	878,623,570.34	97,650,000.00	976,273,570.34	748,491,867.32	
August, 1919.	711,621,798.39	54,275,945.99	765,797,744.38	497,258,913.42	
September, 1919.	565,215,630.24	102,006,000.00	667,221,630.24		475,333,814.88
October, 1919.	526,194,278.58	50,154,927.00	576,349,205.58	319,239,450.35	
November, 1919.	358,832,293.58	10,000,000.00	368,832,293.58	127,446,531.67	
December, 1919.	465,776,232.92	26,634,041.10	492,410,665.02		600,280,932.61
January, 1920.	333,293,696.44	15,000,000.00	348,293,696.44	92,955,669.77	
February, 1920.	275,457,433.96	20,000,000.00	295,457,433.96	65,930,903.19	
March, 1920.	525,540,559.40	12,000,000.00	537,540,559.40		561,500,064.36
April, 1920.	489,713,336.50	15,616,114.00	505,329,450.50	188,071,130.11	
May, 1920.	380,475,235.43	15,000,000.00	395,475,235.43	137,973,860.11	
June, 1920.	471,362,356.34	3,000,000.00	474,362,356.34		831,474,251.71
Total for fiscal year 1920.	5,982,006,813.12	421,337,028.09	6,403,343,841.21		1,291,221,547.67
July, 1920.	295,501,839.31	11,000,000.00	306,501,839.31	76,135,313.86	
August, 1920.	417,101,594.56	30,469,467.89	447,571,062.45	49,170,396.77	
September, 1920.	481,044,489.25	15,732,165.64	496,776,654.89		414,530,416.92
October, 1920.	426,497,372.37		426,497,372.37	206,462,567.40	
November, 1920.	426,092,313.00		426,092,313.00	150,671,500.75	
December, 1920.	404,575,091.03		404,575,091.03		527,414,306.29
January, 1921.	388,179,272.33		388,179,272.33	170,851,023.23	
February, 1921.	351,102,030.45		351,102,030.45	192,588,418.67	
March, 1921.	519,781,297.00	16,695,063.91	536,476,360.91		385,151,241.51
April, 1921.	494,091,189.49		494,091,189.49	197,920,523.67	
May, 1921.	368,450,545.01		368,450,545.01	144,744,146.12	
June, 1921.	469,613,958.06		469,613,958.06		280,403,194.06
Total for fiscal year 1921.	5,042,030,991.86	73,896,697.44	5,115,927,689.30		1,509,005,271.61
RECAPITULATION.					
Apr. 6 to June 30, 1917.	330,886,628.55	885,000,000.00	1,215,886,628.55	648,447,921.46	
Fiscal year 1918.	7,958,672,721.14	4,738,029,750.00	12,696,702,471.14	9,032,119,606.44	
Fiscal year 1919.	15,035,624,689.47	3,479,255,265.56	18,514,879,955.03	13,362,622,818.60	
Fiscal year 1920.	5,982,006,813.12	421,337,028.09	6,403,343,841.21		291,221,547.67
Fiscal year 1921.	5,042,030,991.86	73,896,697.44	5,115,927,689.30		509,005,271.61
Grand total.	34,349,221,844.14	9,597,518,741.09	43,946,740,585.23	22,242,963,527.22	

¹ Net.

Gov. STRONG. The long statement I made this morning with regard to the operation of the money committee really introduced a discussion of the whole subject of control. It was made for the purpose of showing all of the influences that were active during the periods that I have described, or that were dealt with directly by the Federal reserve banks, or through various agencies.

The next subject is the progressive rates which also were adopted as the result of an amendment to the Federal Reserve Act, as a means for control of expanding credit.

The members of the Federal Reserve Board were good enough to discuss this matter with the officers of the Federal reserve bank before the amendment was submitted to Congress. The Federal reserve bank in New York—I was away at the time—but after much discussion we made up our minds, in New York—at least my associates did—that it was a plan which was not applicable to the New York district.

The only comment of my own that I have located is contained in a portion of a telegram which I sent to New York, from San Francisco, on April 16, 1920, and in one or two letters which are too long to be read.

I have the telegram here which I will read.

The CHAIRMAN. What is the date of that telegram?

Gov. STRONG. April 16, 1920.

With rates and reserves at present level believe we are justified in exercising more rigid control of accommodation to large borrowing banks, but have always doubted wisdom of progressive rates as now proposed unless they were only permissive and not mandatory. The principle of a progressive rate applicable to the present situation, but might prove unfair under more normal conditions.

Now, the subject of progressive rates is open to a good many opinions, because conditions differ in the different districts. So I would like—and I can fully appreciate that in some districts the application of this rate might be wholesome in controlling undue expansion of borrowing by individual banks—to point out that the failure to adopt the plan in New York was the result of discussions by the directors of the bank and especially because they felt, I think, that it was not applicable in New York.

I want to point out, however, certain things about the Federal reserve bank rates. My belief is that credit is a commodity just as anything else that is bought and sold and commands a price which is fixed by the laws of supply and demand. When an attempt is made by the Federal reserve bank to distinguish by different rates—differentials between the value of credit extended to member banks on one kind of collateral, as distinguished from another kind of collateral—I think that a fundamental error is made in the whole plan of credit extended by a reserve bank.

While the market value of credit is determined by supply and demand, it is also determined by the goodness of the credit. Credit that is not very good, generally has to pay a higher rate. But the principle of the Federal reserve system is that it will only make good loans. It does not undertake anything that is speculative. All of the loans that the Federal reserve banks make are those which come to them from a member bank, with the indorsement of the member bank; and, if we are willing to accept the premise, which I think we should, that substantially every loan made by a Federal reserve bank

is as good as any other loan which it makes, then it seems to me that the only difference in rates which is applicable to a loan made by a Federal reserve bank is that which depends upon the term for which the loan is made; that is, money for a longer period may command a different value from money for a short period.

I have always felt that we should look in the Federal reserve system toward a policy of having one rate for all credit which we extend for a given period of time.

In New York we have arrived for the second time at that desirable objective, according to my views; and if the theory is good, then in the discounting business which we conduct with our members, we will always discount for the period of the discount at one rate, no matter what kind of security we get.

See how it works out: By illustration, suppose to-day we should adopt the urgent recommendation which some people make of a $3\frac{1}{2}$ per cent rate upon Government securities, and a $4\frac{1}{2}$ or 5 per cent rate upon any other kind of securities. The result would be that shortly all loans by the Federal reserve banks would be made upon Government bonds, notes, or Treasury certificates. No different motive actuates a bank in borrowing from that which actuates an individual who borrows. They borrow at the lowest rate at which they can get the credit: and the question which every member bank asks when it borrows from a Federal reserve bank is, "What is the cheapest credit we can get?" And, allowing for the slight difference in the value of the credit, due to matters of convenience (that is to say, it may be very much easier to ship some commercial paper which is not negotiable to a Federal reserve bank than to ship a bulky bundle of coupon bonds) at a very slight rate differential, in borrowing for a very brief period they may prefer to send in commercial paper rather than to ship bulky bonds at some risk.

In the same way they will prefer to borrow on the Treasury certificates of indebtedness, so far as convenience is concerned, where they are not very bulky rather than to send in bulky coupon bonds. But, in general, I think the principle that I stated is correct, that the rate policy of the Federal reserve system in time, as experience goes on, and as we get away from the influence of war conditions, will be one rate for all credit for a given period.

Representative TEN EYCK. The tendency to give a higher rate on Government securities would be to keep the Government bonds nearer par than they would be otherwise, would it not?

Gov. STRONG. I do not believe that it would have any effect.

Representative TEN EYCK. You do not think that it would have any effect?

Gov. STRONG. I do not believe that it would have any effect. I admit that I did think it would have an effect at one time, but we are entitled to change our opinions, and I do not think the differential is a wholesome thing.

Representative TEN EYCK. I can appreciate your suggestion of putting everybody on an equality.

Gov. STRONG. Yes, sir.

Representative TEN EYCK. The only thing is that the farmer in this instance, being the long-time borrower, and if you charge him a higher rate for a long-discount period, it might in that way ultimately work against the farmer; would it not?

Gov. STRONG. Let us see now—of course the farmer is entitled to every consideration.

Representative TEN EYCK. I am merely bringing up that question.

Gov. STRONG. But, if the farmer requires credit for a longer period than the merchant or the manufacturer and gets it, according to the laws which I believe govern these things, he should pay slightly higher rates for it.

Representative TEN EYCK. Right there, Governor, is this worthy of consideration: You make your rates of discount of paper due to the length of time of maturity of the paper, which time is governed to a certain extent by the actual turnover of the business that the paper represents?

Gov. STRONG. Yes, sir; and the farmer has the longest turnover.

Representative TEN EYCK. Yes; and if the length of discount is no longer than his turnover he should be given the same consideration that the man who borrows who has a short-time turnover in business?

Gov. STRONG. Yes, sir. Now, let me examine that from the standpoint of the farmer a little bit. He is not a wholly unknown factor in our district, as you know.

The farmer has two choices when he goes to a bank up in Orange County, where they grow onions, which we finance for the banks up there. He has the choice of borrowing money for three months, probably, in which event he gets the rate that manufacturers get. That paper comes to the Federal reserve bank and is discounted at the 90-day rate by the Federal reserve bank.

But suppose he says, "I want to be sure that I have this money until I make my onion crop and sell it. I want this for nine months."

What he wants is insurance, and he pays for it a little higher rate. The bank charges a higher rate and the Federal reserve bank prescribes a higher rate.

In point of fact, we do not control his rate. Our rate has no influence on him at all. It is the cashier of the bank that deals with him who controls; and from the standpoint of the bank which makes the original loan to that farmer, the cashier says, in making the loan for nine months, "Nine months is a longer period than three months. There is much uncertainty in money rates. They may go up. I will have to charge you more if you take the money for nine months, than I will if you take it for three months. If you take it for three months, you can have it for 5 per cent, but it may be that three months from now you will have to pay 7 or some higher rate; but if you want to be insured over a period of nine months, you will have to pay a higher rate than for three months—let us say 6 per cent."

Now, you will see the influence which our rates have upon this, and it is the very point that I want to bring to your attention. They have no influence at all, because it is only after the bank up in Orange County finds its reserve has got down too low as a result of loans to these farmers that it comes to us to borrow money.

What motive actuates that bank in borrowing money from us? It is the same motive as that which actuates the farmer in borrowing the money from his bank, and if it has Treasury certificates or Liberty loan bonds, it will come in and borrow from us at that preferential rate, which may have been lower, and it will use the bonds or certificates as collateral.

There is no relation between the loan we make to the member bank and the loan which the member bank makes to its customer.

Representative TEN EYCK. Well, it does in this respect, that the banker at the time that he makes the loan to the farmer realizes that if he is to make loans in the future to the farmers that the farmers' paper will have to be discounted, as it were.

Gov. STRONG. Yes.

Representative TEN EYCK. And that he will have to pay higher rate.

Gov. STRONG. Yes, sir.

Representative TEN EYCK. He figures that in his original transaction.

Gov. STRONG. He may take into account that differential.

Representative TEN EYCK. Yes.

Gov. STRONG. Well, I should question that a little bit, sir. Was not the motive the same with the member bank when there was no reserve bank?

Representative TEN EYCK. Undoubtedly.

Gov. STRONG. Suppose there was no reserve bank. When that farmer asked for a loan and his bank loaned the money to him, a borrower for nine months instead of three months, would not the motive be just the same whether there were a reserve bank or not?

Representative TEN EYCK. It would; but my idea is, or suggestion for consideration is this, that the Government has learned from experience the necessity for certain loans to the farmers in the community.

Gov. STRONG. Yes, sir.

Representative TEN EYCK. And on that account they have established a farm loan bank for mortgages to take up the mortgage loan that has not been properly attended to by the savings banks in the past.

Gov. STRONG. Yes, sir.

Representative TEN EYCK. As governor of the institution, there is a question whether you should not, on the short-term loans, nine months to a year, do something likewise.

Gov. STRONG. Well, now, Mr. Ten Eyck—

Representative TEN EYCK (interposing). That, you understand, is my argument on the discount of farm paper. I know you do not loan directly to the farmer.

Gov. STRONG. Yes; that is important to keep in mind. That is something I was going to take up later—I suppose you think I am going to talk forever, when I am constantly saying that I have something to talk about later.

I am going to take the liberty, with a great deal of diffidence, Mr. Chairman, of making a suggestion on that subject. It may be of no value to the commission, but consider it for what it is worth.

We do not pretend to be especially experienced in our district in the problems of the farmers, because they have been very well taken care of. And yet sometimes a point of view from a distance, where controversial questions are not of such strong influence, may be of value, and later on, if permitted to do so, I will discuss that.

The CHAIRMAN. Yes, sir.

Representative MILLS. But, it is a fact, is it not, Gov. Strong, that the Federal reserve system was primarily organized to mobilize the financial resources available for the financing of short-time or commercial credits?

Gov. STRONG. Yes, sir.

Representative MILLS. And so far as the farmer's long-term credits are concerned, we have got for that a Farm loan system?

Gov. STRONG. Yes, sir.

Representative MILLS. Now, that leaves an intermediate stage that is not covered; that is to say, from nine months to two years, the credit which is needed by the farmer.

Gov. STRONG. That is the very point.

Representative MILLS. And that you propose to take up later?

Gov. STRONG. That I propose to take up later, yes, sir.

The CHAIRMAN. Would not the banker, with respect to charging a higher rate for long-time loans, depend somewhat upon what the prevailing rate of interest was, and for what purpose the credit was granted?

Gov. STRONG. Yes, sir.

The CHAIRMAN. In other words; if the interest rates were high and the risk of the loan was not great, with the interest high, there will be more profit in making a long loan than there would be if the interest rates were low?

Gov. STRONG. That is exactly so, and the lending of money successfully by a bank depends very largely upon the ability of the officer who makes the loans to forecast that very thing whether the trend of the market will be up or down. When we make loans for three months or for nine months, it involves a consideration as to what the possibility of the future may be.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes, sir.

Gov. STRONG. Now, in connection with the establishment of these progressive rates, which, as I say, according to my views are not applicable to our district, it naturally involves the necessity for establishing what may be called the basic line, which has been fully described to the commission and I believe is fully understood.

With the progressive rate, and consequently with the name, "basic line" which is simply a yard stick by which we measure, the question arises as to what should be the policy of the Federal reserve banks in lending money. Of course, in lending money, a great deal depends upon the individual borrowing banks, and here we introduce the element of a basic line, to resist the reduction of reserve where it will approach the point when the reserves of the Federal reserve system as a whole might be impaired. That is to say, even with no prescribed line being adopted, under the provisions of the statutes, which requires that the Federal reserve banks shall dispense this credit with due regard to the interests of all of the members, it is quite conceivable that the entire basic line of a district might be exhausted by the borrowing of a small proportion of the members of that district, and later on those members, which had not been borrowing at all might be denied credit, credit which they required. Those coming in later would be denied their credit because it had been exhausted, or because the Federal reserve bank had no more lending power.

The deficiencies of reserve that were developed before putting the interreserve discounts into effect in the 12 districts, and the disadvantage to a reserve bank had these adjustments not taken place, indicate the necessity for adopting in the management of the reserve banks some system to insure that we do not lend, or do not extend too much credit to certain member banks that may desire to borrow too much; but on the other hand, a mechanical and purely mathematical application of this method of control might operate very unjustly. It might have the effect, as has sometimes happened, that a large number of banks would decline to extend credit due to temerity. Banks which had the courage, however, and the public spirit to extend credit in an emergency far beyond what they ordinarily would extend, if subjected to this purely mechanical, mathematical rule, would be doing an injustice to the business of the community by declining credit.

The CHAIRMAN. Penalizing the very men who do what you want them to do under the circumstances.

Gov. STRONG. Yes, sir; penalizing the men for doing what you want them to do under the circumstances. I bring this out in this discussion, and point out the difficulty with which these matters may be determined by the management of the respective reserve banks at a time when the reserve gets low. Not only did reserves get low, as to certain individual banks like those pointed out yesterday, but they got low as to the whole system. And, if it were a time when you had a progressive rate or not, it would be necessary to be careful and see that the administration of this volume of credit was fairly apportioned to those who needed it, and it might be that those who needed it could not get it, because other borrowers had reduced the lending power to the proportion limited by the basic line.

Now, in this connection, a good deal has been said about the relation of the borrowings of certain banks to the basic lines and we are assembling some data for the whole system to submit to the commission. I regret that it is not yet finished, but when it is complete it will be introduced into the record. (See p. 762.)

Representative MILLS. Are you going to deal now, or later, with Mr. Williams's special charges with reference to excessive loans to certain banks?

Gov. STRONG. I was expecting to deal with that later, Mr. Mills, when we deal with his testimony.

This brings the discussion down to the point where we should examine the methods that were employed to exercise some influence or control over the extent to which our credit should be employed by the member banks and especially at a time when that control could not be exercised entirely by discount rates.

I think it must be admitted that if the discount rates of the Federal reserve banks and especially the preferential rates that were accorded on borrowings upon Government securities were much below the market rates for money, the temptation to use the reserve banks for profit was considerable; and unless the rates could be so adjusted that that was eliminated, they would always face the possibility of furnishing facilities which would be abused.

In other words, suppose we attempt to exercise some other kind of control than rate control—by direct influence, or by mandate, if it could be issued, or by argument and discussion, and so on. That

brings us to the point again which I will illustrate by the case of a State bank enjoying the facilities of the Federal reserve system indirectly. The Federal reserve act provides that member banks shall not act as agents for nonmembers in securing credits from reserve banks, except after having secured the permission of the Federal Reserve Board. But, how can you distinguish it? Let us suppose that a State bank, not a member of the Federal reserve system, borrows money from a national bank, which is a member, and that the national bank at the same time, possibly because of this borrowing by the State bank, comes to us for a loan to increase its reserve which has been impaired by that very borrowing; that is, the loan made by it to the State bank. The loan is such as would ordinarily be made by one bank to another. And, if we make a loan to that national bank, we are providing it with funds, indirectly, to enable it to make a loan to a State bank.

It is a fact that certain loans may come to the reserve banks through the agency of member banks, with which the State banks have never had any relation whatever, just acting as a go-between, and the member banks may indorse the paper (as they would have to, in order to get the discount) for a consideration, for a commission, or for a difference in interest rates, and then turn the funds right over to a State bank, which thus employs the member bank as an agent. But if we were to attempt to prevent the employment of the funds of the Federal reserve bank for the purpose of making loans to non-member banks; if we were to prevent member banks doing that, we would have to go into their offices and examine every loan that they made or require from them a certificate that they make no loans to nonmember banks, in order that our funds might not be indirectly used for nonmember bank purposes.

That same principle applies to all transactions between reserve banks and member banks. We can not earmark these dollars we lend, so to speak, to the member banks, and say that so much shall go to the State banks and so much to the farmers, and so much to other purposes.

Once a loan is made it goes into a common fund, not a common fund to be reloaned, but a common fund of that member bank's reserve, to build up its reserve, so that its reserve will be maintained in keeping with its loans and deposits.

I am stating this at some length for the purpose of pointing out to the commission the fact that these controls we were called upon to exercise, which would otherwise be exercised by the rate of discount, could only be in the nature of a general discussion and survey of what it was that occasioned an increase of borrowing by the member banks in a rather general way.

If we attempted a more particular control than that, it would mean, in point of fact, that we would have to have a representative in each one of the 792 member banks of the second or New York district to examine every single loan made in order that there might not be any escape. We would have to do all, survey all, control all, under such a rule instead of relying upon such general impressions as we could gain by meetings and discussions with these member bankers.

Representative MILLS. Will you illustrate that further by giving the multitude of operations which are carried on in the Federal reserve banks, say, during the course of one day?

Gov. STRONG. Well, there have been a number of instances in the Federal reserve bank of New York when we have done a business of over \$1,000,000,000 in one day. There was one day when we had a turnover of over \$1,500,000,000.

At the height of war activities and placing of Government loans it was no unusual thing for us to have \$400,000,000 or \$500,000,000 of loans go through the office in one day.

I am speaking roughly from memory, from examinations made from day to day by the executive committee; but the business of the bank every day is in the hundreds of millions of dollars.

Now, that is just business which goes through the reserve bank. Of course, when you go over the transactions of all the member banks every day, with the multitude, the variety, the complexity of them. for these determinations, what would take place would be that we would have to run every bank. The situation is simply this: At a certain point every day the member banks know whether they have an excess reserve or whether they are short in reserve; that is, the net effect of a day's transactions upon their reserves, which vastly varies.

In some cases, with the large banks, new deposits are coming in and old deposits are being withdrawn, new loans are being made and old loans being repaid, and their customers are buying and selling securities and foreign exchange and so on, without limit. When those transactions are all measured up and the sheet of the bank for the day is made out, they then find that the net of it is that they have impaired their reserve, which they carry on our books, or that there is an excess. If there is an impairment, they will come to us and borrow enough to make the reserve good, and if a surplus, they will repay some of their borrowings from us.

Thus, to exercise a particular and exact control as to what is done with the credit that we extend to member banks, would involve the examination of each transaction by every member bank every day in the year.

Representative MILLS. Which is a physical impossibility.

Gov. STRONG. Which is a physical impossibility. I am sorry to urge that argument so strongly, but I think it has a great deal to —

The CHAIRMAN (interposing). Let me see if I understand you correctly. As I understand, when a bank makes a loan to those who are worthy to borrow, it does not actually borrow the money from the Federal reserve bank, or borrow from the Federal reserve bank for the purpose of making that loan, but that it borrows from the Federal reserve bank an amount sufficient to bring its reserve up to the amount that it is required to carry.

Gov. STRONG. That is it. That is all. That is all they borrow from the Federal reserve bank for.

The CHAIRMAN. So that the actual credit represented by the discount of the member banks, with the Federal reserve bank may be many times the actual borrowing of the member banks from the Federal reserve bank?

Gov. STRONG. Exactly.

The CHAIRMAN. So that the suggestion that the \$240,000,000 which was borrowed from the Federal reserve banks on farmers' paper represented the sum total of the credit extended to the farmers of the country, is not a sound conclusion?

Gov. STRONG. It is not a sound conclusion, and I can not emphasize that too strongly. It is perfectly obvious to me that a very large amount of money, of credits, was undoubtedly granted to the member banks upon the security of Government bonds for the benefit of farmers.

You can not identify it. In order to get at the volume, and the change in the volume of loans for agricultural purposes which are reflected back into the borrowings from the Federal reserve banks, you would have to go to every bank in the United States and analyze their loans and find out just what they had loaned to the farmers.

Representative MILLS. I think that if the chairman would go a step further, he may, or if he does not, I would like to ask a question: Assume that \$100,000 was loaned by a member bank to an individual farmer, by, let us say, a New York bank, that they deposited that to the credit of the farmer. It would not borrow the full \$100,000 from the New York Federal reserve bank, but it would only borrow \$13,000, to make good the necessary reserve created by the deposit to the credit of the farmer.

Gov. STRONG. That is all.

The CHAIRMAN. It would only borrow between \$7,000 and \$8,000.

Gov. STRONG. If it were in a country district, it would only borrow \$7,000.

Representative MILLS. So that the \$230,000,000, might well represent not the \$200,000,000 cash, but over \$2,000,000,000 in the way of credits.

Gov. STRONG. You anticipate, Mr. Mills, what I was coming to.

Representative MILLS. Excuse me.

Gov. STRONG. If you want to find out how much it represents, test what the results of that credit would be in reserve borrowing, and multiply—I do not think it would be exactly an honest exposition—but multiply it by the proportion in which this credit is multiplied, as I explained in my discussion, and then you will have something like it.

Representative MILLS. Now, those figures taken from that report gives a maximum of even greater than the amount I had suggested.

Gov. STRONG. Yes, sir.

Representative TEN EYCK. The commission, I think, understands; but the figures that we are considering were the comparison of the discount on agricultural paper, in the country banks with the discounts on all other paper, industrial paper, in the same banks, and that same thing would stand true of them, the same as it does of the farmers, and therefore our comparisons were perfectly proper.

Gov. STRONG. Well, the comparison—

Representative MILLS (interposing). Let me say to Mr. Ten Eyck that that statement, the only comparison made before this commission would be \$230,000,000 which has been compared with the values of what the farms raised in the United States and with the total value of the farm products, and comparisons made, and the statements made before this commission that \$230,000,000 represents the accommodations which the farmers had received. And it is on that basis that the figures are not entirely fair.

Representative TEN EYCK. The question I think I placed before the commission was to ascertain the relativity of the loans to the farmers on farm products discounted by the reserve banks between

the loans on other industries discounted by the reserve banks. Comparing them with the total value of farm products and the total value of the products of other industries.

Gov. STRONG. Yes, sir. Well, Congressman, I do not know how we can get at that, but I want to say a few words here about these figures, in regard to this credit, which are liable to be most misleading. Just take the possibility of their being misleading by supposing this. We have a farmer who wants to borrow \$100,000 from a New York bank—

Representative TEN EYCK (interposing). I can not imagine one, but I will try to.

Gov. STRONG. There may be some there who can, and I think that there are.

Representative TEN EYCK. I mean farmers.

Gov. STRONG. Suppose he had an account with a New York City bank—I am just leading you to the point, if I can do so, of doubting the wisdom of placing too much reliance on some of these figures.

Let us suppose that he borrowed \$100,000 from a New York bank where he had an account—he is not a farmer, but an agriculturist, if you please, and in addition to having an account there he had an account up at Millbrook, or some place where he actually lived.

Representative MILLS. Where they used to go to avoid the personal property taxes.

Gov. STRONG. And the result of that loan from the New York City bank is that he leaves deposited in the New York City bank \$10,000. Now, the New York City bank borrows \$1,300—only to maintain that reserve. It might be on Liberty bonds. Then the agriculturist would transfer \$90,000 up to the district where he needs it in his farming business and operates the farm, and he would deposit that \$90,000 in the local bank. That would increase the deposit liability of the local bank which would then have to get some reserve to offset it. But it did not increase the reserve requirement of that bank until it had used that credit—had loaned it.

Therefore, the first effect of the transfer of \$90,000 from the New York City bank to this country bank, where a 7 per cent reserve is required, would be that they would use the money in making loans to the farmers in the district, and after they had made loans in the district to the farmers and gotten down to the point where they could not lend any more, then they would come to us and borrow money to sustain this inflated deposit liability that had been created. Now, that bank possibly has had an occasion to borrow from the Federal reserve bank before, so instead of borrowing from us on this farmer's paper, they would send in certificates of indebtedness, or if we allowed lower rates on Government bonds, they would send down the bonds, or whatever they got the lowest rate of discount on. And this loan, the original \$100,000, in New York City, has resulted in loans from us to maintain reserves, without any agricultural paper appearing in our discounts at all. With the transfer of this money, nevertheless, which is employed for operating a farm in the community, their reserves have become impaired and they have possibly borrowed over \$7,500 from the Federal reserve bank on certificates of indebtedness, because of the differential rates and there you have had a series of loans, an extension of credit of more than \$100,000, and it has been for agriculture.

Representative TEN EYCK. I do not believe those figures show the amount of money loaned to the farmers upon farm products owned by them. That is one of the reasons why I asked for the relative statement of the discount on products of the farmer for comparison with the discount on the products of other industries, so as to ascertain whether or not the farmer has been able to have his loans discounted upon farm products in the same proportion that the value of his farm products bears to the value of the products of other industries.

Gov. STRONG. Yes, sir.

Representative TEN EYCK. And I believe that all we can do is to get down to a scientific statement as to whether or not the farmer is getting for one reason or another, or is not getting for one reason or another, proper credit for work performed.

Gov. STRONG. Credit proportioned to the value of his products as compared to the value of the products of other industries of the country exactly.

Representative TEN EYCK. That is the idea.

Gov. STRONG. Now, I would like to pursue for just one more sentence these figures about farmers' credits.

If we assume that Prof. Persons's figures have any real basis, and I think they have—I think they were studied very carefully, and that those studies were very carefully made—then this increase of credit extended to the farmers, which has been quoted roughly at \$100,000,000, employs—

The CHAIRMAN (interposing). \$230,000,000.

Gov. STRONG. That is the total. The increase is something over \$100,000,000.

The CHAIRMAN. In the last year?

Gov. STRONG. Yes, sir. Just take the increase—(it is more convenient to figure \$100,000,000): That has been distributed generally through the agricultural sections of the country, where the reserve requirement is only 7 per cent, and upon the basis of that very calculation (disregarding whatever needs the individual bank may have for till money), that \$100,000,000 increases, if we apply the test, so as to create a credit or to produce between seventeen and eighteen hundred million dollars for the farmers, because in the 7 per cent reserve districts, you would multiply it by between seventeen and eighteen times.

The CHAIRMAN. Then in that connection, how about the money loaned to other industries? That would be the same as the loans to the farmers. We would have to regard or assume the same in connection with the loans to other industries as that which might be turned over to the farmers.

Gov. STRONG. You are pointing out again another reason for not relying too strongly upon the value of these particular figures, which I do not think can possibly—

The CHAIRMAN (interposing). The only value that I would place upon those figures at all is the relation that they have to the other figures on loans to other industries.

Gov. STRONG. That is what we are trying to get at. We will give them to you as soon as we can. We have got men at work on that job and they will produce something. (For expansion by counties, see pp. 650-663.)

Now, the last word that I was going to say was this: I believe that what will be shown, if we can get at the facts, is this, that when the pressure came in the agricultural areas of the country, developed as it did very strongly, the banks of those sections in the effort to take care of their agricultural customers first went to the Federal reserve banks with those kinds of securities on which they could borrow money at the cheapest rate.

After they had exhausted their certificates of indebtedness, used them to the limit, used all they had, as they could borrow on them at the lowest rate, then they sent in Victory bonds and Liberty bonds and borrowed on them; and after exhausting their borrowing power on those, being the next cheapest kind of credit, they went to the next kind of paper, which was possibly commercial paper. After they had exhausted commercial paper by borrowing all they could from the Federal reserve banks on it, it being the next cheapest kind of collateral, they began coming in with paper bearing the highest rates of credit, which was the paper of the long-time maturity, six months. To my mind, the amount of agricultural paper which found its way to the Federal reserve banks, was the result of the exhaustion of other kinds of collateral that could be used to get cheaper credit, because six months' paper was high-priced credit; and this indicates that the increase in the amount of agricultural paper shown in the portfolios of the reserve banks discloses not only that there was pressure in those sections of the country, but pressure had extended to the point where they had to borrow in the most expensive form of credit.

Representative TEN Eyck. Now, do you not believe that any other conclusion on the part of the banks would have been wrong; do not the member banks figure it in this way, that in times of stress, during an extreme tightening of the money market, that it is well to discount the—I will not say the poorest paper first—but that of the longest duration first, so as to save the short-time paper to make sure that they will get loans at the most stringent time, when it is actually necessary for them to have money, by keeping the most acceptable paper until the last?

Gov. STRONG. Well, does not that depend partly, in the case of the member banks—

Representative TEN Eyck. That is the member banks—

Gov. STRONG (interposing). In the case of member banks, and in speaking from the standpoint of our district, and I can not speak for any other district, I do not believe that has any influence at all, because the average maturity of the loans which we make in New York are now reduced below 18 days.

Representative TEN Eyck. You realize that my questions have been directed to the country at large rather than just to New York?

Gov. STRONG. Well, I do not want to speculate too much about the other districts, but I think by and large, the member banks in this country have exhibited a great deal of reliance in the reserve banks, and they feel that if these borrowings did mature, that they could still borrow, could put other paper in to take the place of what matures. That is their feeling in New York at least.

Concluding, I want to say that the nonmember banks have benefited by the Federal reserve system.

There are just a few words that I want to say on this point, and I will have more later.

You are aware of the fact, I suppose, of a Federal Reserve Board rule made long ago, that all State banks would be permitted to employ member banks as a medium for certain loans, secured from the Federal reserve banks upon the security of Liberty loan bonds and certificates of indebtedness.

Now, that rule is of far-reaching importance, because we are selling these securities to the State banks as well as the member banks, the nonmember banks as well as the member banks, and it gives the State banks in farming districts a very large portfolio of paper which they can bring to the reserve banks through the medium of a member bank. Recently, as you know, the Federal Reserve Board has made a ruling which expressly permits State banks to obtain accommodations from Federal reserve banks, through the agency of a member bank, on any collateral.

The CHAIRMAN. I think perhaps there may be some misapprehension in this discussion of the possibility of borrowing, or the extent to which the principal may be multiplied, in the member banks. For instance, if it is assumed that it may be multiplied 10 times on the basis of the total discounts of September 24, 1920, it would mean a total liability of \$27,000,000,000, which is very nearly equal to the total deposited liabilities of our banks, State and national combined.

Gov. STRONG. Are you not overlooking, Mr. Chairman, the proportion of three to two of notes to deposits, if that three-fifths proportion of notes is not taken into consideration in that statement, which is expressed in bank notes?

The CHAIRMAN. That was \$2,704,000,000.

Gov. STRONG. Well, so that really, Mr. Chairman, \$1,000,000,000 would be the multiplied factor and would support in the ratio of 12 to 1 \$12,000,000,000 of deposits, which is not very far out of the way in total expansion that has taken place.

Now, in the absence of complete rate control, I would like to refer to what the Federal reserve bank of New York did toward getting what I may describe as personal control by personal contact.

We have in the bank an organization which is called the member bank relations department. In that department we have a small staff of men who, by their experience in the bank and by their studies, have become especially familiar with the meaning of the Federal reserve act, and those men are engaged in traveling through the district visiting our members.

They have been employed especially in two things, in recent years; that is, since the war ended—in fact the organization has only been perfected in that period.

First, they take up every cause of complaint, dissatisfaction or difficulty in accounting, or the technical matters in our relations with the banks visited. They take the records of these matters right from our bank, and they go over them carefully with the member bank. Second, the organization is also created for explaining the purposes of the act, how the Federal reserve bank can be used, what is a proper use of its facilities, and what is not a proper use.

I will not review in detail the character of their work, but it is distinctly educational. They do occasionally help a bank that gets into difficulty. Sometimes we have had cases where a bank building

burned up and they needed help from us, and we sent men up to help them. And there have been one or two cases where all of the officers of the bank were sick at the same time, during the influenza epidemic. We sent men up to run the bank, literally. But those are unusual occurrences.

The function of these men is to make the member banks acquainted with the new developments in banking.

They aim to visit every member bank in the district twice a year, and the influence of that work has been very considerable in keeping the district in good order, if I may say so, and preventing abuses.

Let me read to you something of the work in visiting out-of-town banks. The number of visits made since the establishment of the department is as follows: In 1919, 487; in 1920, 1,093; in 1921, the first six months, 511.

These men also visit nonmember banks for special reasons. They have refrained until recently from any discussions of credit conditions. The reason for that is that it is a very difficult thing and a dangerous thing to delegate discussion of those matters to men who have not an official responsibility for the management of the bank.

Preceding that, as a complement of this work these field representatives do, we adopted a policy in 1920 of holding conferences at the Federal reserve bank of New York. I have observed some criticism, made by Mr. John Skelton Williams, of the fact that we have a meeting room in the proposed new bank building. That meeting room is for educational purposes, including these meetings. In the year 1920 we held 16 such conferences; and 882 banks were invited to them. Of course, they are cut up into comparatively small groups; 496 banks were represented at the conferences. These are exclusive of the banks in the metropolitan area in New York.

For the first six months of this year we have had 14 of those conferences, 679 banks were invited, and 445 were represented.

At these meetings the practice of the staff is to spend the entire morning in technical discussions, educational discussions along the very lines of the matters that we have been talking about here since yesterday morning. Bear in mind always that these are what we call the country bankers from outside of New York City. They have lunch together, and at that luncheon a very general discussion of credit conditions and such matters is made by the officers of the bank, and in recent meetings we have not only had the responsible heads of these member banks at the meetings, but we have asked them in each instance to bring in addition one director of the bank, one representative director. I have only had occasion to address these meetings now and then, but other officers do when I do not, and the character of the talk is again educational, along the lines of avoiding misuse, for instance, of the facilities of the Federal reserve bank, not borrowing just for profit, the dangers of expansion, and all these matters.

I have here a memorandum which I would like to read as illustrating the character of these talks. Here is the topic of "The reserve bank as a reservoir of credit."

The course of credit expansion and decline was discussed and illustrated with the use of charts and the relations between the volume of credit and prices was indicated. Interreserve bank rediscounting was explained, particularly showing how banks in the agricultural section were benefited by it, without, however, causing substantial changes in the reserve position of the system as a whole.

THE RESERVE BANK AS THE SOURCE OF THE ONLY FLUCTUATING ELEMENT IN OUR CURRENCY.

The increase and the decrease in the volume of Federal reserve notes was shown and the mechanism whereby the circulation increased and diminished in accordance with business demands was explained.

THE RESERVE BANK AND THE COLLECTION OF CHECKS.

The value to business of the more rapid collection of checks and of the circulation of checks at par was explained, with reference to wire transfers and the use of the gold settlement fund.

A great variety of topics are discussed. After luncheon these bankers are taken through the various offices of the bank, and its mechanical operations shown.

Now, I can't say what the value of that sort of work is. I think the results have got to be relied upon to disclose it. But I think I am correct in stating that so far as I am aware there has not been one complaint from one member bank in the second Federal reserve district as to the administration of credit in that district. I wish very much that it were possible over the great areas covered by the other reserve districts that some such thing as this could be done. We have a peculiarly fortunate situation in New York in that our area is small, the business is concentrated. The member banks can get to the bank and see it, and make personal acquaintance with the officers, and I recite this simply as exhibiting in what way we have adopted a policy of education in simply one department of the bank, to explain all of this to the members and get them to use the Federal reserve bank correctly.

Now, as to the large banks in New York City. I have a variety of material here which I expected would be introduced into the record later in connection with other matters, but I merely want to point out, without reading anything that would appear to be personal or disclose the affairs of any one member bank, something of what has been transpiring in that matter. These are just some samples. When a member bank in New York City builds up its borrowing at the reserve bank to a high point, to such a point that we feel that it is desirable to inquire about it, as to what is happening, we send for the responsible head of the bank. We do not send for the cashier, but we send for the president, and if the president is not available we send for the responsible vice president. At the conclusion of the interview, if it is of any importance, the officer who has the discussion is very liable to dictate a memorandum of it, which at once goes into the file relating to the relations of the bank with that member bank. Now, just a few samples have been taken out, which I will paraphrase a bit in reading to the commission, so as to indicate in general what our policy was in dealing with these banks that borrowed heavily from us. [Reading:]

MARCH, 1920.

Mr. A, vice president of bank No. 6, say, came over here this afternoon at our request, to discuss with us the situation with regard to their taking \$30,000,000 of new money to-day, at a time when their discount line with us is \$62,000,000. Mr. A brought with him figures showing the various changes in bank No. 6's position since last October, the most important features of which were that deposits had run off about \$91,000,000 and pressure from their commercial customers, for borrowings, had become very heavy. He stated that his institution now has \$44,000,000 advanced against Government securities—

That is, to their consumers who had purchased bonds and had borrowed the money to do so—

and holds about \$9,000,000 in Victory notes, together with \$9,000,000 in Treasury certificates of the various maturities up to December 15, 1920. He further stated that his institution is the principal banker for a certain important concern. Quite recently he had been called upon to advance \$30,000,000.

This was a loan of a character concerning which no one could have the slightest question. [Continuing reading:]

It had made the loan in a form which had enabled it to resell it as securities to other banks, and those are being successfully sold. He could see other than in these matters no very imminent change in the bank's position in the future.

That is just a type of the case where the Federal reserve bank was endeavoring, in a general way, without a censorious review of all the business of the member banks, to keep in general touch with their affairs.

Now, there happens on April 23, 1920, just a month later, to be another interview with the same officer of that same bank. This interview is as follows [reading]:

The vice president of bank No. 6 called me by telephone to ask if certain notes which were being renewed would be considered eligible and available for rediscount.

It seems that a customer of that bank had paid off a large part of that issue of notes, and had expected to make a renewal of the balance which had not been paid off. [Continuing reading:]

I informed Mr. A that the notes are still in the category of "purchase money notes" and are not available for rediscount at this bank. I took occasion also to indicate to Mr. A that his institution is, at the present time, the largest borrower we have on our books. Shortly after the termination of our talk Mr. B—

That is another officer of this bank—

telephoned stating that he would like to come over here and discuss the situation with us. He called at 5.15, and one other officer of our bank—

Together with the man who dictated this memorandum—

spent a half hour with him, reviewing matters. Mr. B indicated that a great many of their out-of-town banks have been pressing for accommodation, and mentioned a telegram he had just received from one of their Kansas City banks that wanted to borrow. He stated that such concerns as _____ and _____, and other corporations which seldom, if ever, have borrowed direct, are now asking them for funds.

That is the case of where a concern that is a large borrower sells its commercial paper in the market, but when the commercial paper market clogs up it goes to its New York bank, where it has its account, in order to borrow. [Continuing reading:]

We asked Mr. B if some of the investment offerings in which they are interested, such as so-and-so, are not adding to the bank No. 6 burden. Mr. B answering this question, stated that such would be the case only in the event that the offering was not a success.

The notes to which reference was made were notes of one of the most important industrial concerns of the country. [Continuing reading:]

He pointed out that in the case of another security issue, it had meant that the company had liquidated its floating debt to the bank No. 6 and to others, which action, he felt, had really helped the situation. He promised to get back of the matter with a view to reducing the borrowings of his bank with the Federal reserve bank of New York.

Now, it is not necessary to read these in detail into the record, except to point out the character of the situation with which we were dealing in the case of these large borrowings, and the way we dealt with them.

Here is the case of another bank, one of the large New York City national banks, I think it is. The names are put in by letters. [Reading:]

Mr. X dwelt particularly on the subject of the cotton crop, which will presently be harvested, and informed us that the prospective policy of bank No. 16—

And this memorandum was made in September, 1920—

is to finance, principally for short periods, the sales of cotton to European ports; that this would be coming on rapidly within the next few weeks; that their money is tied up usually for short periods—three weeks to two months—and that barring some unforeseen episode, such as a longshoremen's strike, or something of that character, they do not believe their line will normally increase more than \$25,000,000 to \$50,000,000 additional.

That was to move the cotton crop. [Continuing reading:]

He stated, however, that in the event of abnormal conditions existing, it might be necessary for them to increase, temporarily, this estimate by \$25,000,000 or \$30,000,000

This particular institution, and my memory is refreshed in reading this, is the largest handler of cotton paper in the United States, and they were looking forward to an emergency in the fall of last year when cotton had to be moved, and their point was that they might need \$25,000,000 or \$50,000,000, or in an emergency they might need so much as \$80,000,000 from the Federal reserve bank of New York, notwithstanding that they already were the largest borrower.

Here is the record of a similar interview, August 13, 1920, merely an inquiry as to what was transpiring. The reply was that the increased demands made upon the reserve banks were occasioned by three factors:

1. A loss of deposits, amounting to approximately \$100,000,000 in the past six months, two-thirds of which is to the interior, and one-third in their foreign bank accounts. That is the balances that foreign banks carried in this country.
2. The steady demand for commercial accommodation from domestic sources.
3. The financing of foreign trade import and export bills.

This officer further stated that while their borrowings are now very heavy, amounting to \$114,000,000, it is the belief of the officers of his bank that it may be necessary within the next 60 days to go somewhat higher.

I want again to point out that this is August 13, 1920.

They do not, however, expect this extra borrowing to go much beyond \$25,000,000 additional. We called the attention of the officer of the bank to the fact that they had quite a large amount of gold in their vault, and we did not think that it was a very good plan for us to be lending them money to enable them to carry gold in their vault, so they deposited some of it with us and reduced their borrowings.

Now, let me emphasize the outstanding characteristic of these three statements, which is that New York City banks, although at that time, in the late summer or through the summer—the first of these memorandums is in April—borrowing very heavily from the Federal reserve bank of New York nevertheless expected to call upon us for

further heavy borrowings. The explanation was withdrawal of deposits, a movement of the crops to Europe, and the increased commercial demand.

The CHAIRMAN. The complaint seems to be that a like policy was not followed in some districts where it might have been.

Gov. STRONG. Well, sir, the complaint that I have heard recently, and especially for two days in this room, seemed to have been directed against the Federal reserve bank of New York, Mr. Chairman. I am going into this rather elaborately on that account. If I am exhausting the commission with this discussion I hope you will tell me at once.

Now, no small part of the work of the Federal reserve bank in its efforts to effect control in these matters was those which were undertaken more or less publicly.

Representative MILLS. But before you leave that subject, you have cited those three instances, I take it, to show the character of the supervision which you exercised over your large borrowers, by keeping in touch with them, finding out the character of their loans, and finding out the character of their needs.

Gov. STRONG. Yes, sir.

Representative MILLS. And you have cited those three examples, I take it, further to show the character of the needs of the large borrowers in New York City during the period in question?

Gov. STRONG. We tried to ascertain what the cause of the demand was, not so much for the purpose of applying any restriction upon credits by direct action. That we did not do. We did endeavor by the means at our command, to point out that certain kinds of loans should not be made when this credit pressure was on. I will come to that also later. But we wanted to know whether this expansion of borrowing at the Federal reserve bank was justified, and these memorandums selected purposely to show the progress through the period running from April 23 right through the year, are interesting in contrast with what happened. Those loan accounts did increase. They increased constantly until I think it was February 3 of this year, when they reached the high point. During the period of pressure to which reference has been so frequently made, while we were watching it, while we were trying to watch it, we were trying to determine what was the wise thing to do about these heavy borrowings, but we always were confronted with the explanation, that I believe was perfectly proper, correct and wise, that the money was needed for the legitimate business of the country, and we must furnish it. We did furnish it, and we can justify it.

Representative SUMNERS. Governor, what relationship does need sustain to reserve when you have to decide whether you will reduce your reserve more than you like to, or whether you will refuse to meet a need? Do you understand what I mean?

Gov. STRONG. Yes, sir. You mean to discuss it rather from the academic standpoint of what is the policy then?

Representative SUMNERS. Yes.

Gov. STRONG. Well now, the policy, Mr. Congressman, is this: There is no question about what experience has taught, and that is, when the need arises for credit under such conditions as those do not worry about your reserve. Go ahead and lend the money.

Representative SUMNERS. I am glad to have your answer to the question.

Gov. STRONG. I was referring to certain efforts which the bank made more or less publicly in dealing with these matters.

Now, these extracts from our records which I am proposing to read, are the contemporaneous records made at the time, when we were struggling to establish these policies that conformed to the conditions in the various periods that I have described. These, I regret to say, are not all of them in the chronological order in which I would like to have them, so I will mention the dates.

Representative MILLS. Mr. Strong, before you go ahead with that, may I ask you one question. Mr. Williams in his testimony repeatedly referred to a particular institution which was one of the large borrowers, and that you had failed to exercise supervision over that institution. May I ask you whether you exercised the same supervision over that institution as has been illustrated by these examples which you have just given?

Gov. STRONG. Congressman, the memorandum that I read related to that institution.

Representative MILLS. That answers my question.

Gov. STRONG. Now, the comptroller did not know anything about these things. He was not running the Federal reserve bank of New York. And I never discovered anything in his attitude that invited very frank discussion of these matters, and did not consider that it was very much of his business.

I am quoting now from records made up at the bank and brought over here for the purpose of giving you something of the contemporaneous atmosphere, if you please. Here is a memorandum of credit policies.

Representative SUMNERS. Governor, pardon me just a minute, but I think, in view of the testimony that preceded your testimony, and the inquiry by Mr. Mills, and your reply, that it might clarify the record if you would indicate whether the institution that you refer to has been formerly referred to by you as No. 6 or No. 16?

Gov. STRONG. It was the institution which indicated that it might need \$80,000,000 for moving crops in the fall. That is one. There were two institutions in New York.

Representative SUMNERS. You referred to one as No. 6, as I remember, and one as No. 16.

Gov. STRONG. Well, to make it perfectly clear, one of the records from which I read related to one institution, and the other record from which I read related to the other institution.

Representative SUMNERS. Which was the \$130,000,000 loan institution, if I may so identify it?

Gov. STRONG. That was No. 16. That was the second one that I read.

The CHAIRMAN. Was there any inquiry made at this time as to whether this particular bank was lending any money on the exchange, and just what rate of interest it was getting on its loans?

Gov. STRONG. Mr. Chairman, I must explain what the practice of the bank is in passing upon loans to answer that generally as to all banks. Every application for a discount or loan at the Federal reserve bank is made up on a form which gives certain information in regard to the condition of the borrowing bank, how much it has borrowed elsewhere, and lists the paper which is offered for discount, and certain ratings are given.

That application is taken by men of experience in the departments, the credit and discount departments, and is analyzed, and a sheet is prepared which discloses what the record of this particular bank is in borrowing from us. The executive committee meets at 2.30. They meet at that hour in order that they may gather in all the applications of the day, of course, and pass on all of them. There is laid before the committee a statement giving information which we gather from other sources in regard to each of these banks that is borrowing from us, and among other items there is given the amount of its debit or credit balance at the clearing house.

That is put in for the purpose of disclosing whether it is solely the fact that it has a debit at the clearing house that occasions the borrowing. There is also put in the total amount that it is loaning on the New York Stock Exchange, and whether it is increased or decreased, so that every application that is made for a discount by a New York City bank when it is submitted to the officers and executive committee, presents a picture and indicates at the time whether the amount of its loans on the stock exchange are increased or decreased. And we can tell pretty generally whether this money is being applied to that purpose, and whether the bank generally is increasing its loans on the stock exchange or not.

The CHAIRMAN. But would that fact when known be considered or make any difference in the policy of the bank with respect to making a particular discount applied for?

Gov. STRONG. We would make the discount anyway, Mr. Chairman. Otherwise they would simply have to pay a penalty on their deficient reserve. But what we do, and what we have done repeatedly is to point out to the member bank, where we find that their borrowings from us and their stock exchange loans are going up together, that we do not lend our money for that purpose, and of course, it is a matter that has to be dealt with rather delicately. I hesitate almost to make this statement, because it is not our function to regulate the amount of money which is loaned on the stock exchange. Our function is only to exercise, as I view it, a very reasonable review of what is done with this money that we lend, or what the policy of the borrowing bank is in lending its money especially at a time when it is borrowing from us during a period when our rate is below the rates at which money can be loaned in the market. As long as our rate is above the market these matters become of no importance. The rate control will then control that.

Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes.

Gov. STRONG. This is a memorandum, a part of a continuous story, as to credit policies, referring to a statement made by one of our officers in speaking on the credit situation before groups of bankers in Buffalo in December of 1920, and again in Syracuse in March, 1921. He referred to a class of borrowers which had sustained substantial losses through shrunken inventories, etc., which would have to be recouped out of profits yet to be earned, and emphasized the necessity for moderation and cooperation among creditors in dealing with such debtors to the end that they might be helped through their difficulties and restored again to a normal basis.

He cited instances, without mentioning names, where in New York City this policy was being successfully carried out, and of the regret

of certain banks in New York when some of their clients filed bankruptcy petitions without having first acquainted their banks with their difficulties and giving them an opportunity to assist them through their difficult times.

Representative SUMNERS. Who makes that observation, a member of the Federal reserve bank?

Gov. STRONG. This is one of the officers of the bank, who has charge of the discount department of the bank. He was visiting in Buffalo, attending a meeting of the bankers in that territory.

Representative SUMNERS. And this was an officer of your bank, was it?

Gov. STRONG. Yes, sir; this was an officer of the New York reserve bank.

Representative SUMNERS. He took the position there that where the people who engage in activities found themselves in bad condition by reason of the shrinkage in the value of their inventories, that they ought to be given a chance to recoup out of the activity?

Gov. STRONG. Yes, sir.

Representative SUMNERS. Rather than to clear them up as a wrecked institution.

Gov. STRONG. Yes, sir.

Representative SUMNERS. Well, that is very commendable.

Gov. STRONG. I will read some more of that, if I may. I think so much has gone into the record on this matter, that we ought to make it a fairly complete record. On one occasion or another when the Federal reserve bank of New York has made a change in its discount rate, it has seemed necessary for the information of the public and the member banks to make a statement in connection with the change.

Representative SUMNERS. In that connection may I ask you a question? Of course, there are two ways to proceed when you find a debtor that has become embarrassed by reason of a general advance trend of values in the community. You can force liquidation and get rid of it; or you can give him a chance to redeem himself. The complaint has been made that in some agricultural sections the policy has been pursued under which liquidation has been urged in the presence of values which seemed to be temporary, due to the inability of the consuming market to take care of the normal volume of agricultural output. If it would not be embarrassing for you to answer the question, I would like to know whether or not in your judgment there is any difference between a business so situated, and some manufacturing or commercial institution temporarily embarrassed by reason of the development of the general situation?

Gov. STRONG. Whether there is any difference between an industry and a commercial institution of that character?

Representative SUMNERS. And the general agricultural situation?

Gov. STRONG. I don't think there is any difference, Congressman. If one admits that there is always a difference in cases, I think the same general rule which would apply—as the principle which should apply in a situation such as we have passed through—is to keep the people producing and earning. Now, there are cases that are so extreme and dangerous that they have to be dealt with by bankruptcy proceedings. There are cases that obviously should be kept going, and the judgment of the creditors is the one that must be

relied upon. The judgment of the reserve bank is applied to a situation which it reaches only indirectly, through the member bank, and all that we are doing or have been doing is not exercising a control. We have no power to control what a creditor or creditor bank of a failing concern should do with the affairs of that concern. We simply advise where we feel justified in advising, and for some time past we have been advising moderation. And I think the results are obvious, that we have had such a strikingly small number of business failures in New York City—in the country as a whole—but we have had a very large number of concerns which, by various voluntary actions, have been temporarily managed and dealt with by creditor committees, without any failure or bankruptcy or impairment of earning power. With opportunity, Congressman, to get the data directly from our credit department, I could tell you any number of them. You would be amazed at the number that have been dealt with along that general line of policy.

On November 3, 1919, which was in the period of expansion and speculation, we advanced our discount rate from 4 to $4\frac{1}{4}$ per cent—that is, from that range to a range of $4\frac{1}{4}$ to $4\frac{3}{4}$ per cent. It was the first rate change that we made that year. And this statement was made for publication as an explanation of it [reading]:

The reason for the advance in rates announced to-day by the Federal reserve bank of New York is the evidence that some part of the great volume of credit, resulting from both Government and private borrowing, which war finance required, as it is released from time to time from Government needs, is being diverted to speculative employment rather than to reduction of bank loans. As the total volume of the Government's loans is now in course of reduction, corresponding reductions in bank loans and deposits should be made in order to insure an orderly return of normal credit conditions.

We publish a review of business conditions, at the bank in New York where these things are dealt with, for the information of the public, more generally. It goes to all the member banks in the district, and many others, and has a circulation of about 35,000 copies a month. Commenting in that review upon the increase in rates, the following statement appears [reading]:

The increase in rates, though only fractional, was the first step taken by the Federal reserve bank toward assuming its normal relation to the volume of credit. During the war and as long as the Government continued to borrow on an increasing scale, a constantly increasing expansion of credit was necessary and the Federal reserve bank had not only to provide the basis for such expansion but to encourage it, and its rate policy was necessarily subordinated to the rate carried by the Government bonds and certificates. But when the tide turned and the Government borrowing began to decrease, credit contraction became not only possible but necessary and it was the duty of the Federal reserve bank, hitherto the agency of expansion, to take the lead in encouraging the gradual contraction of credit.

Mr. Chairman, I shall not ask you to listen to the reading of these extracts, which are all marked in the record that I have with me, and which I hope the commission will permit to be published as a part of the record.

The CHAIRMAN. If there are not too many of them, the illustrative ones can go in.

Gov. STRONG. I have marked simply those that bring out in clear light the policies of the bank. Without reading them, I would like to observe generally that they indicate the changes by periods as first described in the policy of the bank, down to the point where the pressure became very great.

There are extracts from the annual report of the bank, some of them are statements made by the bank on the occasion of changes of rate; some of them are extracts from the bank's correspondence with the Federal Reserve Board; some of them are extracts from the Bulletin published by the Federal Reserve Board.

There are one or two here which I would like to read, because of their indicating the change of policy that arose toward the end of this period of falling prices.

Bearing directly upon the question of deflation which has been discussed here, I want to read one paragraph taken from the Federal Reserve Bulletin issue of March, 1920. The Federal Reserve Bulletin, as you know, is the house organ of the Federal reserve system, published by the Federal Reserve Board. [Reading:]

The expansion of credit set in motion by the war must be checked. Credit must be brought under effective control and its flow be once more regulated and governed with careful regard to the economic welfare of the country and the needs of its producing industries. Deflation, however, merely for the sake of deflation and a speedy return to normal—deflation merely for the sake of restoring security values and commodity prices to their prewar levels without regard to other consequences, would be an insensate proceeding in the existing posture of national and world affairs.

Now, that was the statement of the Federal Reserve Board in March of 1920.

The CHAIRMAN. Well, at some time or other the Federal Reserve Board must have determined that some sort of pressure must be brought to bear, if not to being about deflation, at least to stop the growing rate of rediscount.

Gov. STRONG. Yes, sir.

The CHAIRMAN. Now, when was that policy arrived at?

Gov. STRONG. It developed, commencing, I believe, principally, with the discussions which took place in the reserve system in the year 1919. As I pointed out, I think the dangers became a little more obvious to us in New York before they did elsewhere in the country on account of the speculative market there, but these discussions proceeded through 1919, and ultimately manifested themselves by rate action, previously having been manifested by the policies that I have attempted to describe of personal advice and admonition directed to the bankers, and in the publications of the system. And it finally matured in the higher rates that were established early in the year 1920.

The CHAIRMAN. If the board came to the conclusion that some kind of pressure must be brought to bear on the situation, and finally arrived at the conclusion that the pressure had to take the form of increased discount rates, it must have had in mind at some time or other, that that policy would have to stop, and that a less rigorous policy, at least, would have to be adopted, or the policy completely reversed. What I would like to know is whether the board or the directors of your bank doing this thing, prospectively had in mind at the time that this policy was adopted, a point at which it would be assumed that deflation had proceeded sufficiently to warrant the adoption of another policy, or whether it would simply let the thing go along until the adoption of some other policy was forced upon it by public sentiment?

Gov. STRONG. I think, sir, that the records that have been submitted will disclose that. The respective reserve banks' policies,

and especially that of New York, must necessarily be governed by the movements that take place in the commodity that it deals with—credit. I don't think the reserve banks should be managed in their rate policy, or their policy generally, by watching a chart showing the movement of prices. It is the movement of credit with which they are concerned, and the necessity, and ultimately the urgency, for action really did not develop to its peak until the peak of the loans was reached in October, I think it was, of 1920. The decline in prices had started a short time before that, in the summer of 1920. The peak of the loan account did not develop until about October of 1920, and the ultimate application of the highest rates was not made, as you know, until before that, in June, 1920.

I think it is fair to say that the record speaks pretty well for itself, Mr. Chairman, that the maximum rate applied of 7 per cent in June indicated the peak of the resistance, at least by rate, to the expansion; and that the moderation of the policy developed possibly first in New York, where the liquidation first took place, as you know, and then gradually extended as the ability to relax developed in other sections of the country.

The CHAIRMAN. Well, I am trying to get an answer to the question that I think is in everybody's mind about this particular proposition, it being perfectly clear along in the second half of 1920 that prices were dropping almost horizontally.

Gov. STRONG. Yes, sir.

The CHAIRMAN. And it is the impression, I take it, of a great many people, particularly those who were affected by the drop in agricultural prices, that that precipitate decline in prices ought to have been an indication to the Federal Reserve Board and the directors of the Federal reserve banks that the policy that they were pursuing was one which was producing a decline in prices which meant more or less disaster, and certainly very great harm to the agricultural interests in particular, and that some modification of the policy should have been adopted some time in the latter half of 1920 to stop that decline.

Gov. STRONG. Well, sir, as to the Federal reserve bank of New York—I do not like to speak for the Federal Reserve Board, and I was not here in 1920 anyway—I think that a moderation of policy to which you refer did occur in the fall of 1920, and I think the evidence of it is clearly in this record which will be printed. It was during that very period, in 1920, in the latter part of 1920, that we were gradually seeking to create the sentiment that people who were in difficulties must be carried along. No rate reductions were made then, and I do not think they were justified.

The CHAIRMAN. Why not?

Gov. STRONG. In the fall of 1920?

The CHAIRMAN. Yes.

Gov. STRONG. The demand for credit would not justify it. The peak of our loan account in New York, as shown by daily figures, did not come until November, 1920. During that period we were right down at the bottom of our reserve. In fact, the Federal reserve bank of New York was borrowing from \$40,000,000 to \$60,000,000.

The CHAIRMAN. Well, I may be very obtuse, but I must confess that I am not yet clear as to why it was not possible to modify this

policy in the latter half of 1920 as easily as it could have been done in the first half of 1921.

Gov. STRONG. Let me see if I can bring out from the contemporaneous record something on that subject. I think it was modified.

The CHAIRMAN. In making that statement I am perhaps assuming that the policy of the board was not wholly guided by the reserve position at one time or the other.

Gov. STRONG. Well, leaving aside, Mr. Chairman, the consideration of rates, does it not turn upon the question as to whether credit was or was not extended to the member bank by the Federal reserve banks? What was their policy in extending credit? So far as the New York bank was concerned, we were extending credit to the point where we were, as you know being severely criticized.

Mr. Chairman, I think much of the answer to your question depends upon the state of mind of those who were responsible for these matters at the time. Now I think I can speak in general for the state of mind of the officers of the New York reserve bank, and the responsible management of that bank. I hesitate to speak as to the state of mind of the Federal Reserve Board. But certainly the evidence here is conclusive, to my mind, that during that period, the fall of 1920, the attitude of the Federal reserve bank of New York was to extend credit for proper purposes wherever it was needed.

I have before me some of the official publications of the Federal Reserve Board on that very subject, which I think, if I read them, will disclose something on that subject. May I read this?

The CHAIRMAN. Surely.

Gov. STRONG. This, I want to point out, is from the official publication of the board, and it is used by the reserve banks very largely as a guide, educational, in their policies. I have read the statements of the board about deflation merely for the sake of deflation.

In the April issue of the Federal Reserve Bulletin, 1920, this paragraph occurs [reading]:

At all events, the situation emphasizes the necessity for bringing the speculative use of the credit facilities of the Federal reserve system under control at as early a moment as possible in order that credit shall be available as needed for the requirements of industry as the season advances. There is some reason to think that an increasing share of banking funds, both at the reserve institutions and at the member banks, is being offered to the direct service of commerce and industry, but what has already been done in that direction needs to be carried further and rendered more effective.

That is in April, 1920, and when the decline had its commencement.

In June, 1920, the following appears in the Federal Reserve Bulletin [reading]:

Regardless of the extent of its legal powers, it would be a most difficult task for the Federal Reserve Board sitting in Washington to attempt by general rule of country-wide application to distinguish between "essential" and "nonessential" loans.

This is June, 1920. [Continuing reading:]

During the war there was a broad underlying principle that essentials must be "necessary or contributory to the conduct of the war," but notwithstanding the sharp outline of this principle much difficulty was experienced by the various war boards in defining essentials and nonessentials. All the more difficult would it be for the Federal Reserve Board to make such a general definition now when there is no longer that purpose as a guide."

In August, 1920, in the Federal Reserve Bulletin, is the following [reading]:

The board has taken the position that it is not sufficiently close to the actual day-to-day requirements of business to undertake to lay down rules as to what loans are for essential purposes and what loans are not. The Federal reserve banks in their dealings with member banks are better situated in this respect, but ultimately the main responsibility of such decisions must rest with the commercial banks themselves, which in their dealings with customers are in a position to ascertain the purpose of each loan and to decide whether this purpose is essential or not.

Again in September, 1920, that same doctrine is enunciated even more strongly. [Reading:]

In harmony with this attitude the Federal Reserve Board has, however, consistently adhered to the policy of leaving entirely in the hands of local banks the decision what loans are to be regarded as nonessential or "speculative." Gov. Harding has outlined the attitude of the board on this subject, stating that "it has never undertaken to classify any business or industry as essential or nonessential and does not intend to do so." Gov. Harding has further called attention to the fact that "expansion of undue bank credit has been restrained," while he also noted that "the fact that the general volume of loans and discounts remains practically the same would seem to indicate that the solid and genuine business interests of the country have encountered no serious hardship."

Continuing his discussion of the general credit situation, Gov. Harding remarks: "The Federal Reserve Board has consistently from the beginning of the effort to curb the tendency to headlong resort to credit operations simply urged the local banker to study his client thoroughly, and the board has never undertaken to say what class of loans should be held to be necessary or otherwise. The board is too far removed from the actual detailed situations involved to undertake to do this, and has relied on the consistent information and judgment of the local banker to accomplish the board's purpose. * * * The difficulty is no doubt that many critics of the board think that the same rules of action employed during the stress of the war and the selection of preferred war business for credit assistance are now in operation. This is entirely untrue, and the reports coming daily to the board from the Federal reserve banks and from any sources of commercial intelligence distinctly contradict it."

The CHAIRMAN. Regardless of what the Federal Reserve Board said at this time, the fact still remains that during this period of pressure, liquidation, an almost perpendicular drop in prices, with the rate remaining at the highest point that it has ever been in the history of the Federal reserve system, and that was a much stronger argument for restriction of loans than anything that the Federal Reserve Board could say to induce the bank to adopt a more lenient policy.

Gov. STRONG. Well, is not the more conclusive evidence, Mr. Chairman, that with the rate advance to 7 per cent, only on one class of loans—and I pointed out that that is not the effective thing; it is the advance of the minimum rate that is really the effective thing—is not the evidence conclusive that the application of that rate, even though it was a restraining influence, did not deny credit to those who were entitled to credit, speaking from the standpoint of the Federal reserve bank of New York, when the loan account increased to the extent that it did?

The CHAIRMAN. I don't know. I am trying to find out.

Gov. STRONG. Well, the fact was that from the time that rate of 7 per cent was introduced on to the very end of 1920 our loan account continued to increase. It was the expansion of the loan account in which we were interested, and toward which we direct our rate. And certainly if experience justifies any action, experience justified an advanced rate at a time when this whole Federal reserve system was right down to the minimum reserve, but at the same time not hesitating to lend where it could be shown that lending was needed.

The CHAIRMAN. The whole question, as I said before—and I think it is in the mind of the public on this proposition—is that this precipitate perpendicular decline of prices was a warning to the Federal Reserve Board and the directors of the various Federal reserve banks that the pressure of these rates and the policy adopted was inflicting, and bound to inflict, if that decline continued, exceedingly great hardship, particularly upon the agricultural section of the country, because the decline was greater, not only actually greater, but greater in its relation to the decline in commodities that the farmer had to buy.

Gov. STRONG. I would like to rely upon the evidence that I can produce of my own feelings about this matter before any question arose about a congressional inquiry.

The CHAIRMAN. Of course I recognize when propounding this question to you, that you are not responsible for the policies of the Federal Reserve Board, and you are undertaking to speak, I assume, only for the policies adopted by the Federal reserve bank of New York.

Gov. STRONG. Yes, sir.

The CHAIRMAN. And I am frank to say that so far as what has come to my knowledge extends, the policy adopted by the Federal reserve bank of New York was not the policy adopted by some of the other reserve banks.

Gov. STRONG. That may be so. I can not answer for that, Mr. Chairman. But in that connection, let me point out that a change of policy in the Federal reserve bank of New York would naturally take place before it took place in other sections where the expansion had been greater. The liquidation took place first in New York. And it took place in the market where the liquidation is easiest, where the security market is, and so on.

The CHAIRMAN. That would only increase the necessity, from the standpoint of the agricultural sections of the country, for a more liberal policy in carrying along that necessarily longer period of liquidation.

Gov. STRONG. I think, Mr. Chairman, that a discussion as to who is responsible and who is not responsible in such a situation as this is liable to be misleading unless you can make a fairly extensive statement on the subject, and if you will let me do so I will endeavor to express my own personal opinion.

The CHAIRMAN. I have not put any limitation on you.

Gov. STRONG. No, sir. Now, first let me read something which happened to have been taken down stenographically of what I stated in Washington in April of this year, bearing in mind that I had been away and had returned, and had, so to speak, oriented myself in a couple of months after my return with what was going on. It was at a meeting of the reserve bank governors held between April 12 and 15 of this year, where, by their suggestion, a committee of delegates to the Convention of the American Farm Bureau Federation, which was then being held in Washington, appeared at our meeting to discuss this very matter. Their first remark upon entering the room was that they were looking for the man who had given this deflation order, and it resulted in some discussion, in the course of which I made this statement, and I read it simply to give you an expression of opinion which I then made without any thought of any

congressional inquiry or anything of that sort. It begins with my statement [reading]:

Gov. STRONG. What you gentlemen very properly desire before you go, and what we desire, is constructive suggestion.

Mr. MANSFIELD. Certainly.

And this is the statement that I made [reading]:

Gov. STRONG. I do not believe that is going to follow from attempting to fix some responsibility for any definite transaction upon some individual. I would like to refer to two or three of the points that were made in the course of your discussion.

You inquire as to the man who gave this order for deflation. I know of no such order being given. It happens that during the year 1920 I was traveling. I had a year of leave. I reached Japan in the spring of 1920 and found that this deflation order had been given there long before it was given here. They were in the throes of a liquidation much more severe than we have experienced.

And then I went on to describe some of these conditions, which I will not read. And this is the statement that I repeatedly referred to [reading]:

It would appear from your remark as though some gigantic conspiracy had been devised around the world to bring about this condition to which you refer, but it was not a man-made affair, something ordered by a supreme czar of finance. * * *

We believe, and I think the students of the subject generally believe, that irrespective of any policy that might have been adopted by any particular bank or system of banks, that what has happened was bound to happen anyway. This great wave of expansion of prices had reached its climax and it was bound to break. It broke the world over, and the mere fact of some person accepting voluntarily responsibility for it, if I may use such strong language, is really nonsensical, because on one could have stopped it and no one could have started it. In our opinion it was bound to come. It was foreseen abroad and it was, to some extent, foreseen here. I think it is no injustice to this body to say that the storm signals were raised long before the storm appeared.

Now, without reading further from this statement, let me explain what my best information is as to how this all happened. I think it was obvious that with the rates of the reserve banks below the market rates for money, some measures other than rate control were necessary, some supplementary method of control. That was undertaken by a systematic canvass of the country, more or less effective, to warn bankers to be careful. They paid no attention. Speculation continued. It swept through the country and reached its culmination in the spring, say, of 1920. No one believed what we said. You have heard endless references to the statements made by the responsible heads of the Federal reserve system in the nature of warnings of what was going to happen.

But something did happen, and the minute it happened these bankers got more or less frightened. They saw that the warnings had foundation. The effect on the banking system, when all bankers begin to think the same way, of course, is to put the brakes on pretty sharply. I do not think that the decline which was started, and for which the timidity or the caution or the restraining influence of the bankers was to some extent responsible, could have been stopped by any policy or statement or enunciation published by the Federal reserve banks. Something had to be done to change the current of public opinion in these matters. Something had to be done to stiffen up the backs of the bankers after this period of decline to which you referred. It is difficult to say what might have been done that was not done. I think what I have described as the policy of the New York bank was probably all that could be done. I certainly

do not believe to-day that the reduction of rates was justified or would have been the wise thing to do.

The fact is that the impetus of public opinion and desire to go ahead and buy things, speculate, and so on, that carried prices to these levels was reversed, and that impetus carried the machine back, not for the entire length to which the prices had advanced, because they have not proceeded to anything like that length, but it carried them a long way, and I doubt very much if anything that a man or a group of men or a system could have done would have arrested it once it started. It was bound to come.

The responsibility resting upon the Federal reserve banks, to my mind, was clear. When there was need for credit, under this condition of declining values of inventories, whether they were crops on a farm or automobiles or stocks of any other kind, the responsibility of the Federal reserve system was to see that the member banks which needed credit, which were trying to do their duty to their customers by carrying them along, got the credit, and I believe the Federal reserve bank of New York did that very thing.

The CHAIRMAN. There is another matter that has come to my attention to-day which I think presents a very common misapprehension, which I think perhaps you can alleviate. I want to call your attention to a paragraph of a letter which I received this morning from a man down in Fort Smith, Ark., in which he says [reading]:

In my opinion, raising the rate of interest is inconsistent if you stop and consider the amount of money the Federal reserve banks have made. I understand the Federal reserve bank in Kansas City has \$4,000,000 capital and made \$3,600,000. Suppose any other institution in the United States had made that much money on that much capital, don't you think they would have them arrested on general principles for highway robbery?

Now, there seems to be the general impression that the amount of money which the Federal reserve banks have made bears some relation to policy or the rates which were or should have been adopted.

Gov. STRONG. Well, the Federal reserve banks, Mr. Chairman, are not run for profit. Profit is an incident of the business which they can not avoid. Now, there are a variety of ways of answering that. The first thing is that the profits go to the Treasury of the United States, over the amount of dividend and the amount added to surplus. But the important thing is this: The Federal reserve banks enjoy a franchise from the Government of the United States which enables them in emergencies to issue credit in the form of bank deposits and bank notes. These earnings of the Federal reserve banks, if expressed as they were expressed, for instance, in the Aldrich-Vreeland Act, would be no more than a tax upon the issue of notes made by the Federal reserve banks, just as the national banks pay a tax upon issues of national bank notes, and just as the Aldrich-Vreeland associations paid a tax upon issues of their notes, and had these taxes been expressed in a similar form in the Federal reserve act, instead of in the form of a sweeping franchise tax taking all of our earnings, the result would have been just about the same.

We have figures carefully prepared at the bank in New York which disclose the fact that had the system of graduated taxes which applied to the issues of Aldrich-Vreeland notes applied to issues of Federal reserve notes during this period, the tax paid to the Government would just have absorbed the earnings we paid to it as a franchise tax in the form of turning over these surplus earnings.

The CHAIRMAN. Well, this income was the result rather of the volume of rediscounts than of the interest rates charged?

Gov. STRONG. Yes, sir.

The CHAIRMAN. And therefore would indicate that the Federal reserve banks had been doing the thing they should have been doing; that is, lending their money instead of not lending it.

Gov. STRONG. Yes, sir; and may I point out this important fact in connection with this complaint about our earnings. Let us suppose we had adopted a policy of low rates such as so many people have urged us to adopt, and instead of having a 5 or a 6 or a 7 per cent rate we had had a 3 or a 4 or a 5 per cent rate, I will undertake to say that our earnings would have been very much larger, because then there would have been an expansion on top of what we have already had, of very much greater volume, and even at the low rates we might have been making more money than we did at these high rates.

The Federal reserve bank of New York—and I don't say it with any pride; personally I feel mortified that it should be so—with the expansion which took place and which swept this enormous loan account into the Federal reserve banks, made \$62,000,000 gross in one year. Now, we do not want those earnings. They are nothing to be proud of; and if any means had been possible to have avoided the expansion, which is another form was simply expressed in the earnings of the bank, no one would have been gladder than we to have avoided it.

Representative SUMNERS. Governor, I have a letter from the president of the bankers' association of one of the States, in which he says that the high rediscount rate did one of two things in his State, had one of two effects: Either it denied to the bank the service of the Federal reserve system, or it compelled the bank to charge a usurious interest, the interest rate being 6 per cent by law.

Gov. STRONG. I think that can be answered, Congressman.

Representative SUMNERS. Well, I believe it would be worth while to put the answer in the record some place, if you can answer it.

Gov. STRONG. In the case of the member banks in New York State the legal limit of interest permitted—with certain exceptions, such as the stock exchange loans, made upon demand and secured by collateral—is 6 per cent. And our rate, as you know, upon commercial paper, was 7 per cent. I referred to the case of one of our banks in New York, the president of which stated to me that on one day his bank had loaned \$18,000,000 to railroad customers, which necessitated borrowing large amounts from us at 7 per cent, and he had charged his customers 6 per cent. Now the effect of such a relation of rates is to make that banker discriminate very carefully between anything that is avoidable, or speculative, or that a bank should not lend money for, and take care of the customers of the bank that need and are entitled to the accommodation. It does exert pressure, if you please, to reduce unnecessary loans.

Representative SUMNERS. Doesn't it exert pressure, Governor, to refuse to make necessary loans? Now let me submit this sort of a situation. The State from which this letter was received is an agricultural State, and I assume that the banks in that State have agricultural customers. There is an unfavorable situation, we will say, in the cotton market. The bank is called on to loan money. The bank can not legally loan money at a higher rate of interest

than 6 per cent. The rediscount rate of the Federal reserve bank is 6 or 7 per cent. It would seem to me that the inevitable result of that would be for the banker to decline to make the loan. He could not loan and preserve his own assets if he would loan money at 6 per cent.

Gov. STRONG. Well, I think, sir, that the assumption is that the sole profit that the bank makes out of its customers' relations is the profit on these loans. Well, that hardly expresses it all. People who borrow from banks carry accounts with banks, and that balance in the bank represents a profit to the bank.

Representative SUMNERS. But that would not apply to the same degree to a country bank. Perhaps there are one or two banks, we will say, in the community. The average farmer has just the one bank to which he can go.

Gov. STRONG. Yes, sir.

Representative SUMNERS. That bank being already extended, as most of the banks were at about that time, and the farmer not being a person who keeps money on deposit, as a rule, in any considerable amount, I think that the loan would be declined.

Gov. STRONG. Well, Mr. Congressman, this 7 per cent rate to which you have referred, was that the only rate at this reserve bank?

Representative SUMNERS. I was submitting a more or less hypothetical situation. But, I think we would be safe in assuming the rate on agricultural paper was not less than 6 per cent.

Gov. STRONG. But I maintain that that is not the controlling factor. I do not think there has been a time during the period of high rates when all the member banks did not have available to them the large possibility of borrowing at the Federal reserve bank upon other securities. Take the certificates of indebtedness which were owned by the member banks all over the country. They could always borrow from the reserve bank at a lower rate on those securities. I mean that the hypothetical question, I think, does leave out some factors in the matter of the cost of credit itself which should be taken into consideration to indicate whether in point of fact this 7 per cent rate did bear so heavily upon the member banks. It did exert some pressure, there is no question about that. It did in our district.

The CHAIRMAN. I suppose the answer to that question is in the fact, as you have already suggested, that after all, during this period from June 30, 1920, to July, 1921, both the number of the member banks that were borrowing, and the amount that they were borrowing, increased.

Gov. STRONG. They got the credit.

Representative SUMNERS. I think they charged a usurious rate of interest if they loaned at all, and took a chance at that.

Gov. STRONG. Of course, Congressman, you do not feel that the 7 per cent rate was established by any reserve bank for the sake of making a profit?

Representative SUMNERS. No, sir, I do not. I am not questioning the motive. I am just seeing where we would get to in its application. I do not even by that question want to put myself in the position of saying it was not necessary, because I do not know about it yet.

Gov. STRONG. Well, going back to that period, and reviewing the occurrences, we see the picture presented of a scale of rates generally maintained by the reserve banks down to at least the spring of 1920, very considerably below the market rates through the country, which is an invitation to borrow money for profit from the reserve banks. During that period we see that the great volume of publications, correspondence and other material produced by the reserve system in the nature of warnings to the banks not to extend, not to permit this speculative development to extend, were all of them unheeded—no response, prices rising, the volume of credit growing. What else could be done but to apply the rate remedy? What would have happened had we not applied it?

Representative SUMNERS. Take the situation like the present what is the rediscount rate now at the banks?

Gov. STRONG. Ours in New York is $5\frac{1}{2}$ per cent for all accommodation of every kind.

Representative SUMNERS. I believe it is 6 per cent in most of the districts.

Gov. STRONG. In Boston it is $5\frac{1}{2}$ per cent. In Philadelphia I think it is $5\frac{1}{2}$ per cent. In some districts it never went above 6 per cent, as you know. I have been absent from the office now so long that I am not able to say from memory what readjustments have recently taken place, but a number have reduced to $5\frac{1}{2}$ per cent.

Representative SUMNERS. Now, I think that it must have been 6 per cent in districts serving southern territories. Not less than 6 per cent, I believe, in the Richmond district. Now, if they hold on to a 6 per cent rediscount rate there it shuts agricultural paper for rediscount privileges out of that bank, or compels usurious interest being charged.

Gov. STRONG. Well, I do not recall what the contract rates are there, Congressman.

Representative SUMNERS. Well, it is 6 per cent in North Carolina, I know. That is where I got this letter from.

The CHAIRMAN. Well, the average rate is above 6 per cent, I am very certain of that.

Gov. STRONG. I think it will be found that on the average country banks throughout the United States are able to make more than 6 per cent on what they lend to their customers, but isn't it fair to point out this in connection with the loans of the Federal reserve banks? Your question would seem to imply that every dollar of accommodation under present conditions extended to needy farmers through a member bank was in turn represented by borrowings by that bank at the reserve bank. Now, in the country districts, as a matter of fact, the amount of borrowings from the Federal reserve banks is only 7 per cent of the deposit liabilities of the member bank. Your question would imply that every dollar of credit extended by member banks to their customers was subjected to the direct influence of an equal number of dollars borrowed at a higher rate from the reserve bank, whereas that is not so at all.

Representative SUMNERS. Well, I did not mean to so imply by my question. I was only directing my question to that part of the loans which they did get from the Federal reserve banks.

Gov. STRONG. Take the banker who made that inquiry of you, Congressman. Suppose, for illustration, that he is the president of

a bank which is lending a million dollars to the farmers and has a million dollars of deposits. Now, assume that he is getting a variety of rates on his loans; but at that level if he is just borrowing enough to make good his reserve he is only borrowing \$70,000 at the reserve bank. Of course I do not mean to say that the Federal reserve system has only provided that amount of credit to the member banks. Some member banks have borrowed far beyond it. There are some sections of the country where the large borrowers get as much as eight and nine times their basic line, but the principle that I want to refer to is that the pressure of rate exerted by the reserve bank rate only applies to that amount which is borrowed from the Federal reserve bank and not to the full loan account.

Representative SUMNERS. Do you not think that the rediscount rate of the Federal reserve bank has a most direct influence on interest rates generally in the country?

Gov. STRONG. Well, I think it is going to exercise a considerable influence in New York, but in Texas, for instance, where the contract rate is 10 per cent—isn't it, or 12?

Representative SUMNERS. Ten.

Gov. STRONG. There, in Texas, I do not believe it has much influence.

Mr. Chairman, may I have a selection made from this collection of material to go into the record? It is all along the line of the general discussion in regard to credit control, and if you will permit me to do that I would like to put these quotations in the record.

The CHAIRMAN. Very well, you may do so.

Gov. STRONG. I have already read in the record the statement issued to the public on November 3, 1919, the date of the first change during that year in the rediscount rate, and the comment on the conditions that led to this advance, by the Federal reserve agent.

Again, on December 30, 1919, when a uniform rediscount rate of 4½ per cent was established for all advances not exceeding 90 days, this bank again publicly outlined its policy with regard to the rate changes and issued a word of caution to bankers against unwise expansion of credit. This statement was as follows:

It seems appropriate at this time to make a brief statement to the member banks in regard to the discount policy of this bank.

During the period of active borrowing upon an increasing scale by the Government of the United States, the demands for credit for war purposes exceeded the amount of the savings fund of the Nation available for investment in Government securities, so that the discount facilities of the Federal reserve banks were, necessarily, employed to supplement the normal volume of credit created by savings. It was necessary, therefore, during this period for the Federal reserve bank of New York to give consideration in its discount policy to the interests not only of the Government and of business, but also of those patriotic citizens who anticipated their future savings in order to subscribe to war loans.

Now, happily, the income of the Government has overtaken its expenditures and in the month of September there was an actual decrease in the Government debt of about \$400,000,000; the loans which banks have made to their customers on Government securities are steadily being reduced, and Secretary Glass, in announcing the current offering of 4½ per cent Treasury certificates of indebtedness, states that the success of the issue will assure the consummation of the Treasury's plan for financing the unfunded portion of the war debt.

In view of the foregoing, and of the wide distribution of certificates to the public, it being estimated that not over one-half of the certificates outstanding are now held by the banks, the directors of the Federal reserve bank of New York have eliminated the preferential rates heretofore maintained in favor of advances and rediscounts based on bonds, certificates of indebtedness and acceptances, and for the time being

at least, have established a single rate for credit at the Federal reserve bank, thereby greatly simplifying their future rate policy.

While the Federal reserve act, by lowering reserves, added permanently to the lending power of the member banks, it was not intended that the Federal reserve banks themselves should be used to promote permanent credit expansion or for the purpose of obtaining funds to reloan at a profit in the general credit market. They were intended to facilitate emergency or seasonal expansion, and except for such unusual borrowing as war financing necessitates, the same principles which governed borrowing by banks prior to the establishment of the Federal reserve system should still obtain. Nor does the existence of the Federal reserve system relieve bankers from their individual responsibility to prevent unwise expansion of credit at a time like the present, when the pressure for credit is very great. On the contrary, with the banks being gradually relieved of the volume of Government securities, which, directly or indirectly, they had to assume, the released credit should be devoted, as far as practicable, to the reduction of indebtedness to the Federal reserve bank, in order to gradually reduce the present credit expansion.

On May 29, 1920, the Federal reserve bank of New York announced the establishment of a discount rate of 7 per cent on commercial paper. This announcement was accompanied by the following statement:

The foregoing action has been taken in order that bankers, their customers, and the public generally may find in the discount rates of this bank a reflection of existing credit conditions.

This action is commented upon by the Federal reserve agent in his review of business conditions June 30, 1920, as follows:

The result of the higher Federal reserve bank rates, as far as we can learn, has been to impress borrowers with the necessity of borrowing as little as possible, and of presenting a sound case when applying for credit. The increasing number of sales not only of manufactured goods but of raw materials, during the past month, is clearly indicative of the desire to reduce stocks of goods which are being carried. Producers and distributors find that necessary credit is available, but there is greater discouragement of borrowing for less necessary purposes.

In addition to explaining publicly its policy with regard to rate changes at the time changes were made, this bank, during the period of rising prices, repeatedly made statements warning bankers and business men that credits could not continue to expand indefinitely, and to urge the restriction of unnecessary borrowing.

The following quotation is taken from the Federal reserve agent's report on business conditions, issued on December 20, 1919:

The banking problems of the coming year will center largely around the greatly expanded volume of bank credit which the war required and with which the subsidence of war financing leaves us. To establish some control over it and to prevent in so far as practicable its diversion into undesirable uses instead of to reduction of bank debts is a task requiring of the bankers of the country not only an understanding of the situation but action of a most disinterested sort. For the longer this volume of credit remains in use in excess of our requirements for producing and distributing goods and carrying on the usual business of the country, the longer will be delayed a return to more normal business and price conditions.

The additional credit created by the Federal reserve bank during the war was supplied at rates which of necessity conformed to the Treasury's policy of borrowing at low rates of interest. During the war, when industrial expansion was closely controlled by Government regulation, the use of the credit resources of the Federal reserve bank was confined largely to purposes necessary to carry on the war and maintain the civilian population. But with the removal of such regulation and control, and under the stimulus of cheap credit and apparently limitless demand for goods, industrial expansion has progressed by leaps and bounds, accompanied by speculative activity in all kinds of property. This expansion keeps up a pressure for credit at a time when the volume of credit should be diminishing.

There are two effective checks to such expansion: one, the higher cost of goods which, when supply and demand become more nearly balanced, will decrease consumption; and the other, the higher cost of credit, which will make it less profitable for banks to borrow and thus reduce the supply of credit available to them for further expand-

ing their loans. The rates of the Federal reserve bank should be an effective influence upon the cost of credit. They have been raised twice, on November 3 and December 11, but have, nevertheless, been closely related to the certificate rate policy of the Treasury. They have, however, given clear indication to the member banks of the desirability in their own interest of extending credit with increasing restraint and circumspection and of addressing themselves to the gradual reduction of their debts to the Federal reserve bank.

The annual report of the Federal reserve bank of New York for 1919 further discussed the rate changes of that year and pointed out the need of conserving credit for productive and necessary uses. The statement was as follows:

During September the debt of the Government decreased about \$400,000,000. By the end of the year the reduction had grown to \$759,000,000. This turn in the tide of Government financing provided the basis for an increase in the rates of the Federal reserve bank of New York. These rates were accordingly increased, gradually and progressively, on November 3, December 11 and 31, 1919, and January 22, 1920, from a scale of from 4 to 4½ per cent to a scale of from 4½ to 6 per cent. Thus the rates which during the war were necessarily related to the rates on Government securities rather than to the rates paid by industry and commerce began gradually to approach their normal relation to the latter class of borrowing. If credit elasticity were abandoned and fixed limits of credit established, a large measure of credit and price deflation might be accomplished promptly, but only at the expense of industrial demoralization such as we have seldom if ever experienced. Credit should do its part in bringing about the readjustment, and should be made sufficiently expensive to exert pressure and discourage unproductive and unnecessary uses. But the movement should be gradual and orderly; sudden credit or price deflation might lead to disaster.

In the same report this bank outlined the responsibilities of member banks for the control of credit expansion in the following words:

Except in the case of open market transactions, whatever pressure Federal reserve bank rates may put upon the volume of credit is exerted not directly but through the member banks. It is important, therefore, that as the first steps are being undertaken to reduce the great credit expansion which war financing necessitated the member banks should realize that the existence of their new credit organization does not lessen the responsibility for credit conditions which they formerly recognized and assumed. On the contrary it rather increases their responsibility because of the immensely increased credit power which the new organization creates and which they take the initiative in using. The duty of the organization is to establish such rates as will suffice to keep the volume of credit within control. But it is the credit policies and requirements of the member banks, reflected in the amount of their reserve credit they call into use, which will usually determine the volume. And as the banks are gradually relieved of Government securities it seems desirable that the policy of steady borrowing which the absorption of these Government securities has necessitated, should gradually revert to the policy of seasonal or occasional borrowing by banks, which prevailed prior to America's entry into the war. When the member banks have thus once more reached a position in which they usually transact only such business as their own resources permit the Federal reserve system will have been restored to its normal rôle of an agency for emergency or seasonal expansion.

The December, 1919, monthly review of the Federal reserve agent sought to call attention to certain evidence that the rising tide of business activity was near to flood, and that there were signs the ebb had begun. This warning was contained in the following paragraph:

There are other evidences of reaction from the progressive expansion of October. There has been a marked falling off in the amount of new securities offered for sale and manufacturers and merchants are now unwilling to make contracts at present prices on the old basis; indeed it is reported to us that where such contracts formerly covered a period of six months they are now generally limited to half that time.

In the review published on April 30, 1920, the agent of this bank discussed at length the credit situation and pointed out the necessity for a gradual deflation, urging upon each banker his individual responsibility for doing his share in conserving credit for necessary purposes.

A review of the first four months of 1920 indicates very little progress toward a reduction of either commodity prices or credit volume. The best that can be said is that the rate of increase in both has been slowed down. The usual credit liquidation of January and February did not occur this year, and while during February the steadily rising indices of commodity prices halted, or even showed signs of declining, they have resumed their upward course during March and April, accompanied by increasing bank loans, in spite of a decreasing volume both of the Government debt and of Government securities owned or carried by the banks. This condition finds its reflection in the Federal reserve system, the reserves of which were 43.7 per cent on January 2 and 43 per cent on April 23. A year ago the reserves were 52.7 per cent.

NECESSITY OF IMPROVING CONDITIONS.

In spite, then, of the substantial increase in rates for both short and long credit which followed the January increase in Federal reserve bank rates, no general improvement in either price or credit expansion has since been effected. When we realize that in another few weeks southern harvests will begin and that in another four months we shall be in the autumn period, when trade and crop moving demand an increased volume of credit, it is important that both bankers and business men should carefully study the situation at once, calmly but frankly, to see what can and should be done to prepare for these demands and to effect, in the meantime, not only a prevention of further credit and price inflation, but a measurable reduction of both.

Before considering what bankers can do to bring this about, it seems desirable that conditions in goods and labor, the physical elements of the situation, should be briefly examined in order that the difficulties of effective action through credit may not be underestimated.

GOODS.

Generally speaking there is no improvement in the supply of goods measured by the demand; the upward movement of the price index shows this. Compared with prewar standards, the production of most goods has not increased materially, whereas the desire and the ability to consume goods have increased greatly. This is due in large part to the increased margin over bare living costs which war conditions brought to so many of our workers—industrial and agricultural—and which in varying degrees they still retain. Our domestic demand for goods is augmented by an insistent demand from Europe, whose industrial disorganization has been made still more difficult by the elimination, for the time being, of Russia, Germany, and Austria, as international producers and distributors.

CREDIT.

Many factors have contributed toward the lack of balance between production and consumption and the price and credit expansion from which, in common with all the world, we are now suffering, and many different steps must consequently be taken to bring our unbalanced economic life back to an equilibrium. Whatever these necessary steps may be and by whatever other groups, Governmental or private, they may be undertaken, it is evident that the Federal reserve banks and each one of the 30,000 banks of the country have a special duty and responsibility toward present conditions that they can not neglect. This duty, as the chamber of commerce points out, is "a stricter control of credit."

THE BANKER'S RESPONSIBILITY.

The bankers as a group are the most potent single influence in the industrial life of the country. They carry on their work with substantial uniformity in every city and town, touching every business activity. Relying on the resources of the Federal reserve banks they patriotically undertook the immense credit expansion which war financing required. In so doing they set in motion forces which are still continuing to aggravate the lack of balance between supply and demand and which must now be brought under control. The existence of the Federal reserve system does not relieve a single banker, whether member or nonmember, from his individual responsibility to do his share in checking further expansion by exercising a stricter control of the credit he creates; for except in its limited open market purchases of bankers' acceptances the Federal reserve system does not act directly on the volume of credit but acts only indirectly, through the banks, on whom the primary responsibility rests.

WHAT CAN THE BANKER DO?

What can the banker do among his own customers to exercise "a stricter control of credit"? It is difficult to generalize, for each bank and each of its borrowers must be considered individually, while each borrower is apt to be convinced that his case differs from that of others and is wholly meritorious. The following suggestions seem sufficiently general to cover many cases:

Clearly, the present is not an appropriate time to extend business merely for the sake of increased volume of profits. This applies not only to producers and distributors but to bankers as well, for the present opportunities to take on new borrowing accounts and to reloan borrowed money at a profit are tempting to many. Nor is it a time for public or private improvements not absolutely necessary for health and efficiency. With a shortage of goods and labor, the necessity of conserving both is as great as it was during the war, and requires an even higher degree of self-restraint on the part of bankers, producers, distributors, and consumers, since governmental controls no longer exist. Accordingly the more clearly the banker keeps in mind the conservation of labor and goods for necessary purposes as the object of his control the more clear will be his course in exercising such control.

Making new loans for purposes which will not further production or distribution of necessary goods creates fresh demands on labor at a time when there is not enough labor to meet pressing needs. Reduction of existing loans for similar purposes tends to reduce demands on labor. Loans for the purpose of speculating in commodities, securities, and real estate absorb credit required for necessary production and tend to increase the cost of living. Loans for the purpose of carrying stocks of luxuries and expensive grades of goods or stimulating their production merely increase the temptation to extravagant living, while loans to individuals to purchase such articles seem wholly indefensible.

GRADUAL DEFLATION THE OBJECTIVE.

The foregoing suggestions are very general and merely rehearse familiar things, yet they will bear repetition at a time when it is the bankers who are primarily called upon to deal with a situation which is not only country-wide but world-wide; by far the most difficult economic situation the modern world has ever faced. The new turn upward in credit and prices, after the halt of February, is an unmistakable sign to every banker, whether or not his institution is itself a borrower, that the necessity is here for him to take a more firm and determined stand to prevent further expansion and to inaugurate a gradual and orderly reduction of credit. A difficult program, it is clear, and one requiring even more discretion, courage, and public spirit than the bankers manifested so notably during the war: a program which requires the cooperation of producers, distributors, and consumers for its success; but a program which, nevertheless, is essential not only to our steady industrial progress but to our entire social and economic well-being, and failure to undertake it is almost certain to lead to abrupt and unhappy consequences.

While urging the necessity of reducing unessential borrowing, this bank did not neglect to assure business men and bankers that there were at all times ample credit facilities to meet all legitimate demands for credit. In the review of the agent for July 30, 1920, the following statement was made:

In spite of the recent movements in prices and credit, past experience indicates that additional credit will soon be required for the heavy seasonal demand of autumn. Happily there is no longer reason for the financial apprehension with which bankers used to approach each autumn in prewar days. For instead of the stone wall of rigid reserves and fixed currency volume, there is now standing back of all member banks a reservoir of credit and currency whose elastic and prompt response to the requirements of the country have been thoroughly tested. The fact that for many months the Federal reserve bank has been exerting pressure in order gradually to reduce the volume of credit will not prevent it from extending additional credit whenever the necessities of industry, commerce and agriculture require it.

On August 28, 1920, the monthly review of this bank said:

Except for those trades in which through price or other uncertainties producers have adopted a waiting attitude, production, distribution and consumption are proceeding at a high rate. This is an indication that though credit is high and under

pressure, the bankers and business men of the country know that through the immense resources of the Federal reserve system credit is nevertheless elastic and can be commanded at all times within legitimate limits for necessary productive and distributive requirements.

In the report of September 30 this bank again emphasized the necessity of protecting industry from undue credit restriction. The statement was as follows:

Just as credit and prices went up together, they should come down together, too. During the past month there has been no decrease in the loans and investments of the banks of the country, but material reductions should not be expected at present. Credit requirements are nearly always at their peak in the autumn; and besides the normal seasonal demands, a period of transition to lower prices like that which we are now experiencing is one which requires temporarily, at least, additional credit. On the one hand increasing inventories which result from slowly moving stocks, and on the other canceled orders and poor collections produce a demand for credit not unlike that of last spring when the railway and ocean freight movements were temporarily congested. Such a period calls for a credit policy on the part of the banks looking to conservation of sound business. Such additional credits as are required are not for further expansion but are for the protection of industry. They are to enable business men to undertake in an orderly manner the reduction of inventories and the descent to lower price levels. That the readjustment, which has been quite radical in many industries, has proceeded quietly and confidently has been due in very large part to the helpful and constructive attitude of the bankers who, in spite of heavy withdrawals of their deposits and the unusual movements of funds described in the following section, have not hesitated, if necessary, to increase their borrowings from the Federal reserve bank to furnish such credits for production and distribution as conditions have required.

In its review of business conditions during October, 1920, this bank pointed out that there had been adequate credit elasticity to meet the added demands incident to the crop moving. In this connection, the review quoted from a statement issued by the Federal Reserve Board under date of October 16 to the following effect:

In view of the representations which have recently been made to the board as to the unavailability of credit in agricultural sections, the board requested information concerning credit conditions throughout the country from the chairman and governors of Federal reserve banks at the usual autumn conference here this week. The board is advised that credit has been steadily available for the successive seasonal requirements of agriculture as well as for the needs of commerce and industry, and that there is no ground for expecting that its availability for these purposes will not continue. The present improved credit situation is due in part to the timely steps taken last spring, following conferences between the board and governors and directors of the Federal reserve banks, to provide credit for crop moving requirements and in part to the subsequent improvement in transportation reported from all districts, except in a few localities.

The November 30, 1920, issue of this bank's monthly report reads in part as follows:

Throughout the year credit has been at all times available, as the Federal Reserve Board pointed out in its statement of October 16, for in spite of the rapid movements of funds from one part of the country to another, member banks have always felt ready to extend additional credit where such a course seemed necessary and sound, knowing that they could in turn fall back upon their Federal reserve bank.

Bearing further upon the availability of credit for necessary purposes, the monthly report of this bank issued on December 31, 1920, said:

It is most important in such a period that there should be sufficient elasticity of credit to enable the various interests and industries to mature and carry out their plans without the fear that the necessary credit facilities may be lacking. Looking back, it appears that during the early months of falling prices, referred to above, the

volume of credit remained practically stationary, and that during the later months, when the fall was most acute, the volume of credit actually increased. Thus, in a year which, from the point of view of credit, has been marked by the measurable recovery by the Federal reserve bank of the control of credit through discount rates which in part had been relinquished to facilitate war financing, it seems clear that the recovery of credit control has not been at the expense of credit elasticity. The higher rates established indicated the desirability that inflation should proceed no further, but they have at no time prevented the granting, continuing, or even increasing of credit where conditions justified such action.

Additional expression of this bank's policy in conserving credits for productive and distributive purposes was made in the annual report for 1920. The quotation follows:

The elasticity in credit which had been maintained in 1920 was an assurance that during 1921, unless wholly new and unexpected conditions should arise, credit would continue to be available for the legitimate and necessary requirements of commerce, industry, and agriculture.

In the monthly review issued March 1, 1921, this bank again indicated its repudiation of a policy of too rapid credit contraction, in the following words:

The very rapidity of the fall in prices, particularly during the last three months of 1920, has required the continued use of credit for the protection of farmers, manufacturers, and merchants.

Reviewing the occurrences of preceding months, the April 1, 1921, report of this bank stated:

credit equilibrium and elasticity were maintained, and credit was at all times available for legitimate needs throughout the country.

The August 1, 1921, review of this bank commented upon credit conditions as follows:

The reduction of bank credit thus far effected, accompanying a decline in the prices of practically all commodities and products, has not been marked by any series of severe business failures such as has characterized other comparable periods. Figures based on the reports of credit agencies indicate on the contrary that the number of such reverses in recent months has been but little above and frequently somewhat below the average through a series of years. Bankers ordinarily have avoided the precipitate calling of loans and have aided in the work of readjusting to new conditions. In this they have been guided by the knowledge that the resources of the Federal reserve system have always been available to meet all necessary credit demands.

The reduction in the volume of bank loans, and particularly the decline in loans of the reserve banks, reflects the passing of the period of credit stringency. There continues, however, as necessarily must continue at all times, a scrutiny of new loans and the exercise of sound banking judgment in granting them, especially when they are desired for the purpose of holding goods at values unrelated to present conditions or for embarking on enterprises which depend for their profits upon the former level of prices. The discretion of the individual banker, keeping in mind the serious consequences of too strict a program with regard to loans already made and still required, will no doubt lead him to follow a liberal policy wherever present conditions or sound expectations warrant.

Following are copies of correspondence of this bank indicating:

(1) Collateral requirements of this bank when rediscounting for another Federal reserve bank.

(2) Additional collateral requirements of this bank when rediscounting in unusual amounts for a member bank or when that member bank is not in first class condition.

Following is a letter to Gov. Van Zandt, of the Federal reserve bank of Dallas:

AUGUST 5, 1920.

R. L. VAN ZANDT, Esq.,

Governor Federal Reserve Bank of Dallas, Dallas, Tex.

DEAR MR. VAN ZANDT: * * * The policy of this bank in making advances to our member banks has not been changed, and we are still making advances on Liberty bonds and Victory notes for the full face value of the bonds.

We have been advised by the Federal Reserve Board that the board's letter of July 15 was not intended to be mandatory and that if any Federal reserve bank desires to effect rediscounts for other Federal reserve banks when the paper is secured only by a like face amount of Government bonds, it may do so. We have not deemed it necessary to require 100 per cent collateral at market value on our rediscounts or loans for members and see no reason for a different attitude on our part toward rediscounts for your bank if you rediscount with us this season.

With reference to the ruling of the Federal Reserve Board that collateral pledged with the Federal reserve agent as security for Federal reserve notes in turn be secured by a like market value of Government bonds, we have also been advised that the board had modified its ruling so that this requirement might be waived in any case where the aggregate of all collateral held by the Federal reserve agent exceeds the amount of Federal reserve notes issued by an amount greater than the discrepancy between the market value of the bonds and the face value of the notes for which they are pledged as collateral. As our excess of security with the agent seems ample to cover any probable deficiency of collateral market value, we apprehend no difficulty or embarrassment on that score.

"I trust that this letter answers your inquiry fully, and with kind personal regards, I am,

Very truly, yours,

L. F. SAILER,
Deputy Governor

As regards the policy of the Federal reserve bank of New York in regard to new financial statements in connection with member bank rediscounts, I quote the following letters:

DECEMBER 23, 1920.

Hon. W. P. G. HARDING,

Governor Federal Reserve Board,

Washington, D. C.

DEAR GOV. HARDING: With this I am handing you a memorandum listing large discount lines of \$500,000 or more of commercial paper under rediscount with the Federal reserve bank of New York as at the close of business December 11, 1920, amounting to \$393,826,000. In addition to the maximum lines there are two other columns, one showing the date of the last statement of condition and the other showing the ratio of quick assets to current liabilities.

You will observe that the ratios of quick assets range all the way from 17.60-1 to 1.06-1. It is perfectly apparent that when our manufacturing and industrial concerns close their books for the year their new financial statements will show a very material reduction in the ratio of quick assets as compared to their previous statements. It occurs to me that, under present conditions, it is most desirable that the Federal reserve banks adopt, as far as practicable, a uniform and perhaps a somewhat more liberal policy in dealing with commercial paper offered them for rediscount when accompanied by new statements. I feel very strongly that if we were to adopt a too critical or too rigid policy with regard to this subject it would not only have a very bad moral effect upon our banks but might lead to consequences that would be disastrous. It occurs to me that you may consider this subject important enough to warrant the board's taking appropriate action in this regard and, thereupon, to notify all Federal reserve banks and branches of the board's views.

Very truly, yours,

J. H. CASE, *Acting Governor.*

The reply to that letter is as follows:

FEDERAL RESERVE BOARD,

Washington, December 24, 1920.

DEAR MR. CASE: I acknowledge receipt of your letter of the 23d instant, inclosing list of large discount lines of commercial paper held by your bank on December 11. Other members of the board and myself have been interested particularly in the range of ratios of quick assets to liabilities as shown in the third column of the statement. It seems that it will be necessary for Federal reserve banks to avoid adopting too

rigid a policy in the matter of ratios when the new financial statements begin to come in. The members of the board present at a conference this morning think that consideration should be given to changed conditions, and where a concern is undoubtedly solvent and its management capable and efficient it will not be necessary to attach the same importance to a high ratio of quick assets to liabilities as heretofore. It must be remembered that as prices reach more normal bases, readjusted inventories will involve less liability to loss than the inventories based on the greatly inflated prices of a year ago.

In accordance with your suggestion, the board is communicating with all Federal reserve banks, but as it would prefer that the initiative should come from the banks, it is merely asking in the general letter for an expression of their views. Further correspondence will follow later.

Very truly, yours,

W. P. G. HARDING, *Governor.*

Mr. J. H. CASE,

Acting Governor, Federal Reserve Bank, New York, N. Y.

I will read the following extracts from the Federal Reserve Bulletin:

May, 1919:

* * * The underlying and most general factor tending to sustain the present high level of values is the credit and banking situation, inflated as it is throughout the world. (p. 410.)

June 1, 1919, the end of Government control:

The restoration of business to a competitive basis necessarily implies the restoration of our banking and financial mechanism to the exercise of its normal functions in connection with the development of trade. Among these are the restriction of undesirable or excessive borrowing and the application within reasonable periods of the test of liquidation to our foreign trade. * * * During this period of transition danger of maladjustment or inflation will necessarily exist in greater or less degree, and such safeguards as can reasonably be applied should be invoked. This places upon the banks of the country an exceptionally responsible task (p. 523).

Ordinarily a sharp check could be administered through the advancing of the rates of rediscount at Federal reserve banks. Such a check for the moment encounters some difficulty so long as the policy of promoting the absorption of Government securities by favoring rates is maintained. (Check to speculation in the securities market, p. 524.)

July 1, 1919:

It is well to reiterate the fact that the funds of the Federal reserve system are in no sense intended for the support of speculation and that member banks should bear this in mind when arranging for the extension of accommodation to borrowers (p. 618).

October 1, 1919, discount policy:

* * * when the financial operations of the Government will cease to be the important factor in shaping reserve-bank policies which they have been, and Federal reserve bank rates once more will be fixed solely "with a view of accommodating commerce and business" (p. 910).

November 1, 1919:

The real character of the situation depends upon the use that is being made by member banks of credit facilities to be obtained at Federal reserve banks. It is just here that the present situation must be regarded as unsatisfactory. The evidence which is currently available seems to point to the fact that member banks, under the influence of strong private demand, are, in not a few cases, greatly expanding their loans * * *. Cooperation on the part of member banks is therefore necessary to the preservation of a satisfactory condition of strength throughout the banking system as a whole, and good results can not be obtained through any single method, least of all through the use of those modes of restraint and correction which are in ordinary circumstances sufficient for the purpose (p. 1010).

December 1, 1919:

As Gov. Harding, in a letter to Hon. Robert L. Owen, has said, the board has repeatedly called attention to the fact that resources obtained from the Federal reserve banks should not be used for speculative purposes, and at various times when there

has been unusual speculative activity it has issued public warnings as to the bad effect of such activities upon the banking situation. The first warning of this kind was issued as long ago as October, 1915, and the warning has been repeated on several occasions since that date when conditions made it necessary.

On June 10, 1919, the board made public a letter, which it had addressed to all Federal reserve agents, reading as follows:

"The Federal Reserve Board is concerned over the existing tendency toward excessive speculation, and while ordinarily this could be corrected by an advance in discount rates at the Federal reserve banks, it is not practicable to apply this check at this time because of Government financing. By far the larger part of the invested assets of Federal reserve banks consists of paper secured by Government obligations, and the board is anxious to get some information on which it can form an estimate as to the extent of member banks borrowing on Government collateral made for purposes other than for carrying customers who have purchased Liberty bonds on account, or other than for purely commercial purposes."

* * * The board has called attention repeatedly to the dangerous speculative tendencies which have been prevalent.

As pointed out in the board's statement of November 4, the speculative situation is not regarded as being confined to any one part of the country, but there has been extraordinary speculative activity in all sections. The consequences of overspeculation are as evident and may be as serious when the funds of banks are used for the purpose of carrying commodities or real estate as they are when they are employed in a similar way in connection with stocks and securities. As was stated by the board at the time, "the real character of the situation depends upon the use that is being made by member banks of credit facilities to be obtained at the Federal reserve banks * * *". The reports which come to the board from the Federal reserve districts indicate a marked advance in the growth of speculative transactions," and again, "there has been an increasing demand for funds, speculation is attaining an unprecedented activity and is embracing real estate and many classes of commodities." It follows from what has been said that the repression of undue speculative activity and overextension of credit is as clearly a duty of the banking system in the South and West as it is in the East and North. In reply to a message received from a cotton-growers' committee, the board, on November 19, telegraphed the National Farmers' Union, in session in Memphis, that there had been no change in policy with respect to the extension of productive credit, but that Federal reserve bank resources should not "be used directly or indirectly for speculative purposes nor for facilitating the hoarding of commodities for such purposes * * *". As already pointed out, the use of the resources of the Federal reserve banks either directly or indirectly for speculative purposes is forbidden by the act (p. 1109).

February, 1920:

Our banking system is therefore passing through a transition period. During this transition period there should be an effective control of credits, gradual liquidation, and such temporary expansion only as may be necessary to meet seasonal requirements or emergencies. There should be a less lavish but more efficient use of capital and credit, extravagance should be discouraged in every way possible, and the production of essential commodities increased. It is important that the world should get back to work, but in order to provide steady employment for the people of our country it is necessary that there should be a sustained demand for the products of our fields and factories, mines and forests, and in order to maintain this steady demand it is necessary to provide markets abroad for our surplus production.

Working along this line of policy, the Federal reserve agents in the several districts have in some cases issued to member banks circular letters of suggestion designed to encourage the curtailment of unessential loans and to explain to them the real purpose of variations in the discount rate, while others, although making no public statement, have undertaken to secure the cooperation of member banks through informal conversations and correspondence intended to aid in this process of reducing inflated loans and of confining reserve credit to the financing of necessary business operations.

March, 1920:

The expansion of credit set in motion by the war must be checked. Credit must be brought under effective control and its flow be once more regulated and governed with careful regard to the economic welfare of the country and the needs of its producing industries. Deflation, however, merely for the sake of deflation and a speedy return to "normal"—deflation merely for the sake of restoring security values and commodity prices to their prewar levels without regard to other consequences, would be an insensate proceeding in the existing posture of national and world affairs.

April, 1920:

At all events, the situation emphasizes the necessity for bringing the speculative use of the credit facilities of the Federal reserve system under control at as early a moment as possible in order that credit shall be available as needed for the requirements of industry as the season advances. There is some reason to think that an increasing share of banking funds, both at the reserve institutions and at the member banks, is being offered to the direct service of commerce and industry, but what has already been done in that direction needs to be carried further and rendered more effective.

June, 1920:

* * * Regardless of the extent of its legal powers, it would be a most difficult task for the Federal Reserve Board sitting in Washington to attempt by general rule of country-wide application to distinguish between "essential" and "nonessential" loans. During the war there was a broad underlying principle that essentials must be "necessary or contributory to the conduct of the war," but notwithstanding the sharp outline of this principle much difficulty was experienced by the various war boards in defining essentials and nonessentials. All the more difficult would it be for the Federal Reserve Board to make such a general definition now when there is no longer that purpose as a guide.

August, 1920:

* * * the board has taken the position that it is not sufficiently close to the actual day-to-day requirements of business to undertake to lay down rules as to what loans are for essential purposes and what loans are not. The Federal reserve banks in their dealings with member banks are better situated in this respect, but ultimately the main responsibility of such decisions must rest with the commercial banks themselves, which in their dealings with customers are in a position to ascertain the purpose of each loan and to decide whether this purpose is essential or not.

September, 1920, essential loans:

In harmony with this attitude, the Federal Reserve Board has, however, consistently adhered to the policy of leaving entirely in the hands of local banks the decision what loans are to be regarded as nonessential or "speculative." Gov. Harding has outlined the attitude of the board on this subject, stating that "it has never undertaken to classify any business or industry as essential or nonessential and does not intend to do so." Gov. Harding has further called attention to the fact that "expansion of undue bank credit has been restrained," while he also noted that "the fact that the general volume of loans and discounts remains practically the same would seem to indicate that the solid and genuine business interests of the country have encountered no serious hardship." Continuing his discussion of the general credit situation, Gov. Harding remarks:

"The Federal Reserve Board has consistently from the beginning of the effort to curb the tendency to headlong resort to credit operations simply urged the local banker to study his client thoroughly, and the board has never undertaken to say what class of loans should be held to be necessary or otherwise. The board is too far removed from the actual detailed situations involved to undertake to do this and has relied on the consistent information and judgment of the local banker to accomplish the board's purpose. * * * The difficulty is no doubt that many critics of the board think that the same rules of action employed during the stress of the war and the selection of preferred war business for credit assistance are now in operation. This is entirely untrue, and the reports coming daily to the board from the Federal reserve banks and from many sources of commercial intelligence distinctly contradict it."

September, 1920:

The board has never undertaken to define what, in its opinion, might be regarded as essential and nonessential loans; it has stated that this is a matter which should properly be left to the judgment of the individual banks.

From the annual report of the Federal Reserve Board, 1919, page 73, I quote the following:

While the Federal Reserve Board will always be mindful of the interdependence of credit and industry and of the influence exerted on prices by the general volume of credit, the board nevertheless can not assume to be an arbiter of industry or prices.

From the annual report of Federal Reserve Board, 1920:

Referring to the world-wide readjustments from war-time delirium to the more normal conditions of peace, operating almost simultaneously throughout the world, its effects have been more far-reaching and drastic in other countries where the inflation of bank credit and currency was more pronounced than in the United States. The process necessarily has been painful but it was inevitable and unavoidable, and in view of world-wide conditions could not have been long deferred in this country by any artificial means or temporary expedients which might have been adopted.

In meeting the strain to which our domestic banking system has been subjected, a strain which always accompanies the economic and financial changes which follow a period of great expansion, no resort was made to credit curtailment or to contraction of the currency. The precautionary steps which were taken during the year did not produce deflation but they checked the expansion which had been proceeding at a dangerous rate and prevented a larger measure of distress than has actually occurred.

Referring to agricultural credits it says:

* * * It should be borne in mind also that the total amount of farmers' notes rediscounted by Federal reserve banks gives no indication of the amounts advanced by the Federal reserve banks to finance the production and sale of farm products since large amounts advanced to member banks in the agricultural districts on commercial and industrial paper are used by these banks for loans to agricultural interests.

It refers also to the important part played by bankers' acceptances in the movement of crops to ultimate markets.

Referring to changes in business conditions and readjustment of prices, it affirms that changes were not due to contraction or drastic restrictions, as the total volume of bank credit in the United States declined but slightly from the first to the last of the year 1920.

I will read the following statement made at the governors' conference, Washington, D. C., October, 1920, in regard to the purpose of credit control under existing circumstances:

It was more necessary to win the war than to observe technicalities of theoretically sound principles. While present abnormal conditions are the outgrowth of the war, and doubtless justify methods which might be undesirable after readjustments have been made, yet it seems clear that the Federal Reserve system should see its justification very clearly before including among its purposes others than those originally specified in the title of the act or clearly implied in the character of the amendments. Regulation of the price level does not appear to be among the implied additional purposes. If the determination of the price level is left to the inter-play of natural forces, it is inevitable that a healthy price level will be an incidental result of the establishment of a sound credit condition.

But it appears to me that the Federal reserve system need not concern itself about deflation. Deflation for the sake of deflation, or of correcting injustices wrought by inflation, is not one of the purposes of the Federal reserve system. It naturally involves a measure of deflation to reduce the volume of credit, but the concern of the Federal reserve system lies chiefly in establishing a sound credit condition.

Gov. Seay said:

The primary purpose of the endeavor to control credit in the present situation and from the Federal reserve bank point of view is to maintain and strengthen reserves, and conservation of reserves should always be the object of credit control.

It is believed there should be no direct connection either actual or apparent, between the objective of the credit control policy by reserve banks and the course of prices; that is to say, control of credits should not be undertaken by reserve banks for purposes of regulating prices. The aim should be to keep credit liquid, to control its use by the discount rate, and leave prices to take their natural course according to economic laws.

It would probably be fair to say that a normal credit condition exists when bank loans are made very largely, and loans from reserve banks entirely, for the purpose of producing, purchasing, carrying, or marketing goods in one or more of the steps of the process of production, manufacture, and distribution.

Dr. Miller expressed his agreement with those who say that the Federal reserve banks should not undertake to regulate prices and

that their policy should be the establishment of sound credit conditions, but at the same time he pointed out that the reserve banks must not and can not be unmindful of the effect of their policies upon prices. Dr. Miller spoke in part, as follows:

It is a very simple thing for me to conceive that a Federal reserve bank might be extremely safe and strong and yet that safety be effected at the expense of a safe condition of industry and a safe condition of the whole body economic. That is what I mean when I state with all possible emphasis that we must look beyond the situation of our immediate banks, in order to understand whether we are functioning as a banking system should function, particularly in times of stress and transition such as we are in the midst of at the present time; in brief, we must always keep one eye upon the effect of a liberal attitude in the matter of credit extension or of an illiberal attitude, upon industry. I should like to hear, therefore, from both of these gentlemen perhaps from others, too, who feel an inclination to say that an adequate administrative object of Federal reserve banking is to maintain a sound condition. After all, whatever we do affects somebody, affects some section, or affects industry in general. I quite agree with Mr. Perrin and Mr. Seay, and others, when they say it is not our business to undertake to regulate prices. I do not think that we can say with too much emphasis that we must not permit ourselves to become, in the public estimation, in any sense a general economic welfare institution. It is our business to bank; it is our business to create credit; it is our business to satisfy, as the Federal reserve act itself requires, the needs of commerce in business, but that implies that we must always have a judgment upon what the condition of industry is in order that we form a judgment upon what the needs of commerce and industry are.

Now, the fact is that all business transactions are made in terms of prices. Mr. Seay brings out distinctly, though mere passingly, the effect that liberal credit policies, on the part of reserve systems, in the past two years, have had upon the upward flight of prices. That, of course, was not the intent, that was not the purpose; it was, however, an incident of the credit policy pursued; so while we may not intend what we do with respect to making the volume of credit larger or smaller, nevertheless, if we should shut our eyes to the fact that whatever we do in the way of affecting the volume of credit is bound to have an immediate repercussion upon the general movement of prices, we should be pursuing an ostrich-like process and probably expose ourselves to pretty severe criticism. It is one thing to say that we do not intend to exercise any effect upon the general movement of prices, and it is quite another thing, however, to say that the effect of what we do upon prices is of no concern to us. My contention on that point would be that it is of immense concern to us. * * * I think we must always, in determining whether or not our credit policies are at bottom well adapted to the existing business and industrial situation, pay a very large and respectable attention to what the movement of prices is.

Now, coming to the immediate situation which has received, properly, the major space in these discussions, I suppose that beyond the elimination of the excessive speculation that was noted in both business and fundamental industrial enterprises in this country earlier in the year and throughout the larger part of the year 1919, that what we might rationally be said to have done is to have permitted, due to the discount policy of the Federal reserve banks, such liquidation as in the circumstances we thought was advisable and such liquidation as could take effect with what we felt an improvement in the general health of the country's industry, its business, and its credit. In brief, as I shall put it, our recent objective was orderly liquidation, and by that I mean liquidation that neither goes too rapidly, and therefore faces the danger of becoming forced liquidation, or one that goes so slowly as to work against the inevitable drift of economic affairs in this period of readjustment and to retard them.

In regard to the necessity for that, Mr. Perrin said:

To maintain or to strengthen reserves should be the present aim, but it is not inconsistent with such an aim to permit reduction in reserve strength, even regardless of the legal limit, if additional advances are made in order to facilitate liquidation. Reserves should in due course be increased, but however desirable that liquidation should go forward, no good can be served by forcing disaster. The wool situation in the twelfth district furnishes an illustration. Bankers who had loaned to wool-growers were counting upon important liquidation and the growers had the definite purpose of selling at whatever the market prices might be, but just at the time when they had their clip ready, the market disappeared almost overnight. It was an unprecedented situation in which there were no buyers. Mills were receiving heavy cancellations and would make no new commitments. Sound policy obviously called for continuation and increase of necessary advances against wool until effective con-

sumption demand should reappear, but only until such time. It would be equally unsound either to force sacrifice sales with no consumption demand, or after an effective demand should reappear to continue advances in order to enable growers to hold wool speculatively for an advance in prices.

I understand that the implication of the term expansion * * * is that it means expansion in connection with new or enlarged operations. It is not expansion in this sense if loans are increased to facilitate liquidation.

No plan for deflation to a prewar basis can be regarded as practicable. * * * But it appears to be in the interest of legitimate business that the present volume of credit should be reduced.

At the credit conference held here in May of this year at the request of the Federal Reserve Board, it was the definite view that steps should be taken to check the expansion of credits so as to make provision for the special requirements of the autumn. It is unquestionably due to the checks thereafter applied and since continued that we now have a relatively easy credit condition. In a similar way, thought should now be taken for the coming year and such credit provision made as will give adequate support to a commercial and industrial activity. To that end, there should be a reduction in the present volume of credit. It would not be safe for a new expansion to start with a condition already overexpanded. But at this time it may not be desirable for such a reduction to proceed very far or to continue very long. We are now having an increase of loans, yet the season is one of liquidation. There is a natural requirement of temporary additional advances to finance the movement of products from producers to consumers. Additional advances for such purposes, of course, facilitate liquidation and mark the progress toward reduction, in brief course, in the present volume of credits.

Mr. McDougal said: .

While it is true that the full measure of relief hoped for has not yet been attained by the Chicago bank, we have regarded it as our duty to provide for the requirements of necessary business and feel confident that the credit extended has been so used.

Gov. Harding said:

My own idea is the main thing for us to emphasize now is the working out of a situation that will get all of the reserve banks on a more independent basis, building up our reserves in order that we may be in a position to meet future requirements. It is going to be done by cooperation on the part of the member banks. They can not do it suddenly; they have got to work out of the present situation.

Gov. Seay said:

I would like to say, speaking for one of the borrowing districts, during the crop-raising season, that we feel that our banks have gotten themselves into a difficulty. We felt that the establishment of a progressive rate would work very seriously against a large number of borrowing banks that were borrowing purely for agricultural purposes. There is quite a considerable number of our borrowing banks that are borrowing from 6 to 25 times the amount of their basic line. You might say that these banks should not have allowed themselves to get in that situation, but they got themselves into that situation, and they needed protection, and we have tempered the wind to the shorn lamb. We therefore felt with respect to the establishment of the progressive rate that if we were to adopt it it should be in advance of a time when the banks had already gotten themselves into difficulty, and for that reason we were not inclined greatly toward the use of the progressive rate, at least this season.

Mr. Chairman, one wrong impression has already gotten abroad here, at least in certain parts of the country. Let us be particular that another wrong impression shall not go abroad. It has been widely stated in certain publications, which has been accepted by still other publications as the fact, and editorials have been based upon it, and a large contingent in the agricultural regions believe it to be a fact, and that is that Federal reserve banks have curtailed credit for commercial purposes, when we know, as a matter of fact, it is continuing to expand credits. Now, do not let it get abroad that the Federal reserve banks are compelling liquidations. Is there any Federal reserve bank that is compelling liquidation?

Regarding the essentiality of loans, Gov. Harding said:

The board has avoided giving any definition of essential and nonessential loans, and do not think the board cares to express itself on the matter of essential production * *. It is for them (the member banks), to determine what is an essential and a nonessential loan. Our position is that the whole question of what is essential and nonessential is one for local determination.

Dr. Miller said:

In my judgment the time is right now when the community must be led to judge for itself what is essential and what is nonessential, and no arbitrary or dogmatic prescription on such a subject by a Federal reserve bank or the Federal Reserve Board, at this stage of our post war movement, will be respected by the community, and in my judgment should not be.

(Inserted here is some correspondence between the board and the Federal reserve bank of New York and some tables regarding borrowings from the latter of six large New York banks and the careful attention that was given the matter by officials of the Federal reserve bank of New York:)

CORRESPONDENCE REGARDING INCREASED BORROWINGS OF SIX LARGE NEW YORK CITY BANKS.

FEDERAL RESERVE BOARD,
Washington, October 30, 1920.

DEAR MR. CASE: I acknowledge receipt of your letter of the 29th instant, inclosing table of comparative figures showing borrowings on three different dates of various groups of member banks. I note that between September 30 and October 22 six of your large city banks increased their borrowings from \$290,000,000 to \$446,000,000 and that your executive committee and officers are inclined to consider this as "not unwholesome." I think the members of the board would be interested in knowing just what caused this expansion of more than \$150,000,000 in your loans to the six banks. Was it due to withdrawal of deposits, increased loans to interior banks for agricultural purposes, European financing, or to subscriptions to corporate issues by the banks pending distribution to customers?

Very truly, yours,

W. P. G. HARDING, *Governor.*

Mr. J. H. CASE,

Acting Governor Federal Reserve Bank, New York, N. Y.

NOVEMBER 5, 1920.

DEAR GOV. HARDING: In your letter of October 30 you asked whether the increased borrowings of six of our large city banks, to which I referred in my letter of October 29, were due to withdrawals of deposits, increased loans to interior banks for agricultural purposes, European financing, or to subscriptions to corporate issues by the banks pending distribution to customers.

We have gone into the matter quite thoroughly and feel certain that all of the causes, to which you refer have contributed in part to the heavily increased borrowings of the six banks to which I referred.

The decrease in deposits since September 30, representing a withdrawal of funds from this center to the interior has been a very large factor in the demands of each of these six banks. In some instances, however, there have been additional reasons. In the case of Bank C additional funds have been required to assist in the financing of cotton. The depression in the cotton trade has caused many local banks to refuse to deal in cotton paper and the big New York City banks, in consequence, have had to shoulder the burden. In the case of Bank B deposits have decreased \$44,000,000, while their borrowings have increased \$29,000,000, the borrowings being caused entirely by the loss of deposits. It may also be mentioned that the call money situation has also played a certain part in the demands of some of these banks. That is a matter which I should like very much to have an opportunity of discussing with you next Wednesday at our directors' meeting. We may be able to go into it in some detail at that time.

I am inclosing a table of comparative figures of the six banks under consideration, showing the changes in the following items: Deposits, total loans and investments, street loans, borrowings from the Federal reserve bank of New York. This table will give you a fair picture of the relation between the changes in the condition of certain items of each of these banks and their respective borrowings from the Federal reserve bank.

91341—22—vol. 2—47

We are looking forward with a great deal of pleasure to having you with us next Wednesday and we shall, of course, be glad at that time to discuss any further particulars in which you may be interested.

Very truly, yours,

J. H. CASE, *Acting Governor.*

Hon. W. P. G. HARDING,

Governor Federal Reserve Board, Washington, D. C.

NOVEMBER 15, 1920.

DEAR GOV. HARDING: When we had our conversation last Wednesday regarding the deposits, loans, and borrowings of the six banks whose line with us had increased \$156,000,000 in the four weeks ended October 29, I was having prepared an analysis of the wire transfers of the six banks in question. The results are in tabular form and, I think, will be of interest to you. The figures do not give the entire picture, however, as the clearing-house balances are not included. The wire transfers to and from points in the second district are also omitted, as they are not cleared through the gold settlement fund.

According to the division made, the North included Boston, Philadelphia, Pittsburgh and Baltimore; the South included Richmond, Atlanta, Birmingham, New Orleans, Dallas, El Paso, Houston, Nashville, and Memphis; the Middle West included Detroit, Chicago, Minneapolis, St. Louis, Little Rock, Kansas City, Louisville, Cleveland, and Cincinnati; and the West included San Francisco, Los Angeles, Portland, Seattle, Denver, Salt Lake City, and Spokane.

Cordially, yours,

J. H. CASE, *Acting Governor.*

Hon. W. P. G. HARDING,

*Governor Federal Reserve Board,
Washington, D. C.*

FEDERAL RESERVE BOARD,
Washington, November 16, 1920.

Mr. J. H. CASE,

*Acting Governor Federal Reserve Bank,
New York, N. Y.*

DEAR MR. CASE: I acknowledge receipt of your letter of the 15th instant, and thank you for forwarding the analysis of the wire transfers of the six New York member banks whose borrowings from your institution increased \$155,000,000 in the four weeks ended October 29.

Very truly, yours,

W. P. G. HARDING, *Governor.*

NOTE.—I assume that these outgoing transfers represent mainly what would have been currency shipments in the old days.

NOVEMBER 17, 1920.

DEAR GOV. HARDING: Acknowledging your letter of November 16 and with further reference to mine of November 15 with which I inclosed an analysis of the wire transfers of the six New York member banks whose borrowings from this bank increased \$155,000,000 in the four weeks ended October 29, you are correct in your assumption that these outgoing transfers represent mainly (we figure a percentage of approximately 90 to 95) what would have been currency shipments in the old days.

Very truly, yours,

J. H. CASE, *Acting Governor.*

Hon. W. P. G. HARDING,

*Governor Federal Reserve Board,
Washington, D. C.*

The sources of the following tables are the records of the Federal Reserve Bank of New York and of the Federal Reserve Board.

TABLE NO. 1.—Comparative figures, 1920.

	May 10.	Sept. 1.	Sept. 3.	Sept. 30.	Oct. 20.	Oct. 22.
Number of borrowers.....	346				252	
Number of borrowers in excess of basic line.....	116				83	
Borrowings of six large city banks.....		\$355,142,000		\$290,139,000		\$446,144,000
Borrowings of six other large city banks.....		255,471,000		258,683,000		203,133,000
Borrowings of 11 uptown city banks.....		29,456,000		23,699,000		13,553,000
Borrowings of all New York City banks.....		831,626,000		757,412,000		843,351,000
Call loans New York City banks.....		278,413,000		309,872,000		332,234,000
Total bills Federal reserve bank of New York.....		983,470,000		975,512,000		1,002,859,000
Member banks, reserve balances.....		730,040,000		716,894,000		675,179,000
Rediscounting with other Federal reserve banks.....		25,000,000	\$47,500,000			25,000,000
Rediscounting for other Federal reserve banks.....				19,003,000		
Reserve percentage after rediscounting.....		37.6		41.8		38.9
Reserve percentage before rediscounting.....		34.0		42.3		35.3

TABLE NO. 2.—Comparative figures, 1920.

[In millions of dollars.]

Bank.	Deposits.				Total loans and investments, including rediscounts, United States securities owned and loans secured by United States war obligations.				Borrowings, Federal reserve bank of New York.				Excess of borrowing, Oct. 1-29.	Government deposit, Oct. 1-29.	Total.
	Oct. 1.	Oct. 22.	Oct. 29.	Increase or decrease.	Oct. 1.	Oct. 22.	Oct. 29.	Increase or decrease.	Oct. 1.	Oct. 22.	Oct. 29.	Increase or decrease.			
Bank A.....	249	229	218	- 31	285	291	278	- 7	28	52	51	+ 23	- 1	15	37
Bank B.....	223	195	187	- 36	315	317	310	+ 5	57	88	85	+ 28	- 3	37	
Bank C.....	464	436	452	+ 12	533	553	542	+ 9	52	99	78	+ 26	+ 5	15	
Bank D.....	84	76	75	- 9	98	98	98	.....	11	17	19	+ 8	- 1	3
Bank E.....	281	273	269	- 12	353	365	382	+ 29	55	74	102	+ 47	+ 6	3	
Bank F.....	519	502	496	- 23	578	568	562	- 16	97	118	120	+ 23	+ 16	7	
Total.....	1,820	1,711	1,697	- 123	2,162	2,193	2,172	+ 10	300	448	455	+ 155	+ 22	77	

¹ Increased to \$132, on Nov. 1, and reduced to \$112 on Nov. 5.

TABLE NO. 3.—Comparative figures, 1920.

	Deposits.			Total loans and investments, including United States securities owned and loans secured by United States war obligations.		
	Sept. 30.	Oct. 22.	Oct. 29.	Oct. 1.	Oct. 22.	Oct. 29.
Bank A.....	\$249,000,000	\$229,000,000	\$218,000,000	\$285,000,000	\$275,000,000	\$264,000,000
Bank B.....	231,000,000	195,000,000	187,000,000	315,000,000	317,000,000	310,000,000
Bank C.....	471,000,000	436,000,000	452,000,000	533,000,000	553,000,000	542,000,000
Bank D.....	81,000,000	76,000,000	75,000,000	97,000,000	90,000,000	85,000,000
Bank E.....	290,000,000	273,000,000	269,000,000	298,000,000	292,000,000	280,000,000
Bank F.....	528,000,000	502,000,000	496,000,000	578,000,000	568,000,000	562,000,000
Total.....	1,850,000,000	1,711,000,000	1,697,000,000	1,960,000,000	1,884,000,000	1,851,000,000

TABLE No. 3.—Comparative figures, 1920—Continued.

	Street loans (included in foregoing).			Borrowings, Federal reserve bank of New York.		
	Sept. 30.	Oct. 22.	Oct. 29.	Sept. 30.	Oct. 22.	Oct. 29.
Bank A	\$14,000,000	\$16,000,000	\$15,000,000	\$20,000,000	\$52,000,000	\$51,000,000
Bank B	30,000,000	31,000,000	19,000,000	56,000,000	88,000,000	85,000,000
Bank C	16,000,000	16,000,000	9,000,000	49,000,000	99,000,000	78,000,000
Bank D	5,000,000	7,000,000	7,000,000	13,000,000	17,000,000	19,000,000
Bank E	7,000,000	10,000,000	29,000,000	56,000,000	74,000,000	102,000,000
Bank F	4,000,000	6,000,000	11,000,000	96,000,000	118,000,000	120,000,000
Total	76,000,000	86,000,000	90,000,000	290,000,000	448,000,000	455,000,000

Wire transfers—Settling figures, Sept. 1—Oct. 22, 1920.

Transferred.	North.	South.	Mid-West.	West.	Total.
From bank A to	15,911,000	280,000	20,135,000	1,990,000	38,316,000
To bank A from	5,354,000	500,000	23,847,000	1,475,000	31,176,000
Net	10,557,000	220,000	3,712,000	515,000	7,140,000
From bank B to	25,386,000	4,721,000	33,647,000	6,333,000	70,087,000
To bank B from	21,013,000	6,993,000	51,290,000	16,322,000	95,618,000
Net	4,373,000	2,272,000	17,643,000	9,989,000	25,531,000
From bank C to	9,930,000	15,910,000	34,811,000	3,024,000	63,675,000
To bank C from	2,571,000	5,788,000	30,501,000	7,060,000	46,500,000
Net	7,359,000	10,142,000	4,310,000	364,000	22,175,000
From bank D to	6,505,000	675,000	7,271,000	5,195,000	19,646,000
To bank D from	6,872,000	289,000	5,779,000	790,000	13,729,000
Net	367,000	387,000	1,492,000	4,405,000	5,917,000
From bank E to	87,122,000	43,636,000	75,380,000	40,677,000	246,817,000
To bank E from	23,894,000	15,106,000	42,865,000	17,236,000	99,101,000
Net	63,228,000	28,532,000	32,515,000	23,441,000	147,716,000
From bank F to	23,309,000	33,754,000	40,278,000	10,940,000	113,281,000
To bank F from	5,140,000	23,147,000	33,874,000	11,662,000	73,823,000
Net	18,169,000	15,607,000	6,404,000	722,000	39,459,000
From all six banks to	168,163,000	103,978,000	211,622,000	73,159,000	556,922,000
To all six banks from	64,844,000	51,802,000	188,156,000	58,145,000	359,947,000
Net	103,319,000	52,176,000	23,366,000	18,014,000	196,875,000

Gov. STRONG. I wish to offer for the commission's consideration, if it is of any value, a complete set of the monthly reviews of credit and business conditions, published by the Federal reserve bank of New York, from the time we began the publication. I would also like to place at the committee's disposal a complete set of the Annual Reports of the Federal reserve bank of New York.

The CHAIRMAN. I think we have already the annual reports. I know we have the annual reports. I am not so sure that we have the bulletins.

Gov. STRONG. I will leave these with the commission. I am also proposing to furnish to the commission a complete set of the official circulars of the bank which have any bearing upon this matter. We have to issue a great many circulars about collections and other details of the bank's management, and a selection will be made from those of everything bearing upon the subject of your inquiry.

In advance of the preparation of certain charts in the form that I suggested this morning, I will hand to the clerk a set of charts which may be of interest to the commission, but I will not ask that they be used except for reference, as we will submit them in better form.

(The charts presented by Gov. Strong have been inserted in their proper places.)

COST OF LIVING.

The index number of the National Industrial Conference Board for the cost of living of a wage-earner's family in the United States shows a decline of 2 per cent during May, a slightly larger decrease than in March or April. The decline is due altogether to a 4.6 per cent drop in food prices and a 3.6 per cent drop in clothing prices. Other groups remain unchanged.

The United States Department of Labor has just announced cost of living figures for the month of May for 27 principal cities. The figures in general tend to be somewhat higher than those computed by the National Industrial Conference Board for the entire country. The following table gives the latest figures reported for important centers by the Department of Labor, together with figures for the country as a whole reported by the conference board. Cities are listed in order by the increase which May figures show above the 1914 base.

Location.	May, 1921.	Per cent decline from peak.	Location.	May, 1921.	Per cent decline from peak.
Detroit.....	193.3	18.1	Houston.....	179.7	15.3
Jacksonville, Fla.....	185.8	14.2	Chicago.....	178.4	16.9
Cleveland.....	184.7	14.8	Baltimore.....	177.4	17.2
New York City.....	181.7	17.1	Washington, D. C.....	167.1	17.0
Buffalo, N. Y.....	180.3	18.6	Portland, Ore.....	162.2	19.1
Seattle.....	180.2	14.4	United States.....	161.9	20.8
Philadelphia.....	179.8	15.8			

In general it may be said that industrial cities tend to show greater increases in the cost of living than those which are agricultural centers. An average of the May index numbers for seven industrial cities was 16 per cent higher than that for seven cities in agricultural districts east of the Rockies. Food ranks first in importance among the various items in the budget and in every case was from 15 to 20 per cent higher in the industrial cities. Housing costs increased in both groups, but the increase in the industrial centers since December, 1920, was about 7 per cent while it was about 2½ per cent in the agricultural centers.

Figures for New York City and the United States for individual items of the cost of living are given in the following table, taking figures for 1914 as a base of 100 per cent.

Items.	May, 1921.		Per cent decline from high.	
	United States.	New York City.	United States.	New York City.
Food.....	145	142.5	33.8	30.6
Shelter.....	171	142.2	0.0	0.0
Clothing.....	162	259.5	43.8	24.0
Fuel and light.....	178	195.9	11.0	0.0
House furnishings.....		256.5		15.9
Miscellaneous.....	185	217.6	3.6	0.0
Total.....	161.9	181.7	20.8	17.1

¹ July 1 figure is 161.6 a decline of two-tenths of 1 per cent.

Gov. STRONG. I would like also to submit a memorandum containing certain operating statistics of the Federal reserve bank of New York, giving tables of loans, deposits, note circulation, reserves, and reserve ratio (see pp. 742-747 and 588-589), which are the basis upon which the various charts have been prepared. If they seem to the commission to be of value in the record they also may be printed. (The memorandum presented by Gov. Strong is hereto attached.)

OPERATING STATISTICS OF THE FEDERAL RESERVE BANK OF NEW YORK, LOANS, DEPOSITS, NOTE CIRCULATION, RESERVES, AND RESERVE RATIO.

Total earning assets, Federal reserve bank of New York.

	Bills discounted and advances.		Bills held.	All other.	Total earning assets.
	Secured by United States war obligations.	Secured by commercial paper.			
1919.					
Jan. 3.	\$691,796,000	\$11,307,000	\$76,291,000	\$43,211,000	\$855,625,000
Jan. 10.	611,980,000	39,259,000	79,628,000	76,136,000	840,703,000
Jan. 17.	569,146,000	33,535,000	84,118,000	169,139,000	856,288,000
Jan. 24.	663,061,000	46,653,000	93,385,000	47,852,000	851,794,000
Jan. 31.	591,212,000	42,519,000	83,727,000	157,247,000	874,735,000
Feb. 7.	839,721,000	49,226,000	61,524,000	47,896,000	891,307,000
Feb. 14.	741,071,000	51,419,000	51,927,000	49,426,000	896,873,000
Feb. 20.	797,364,000	46,917,000	41,399,000	51,119,000	849,799,000
Feb. 28.	711,979,000	45,039,000	43,325,000	60,134,000	860,501,000
Mar. 7.	775,571,000	29,157,000	40,088,000	61,096,000	905,915,000
Mar. 14.	791,365,000	29,231,000	46,907,000	61,852,000	872,348,000
Mar. 21.	676,608,000	32,052,000	27,158,000	65,826,000	801,644,000
Mar. 28.	661,987,000	29,500,000	41,329,000	65,391,000	796,210,000
Apr. 4.	828,697,000	25,572,000	53,612,000	66,174,000	874,055,000
Apr. 11.	692,682,000	31,507,000	57,017,000	73,550,000	855,056,000
Apr. 18.	671,695,000	28,714,000	51,730,000	70,827,000	825,966,000
Apr. 25.	685,022,000	21,045,000	46,903,000	70,126,000	826,066,000
May 2.	678,623,000	22,028,000	47,311,000	70,658,000	818,620,000
May 9.	711,711,000	20,171,000	43,737,000	76,026,000	851,648,000
May 16.	792,953,000	32,618,000	42,691,000	76,713,000	944,975,000
May 23.	708,971,000	23,422,000	44,424,000	69,639,000	846,459,000
May 29.	763,272,000	26,677,000	41,833,000	69,834,000	844,516,000
June 5.	631,061,000	38,949,000	51,779,000	67,492,000	772,881,000
June 13.	630,112,000	30,614,000	71,992,000	67,628,000	800,376,000
June 20.	581,513,000	29,782,000	80,918,000	64,518,000	770,061,000
June 27.	567,632,000	53,185,000	100,822,000	65,253,000	787,192,000
July 3.	674,149,000	65,671,000	113,617,000	58,684,000	911,854,000
July 11.	712,961,000	62,342,000	119,363,000	60,371,000	954,977,000
July 18.	667,892,000	61,775,000	91,564,000	59,096,000	880,226,000
July 25.	619,117,000	65,746,000	91,497,000	60,309,000	839,699,000
Aug. 1.	644,096,000	58,120,000	98,002,000	62,887,000	863,156,000
Aug. 8.	611,596,000	53,625,000	106,990,000	61,498,000	836,669,000
Aug. 15.	615,433,000	49,853,000	111,654,000	77,951,000	854,891,000
Aug. 22.	619,361,000	46,978,000	135,843,400	66,477,000	869,659,000
Aug. 29.	656,305,000	43,891,000	91,288,000	67,811,000	862,295,000
Sept. 5.	672,070,000	52,791,000	71,177,000	68,640,000	864,678,000
Sept. 12.	611,412,000	49,692,000	79,955,000	64,059,000	806,148,000
Sept. 19.	483,053,000	45,539,000	73,521,050	32,093,000	734,206,000
Sept. 26.	617,837,000	47,707,000	76,401,000	61,816,000	806,761,000
Oct. 3.	674,010,000	72,578,000	67,682,000	70,778,000	905,048,000
Oct. 10.	697,763,000	104,877,000	80,400,000	71,078,000	954,118,000
Oct. 17.	698,653,000	116,068,000	85,315,000	73,772,000	974,408,000
Oct. 24.	675,346,000	105,083,000	97,925,000	74,780,000	953,124,000
Oct. 31.	702,142,000	130,880,000	65,373,000	76,000,000	974,395,000
Nov. 7.	705,212,000	149,139,000	54,323,000	76,015,000	1,034,689,000
Nov. 14.	721,344,000	98,739,000	77,896,000	76,519,000	974,518,000
Nov. 21.	701,959,000	88,855,000	86,379,000	76,871,000	954,061,000
Nov. 28.	733,312,000	107,068,000	97,021,000	76,991,000	1,036,614,000
Dec. 5.	697,512,000	119,342,000	131,865,000	76,714,000	995,433,000
Dec. 12.	654,401,000	144,924,000	147,030,000	76,891,000	1,015,816,000
Dec. 19.	515,035,000	143,337,000	179,382,000	98,900,000	937,754,000
Dec. 26.	581,588,000	203,606,000	191,312,000	68,654,000	1,048,160,000

Total earning assets, Federal reserve bank of New York—Continued.

	Bills discounted and advances.		Bills held.	All other.	Total earning assets.
	Secured by United States war obligations.	Secured by commercial paper.			
1920.					
Jan. 2.	\$571,822,000	\$239,901,000	\$208,652,000	\$81,259,000	\$1,101,031,000
Jan. 9.	494,173,000	267,130,000	194,796,000	68,998,000	1,025,095,000
Jan. 16.	499,304,000	209,005,000	212,285,000	72,718,000	993,322,000
Jan. 23.	526,473,000	234,806,000	202,706,000	70,223,000	1,034,298,000
Jan. 30.	505,495,000	166,632,000	191,215,000	70,747,000	1,024,089,000
Feb. 6.	581,479,000	170,873,000	196,876,000	69,706,000	1,018,937,000
Feb. 13.	591,022,000	206,544,000	204,561,000	67,989,000	1,070,116,000
Feb. 20.	616,710,000	202,684,000	217,314,000	63,678,000	1,100,386,000
Feb. 27.	630,281,000	222,685,000	231,257,000	63,833,000	1,148,056,000
Mar. 5.	601,680,000	208,292,000	228,610,000	63,491,000	1,102,018,000
Mar. 12.	598,059,000	189,639,000	225,988,000	63,824,000	1,077,510,000
Mar. 19.	529,631,000	194,546,000	200,221,000	124,644,000	1,049,042,000
Mar. 26.	571,771,000	243,863,000	196,494,000	63,659,000	1,075,777,000
Apr. 2.	526,942,000	209,255,000	171,749,000	121,045,000	1,028,991,000
Apr. 9.	554,358,000	207,738,000	163,848,000	115,520,000	1,041,464,000
Apr. 16.	551,242,000	228,166,000	152,516,000	101,620,000	1,033,544,000
Apr. 23.	570,086,000	249,057,000	142,731,000	66,164,000	1,027,988,000
Apr. 30.	557,785,000	298,991,000	160,431,000	66,896,000	1,049,015,000
May 7.	540,862,000	272,012,000	162,825,000	73,316,000	1,049,015,000
May 14.	586,577,000	248,496,000	170,100,000	79,805,000	1,084,978,000
May 21.	513,566,000	275,560,000	171,529,000	76,860,000	1,037,515,000
May 28.	510,941,000	293,697,000	179,372,000	79,419,000	1,063,429,000
June 4.	513,071,000	327,264,000	179,007,000	74,383,000	1,093,725,000
June 11.	529,827,000	292,606,000	183,993,000	78,233,000	1,084,659,000
June 18.	441,896,000	246,690,000	186,811,000	134,537,000	1,009,934,000
June 25.	477,812,000	303,750,000	189,342,000	118,755,000	1,089,659,000
July 2.	514,347,000	317,540,000	180,162,000	102,798,000	1,114,847,000
July 9.	624,441,000	323,242,000	154,181,000	89,721,000	1,082,585,000
July 16.	520,952,000	309,421,000	147,375,000	80,244,000	1,057,992,000
July 23.	508,425,000	318,652,000	141,003,000	83,009,000	1,046,525,000
July 30.	497,399,000	330,922,000	135,185,000	70,255,000	1,063,409,000
Aug. 6.	537,261,000	321,317,000	134,576,000	67,628,000	1,079,609,000
Aug. 13.	554,289,000	348,249,000	109,443,000	71,141,000	1,068,903,000
Aug. 20.	542,099,000	342,756,000	112,907,000	70,913,000	1,091,479,000
Aug. 27.	553,992,000	366,051,000	100,323,000	70,813,000	1,099,601,000
Sept. 3.	582,978,000	344,968,000	84,476,000	77,279,000	1,075,434,000
Sept. 10.	547,148,000	347,325,000	102,655,000	78,108,000	1,036,410,000
Sept. 17.	492,507,000	267,293,000	103,702,000	172,998,000	1,010,749,000
Sept. 24.	492,210,000	354,849,000	84,793,000	68,807,000	1,011,620,000
Oct. 1.	476,174,000	397,956,000	96,465,000	71,025,000	1,115,443,000
Oct. 8.	509,645,000	434,576,000	97,752,000	73,470,000	1,109,903,000
Oct. 15.	500,403,000	446,646,000	81,784,000	81,070,000	1,078,613,000
Oct. 22.	521,930,000	407,365,000	73,564,000	69,759,000	1,095,528,000
Oct. 29.	515,947,000	421,276,000	68,516,000	69,759,000	1,104,411,000
Nov. 5.	513,943,000	429,620,000	92,682,000	69,676,000	1,113,114,000
Nov. 12.	482,183,000	466,356,000	91,999,000	69,676,000	1,088,997,000
Nov. 19.	469,381,000	436,546,000	95,322,000	77,646,000	1,052,000,000
Nov. 26.	465,027,000	436,760,000	77,990,000	72,223,000	1,117,194,000
Dec. 3.	441,623,000	522,473,000	86,924,000	63,171,000	1,086,238,000
Dec. 10.	421,658,000	465,043,000	92,809,000	73,638,000	1,064,602,000
Dec. 17.	464,249,000	388,697,000	86,357,000	121,999,000	1,084,220,000
Dec. 23.	461,011,000	446,196,000	96,829,000	80,184,000	1,075,351,000
Dec. 30.	445,926,000	458,313,000	109,902,000	61,210,000	
1921.					
Jan. 7.	433,962,000	439,305,000	102,907,000	69,928,000	1,057,098,000
Jan. 14.	363,522,000	413,052,000	87,174,000	76,013,000	969,761,000
Jan. 21.	409,163,000	469,591,000	65,367,000	63,375,000	1,007,496,000
Jan. 28.	414,012,000	494,913,000	28,436,000	60,679,000	998,040,000
Feb. 4.	424,726,000	520,290,000	9,881,000	60,534,000	1,015,431,000
Feb. 11.	394,403,000	520,810,000	14,486,000	62,836,000	992,525,000
Feb. 18.	375,282,000	495,257,000	18,194,000	60,536,000	919,269,000
Feb. 25.	393,451,000	488,990,000	30,743,000	50,836,000	974,020,000
Mar. 4.	373,704,000	472,502,000	37,132,000	62,824,000	916,166,000
Mar. 11.	389,519,000	496,061,000	37,829,000	60,869,000	974,278,000
Mar. 18.	389,519,000	351,324,000	34,957,000	84,532,000	956,543,000
Mar. 25.	377,173,000	314,651,000	29,386,000	60,531,000	795,741,000
Apr. 1.	335,622,000	288,430,000	42,185,000	58,955,000	725,198,000
Apr. 8.	342,653,000	304,324,000	34,492,000	62,531,000	714,000,000
Apr. 15.	349,507,000	291,576,000	50,549,000	62,165,000	754,307,000
Apr. 22.	377,624,000	275,035,000	42,065,000	58,141,000	742,855,000
Apr. 27.	353,659,000	255,742,000	46,829,000	56,281,000	712,511,000
May 4.	338,758,000	275,793,000	43,140,000	56,281,000	713,962,000
May 11.	374,871,000	265,364,000	37,205,000	58,859,000	736,299,000
May 18.	255,926,000	240,008,000	39,601,000	139,136,000	674,671,000
May 25.	268,370,000	249,132,000	44,848,000	100,849,000	663,199,000
June 1.	251,364,000	293,341,000	34,484,000	60,021,000	639,210,000

Total earning assets, Federal reserve bank of New York—Continued.

	Bills discounted and advances.		Bills held.	All other.	Total earning assets.
	Secured by United States war obligations.	Secured by commercial paper.			
1921.					
June 8.....	\$226,231,000	\$281,449,000	\$27,405,000	\$56,281,000	\$591,366,000
June 15.....	196,166,000	217,935,000	17,111,000	240,406,000	671,618,000
June 22.....	184,525,000	229,500,000	10,600,000	84,687,000	509,312,000
June 29.....	177,817,000	237,990,000	7,382,000	50,393,000	482,582,000
July 6.....	212,999,000	236,970,000	11,616,000	65,577,000	527,162,000
July 13.....	171,221,000	259,179,000	7,708,000	73,239,000	505,347,000
July 20.....	172,200,000	250,135,000	5,747,000	57,461,000	485,543,000

Total reserves and Federal reserve notes in circulation, Federal reserve bank of New York.

Date.	Gold reserves.	Other reserves.	Total reserves.	Notes in circulation.
1919.				
Jan. 3.....	\$686,208,000	\$48,688,000	\$734,896,000	\$724,932,000
Jan. 10.....	617,160,000	53,148,000	670,308,000	661,455,000
Jan. 17.....	588,365,000	52,150,000	640,515,000	665,688,000
Jan. 24.....	592,552,000	51,769,000	644,321,000	650,587,000
Jan. 31.....	568,367,000	52,930,000	621,297,000	647,913,000
Feb. 7.....	625,547,000	51,666,000	677,213,000	650,046,000
Feb. 14.....	568,670,000	51,657,000	620,327,000	664,613,000
Feb. 20.....	588,156,000	52,307,000	640,463,000	666,858,000
Feb. 28.....	588,288,000	50,980,000	639,268,000	677,619,000
Mar. 7.....	596,479,000	51,015,000	647,494,000	689,212,000
Mar. 14.....	649,122,000	52,091,000	701,213,000	710,002,000
Mar. 21.....	728,407,000	52,429,000	780,836,000	715,569,000
Mar. 28.....	735,392,000	53,089,000	788,481,000	723,160,000
Apr. 4.....	779,865,000	52,784,000	832,649,000	736,433,000
Apr. 11.....	697,747,000	53,659,000	751,406,000	738,128,000
Apr. 18.....	734,509,000	52,502,000	787,011,000	738,166,000
Apr. 25.....	747,072,000	54,539,000	801,611,000	738,812,000
May 2.....	756,684,000	52,221,000	808,905,000	741,385,000
May 9.....	700,700,000	51,370,000	752,070,000	751,873,000
May 16.....	649,696,000	62,679,000	702,375,000	742,067,000
May 23.....	744,924,000	51,712,000	796,636,000	735,462,000
May 29.....	751,488,000	50,684,000	802,172,000	742,390,000
June 6.....	766,149,000	51,890,000	818,039,000	736,674,000
June 13.....	737,357,000	51,806,000	789,165,000	736,288,000
June 20.....	771,515,000	51,869,000	823,384,000	735,226,000
June 27.....	782,982,000	51,541,000	834,523,000	737,437,000
July 3.....	656,095,000	60,095,000	706,190,000	762,915,000
July 11.....	615,349,000	51,879,000	667,228,000	751,780,000
July 18.....	614,174,000	48,500,000	662,674,000	742,960,000
July 25.....	642,194,000	47,691,000	689,885,000	739,165,000
Aug. 1.....	696,744,000	48,557,000	745,301,000	745,918,000
Aug. 8.....	645,930,000	47,589,000	693,519,000	745,723,000
Aug. 15.....	582,503,000	48,568,000	631,071,000	748,166,000
Aug. 22.....	557,162,000	49,108,000	606,270,000	749,975,000
Aug. 29.....	527,446,000	50,313,000	577,759,000	752,283,000
Sept. 5.....	562,836,000	51,577,000	614,413,000	758,794,000
Sept. 12.....	592,478,000	51,397,000	643,875,000	752,803,000
Sept. 19.....	622,886,000	51,330,000	674,216,000	747,239,000
Sept. 26.....	640,130,000	50,772,000	690,902,000	753,135,000
Oct. 3.....	633,955,000	52,260,000	686,215,000	761,705,000
Oct. 10.....	556,746,000	53,545,000	610,291,000	759,830,000
Oct. 17.....	552,497,000	53,374,000	605,871,000	758,191,000
Oct. 24.....	613,344,000	50,585,000	663,929,000	750,809,000
Oct. 31.....	575,979,000	49,627,000	625,606,000	750,715,000
Nov. 7.....	568,015,000	50,030,000	618,135,000	763,700,000
Nov. 14.....	615,815,000	49,750,000	665,565,000	755,745,000
Nov. 21.....	632,927,000	50,265,000	683,192,000	758,797,000
Nov. 28.....	610,953,000	49,586,000	660,539,000	767,396,000
Dec. 5.....	590,905,000	50,107,000	641,012,000	774,971,000
Dec. 12.....	577,407,000	49,503,000	626,910,000	778,170,000
Dec. 19.....	608,107,000	46,269,000	654,376,000	806,615,000
Dec. 26.....	570,438,000	45,602,000	616,040,000	824,944,000
1920.				
Jan. 2.....	575,064,000	45,819,000	620,883,000	811,119,000
Jan. 9.....	522,757,000	46,260,000	569,017,000	776,562,000
Jan. 16.....	572,285,000	45,638,000	617,923,000	757,906,000
Jan. 23.....	549,906,000	46,111,000	596,017,000	761,643,000

Total reserves and Federal reserve notes in circulation, Federal reserve bank of New York—Continued.

Date.	Gold reserves.	Other reserves.	Total reserves.	Notes in circulation.
1920.				
Jan. 30	\$582,784,000	\$46,171,000	\$608,955,000	\$769,170,000
Feb. 6	543,416,000	46,387,000	589,803,000	788,121,000
Feb. 13	555,117,000	47,851,000	602,968,000	809,254,000
Feb. 20	520,782,000	48,620,000	575,402,000	817,411,000
Feb. 27	516,621,000	99,718,000	616,339,000	826,287,000
Mar. 5	500,633,000	100,230,000	600,863,000	831,694,000
Mar. 12	508,386,000	101,746,000	610,132,000	830,531,000
Mar. 19	477,379,000	107,023,000	584,402,000	837,727,000
Mar. 26	504,689,000	106,773,000	611,462,000	834,188,000
Apr. 2	559,299,000	105,630,000	664,929,000	847,782,000
Apr. 9	536,915,000	104,905,000	641,820,000	835,554,000
Apr. 16	549,353,000	105,541,000	654,894,000	835,738,000
Apr. 23	581,633,000	106,152,000	687,785,000	832,704,000
Apr. 30	532,670,000	106,328,000	638,998,000	836,600,000
May 7	548,937,000	106,812,000	655,749,000	845,006,000
May 14	542,278,000	106,889,000	649,167,000	843,927,000
May 21	562,286,000	106,447,000	668,733,000	849,246,000
May 28	568,261,000	105,877,000	674,138,000	854,827,000
June 4	542,622,000	105,366,000	647,988,000	861,807,000
June 11	548,406,000	105,195,000	653,601,000	851,002,000
June 18	547,047,000	105,794,000	652,841,000	854,828,000
June 25	513,612,000	106,491,000	620,103,000	859,232,000
July 2	543,802,000	107,200,000	651,002,000	862,506,000
July 9	524,935,000	106,846,000	631,781,000	871,467,000
July 16	522,977,000	116,388,000	639,365,000	850,323,000
July 23	496,619,000	119,015,000	615,634,000	846,836,000
July 30	501,568,000	119,521,000	621,089,000	849,589,000
Aug. 6	495,763,000	119,528,000	615,291,000	852,369,000
Aug. 13	475,210,000	123,996,000	599,206,000	852,695,000
Aug. 20	486,003,000	124,112,000	610,115,000	854,295,000
Aug. 27	473,914,000	124,810,000	598,724,000	854,925,000
Sept. 3	478,902,000	124,841,000	603,743,000	865,548,000
Sept. 10	485,163,000	125,126,000	610,289,000	864,439,000
Sept. 17	452,841,000	128,978,000	581,819,000	861,597,000
Sept. 24	543,820,000	128,314,000	672,134,000	855,701,000
Oct. 1	497,032,000	127,993,000	625,025,000	866,091,000
Oct. 8	477,632,000	127,834,000	605,466,000	864,895,000
Oct. 15	478,179,000	129,261,000	607,460,000	875,737,000
Oct. 22	456,389,000	128,429,000	584,818,000	875,027,000
Oct. 29	476,694,000	129,916,000	606,610,000	876,706,000
Nov. 5	467,753,000	131,070,000	598,823,000	886,709,000
Nov. 12	464,821,000	132,380,000	597,201,000	872,609,000
Nov. 19	478,277,000	132,580,000	610,857,000	889,621,000
Nov. 26	486,288,000	133,297,000	619,585,000	876,321,000
Dec. 3	450,597,000	135,291,000	585,888,000	873,360,000
Dec. 10	461,273,000	136,763,000	598,036,000	863,560,000
Dec. 17	444,262,000	138,261,000	582,523,000	871,522,000
Dec. 23	473,618,000	139,322,000	612,940,000	880,870,000
Dec. 30	466,267,000	143,975,000	610,242,000	864,516,000
1921.				
Jan. 7	440,495,000	147,164,000	587,659,000	839,625,000
Jan. 14	431,971,000	150,128,000	582,099,000	800,121,000
Jan. 21	394,475,000	151,623,000	546,098,000	793,026,000
Jan. 28	391,635,000	153,304,000	544,939,000	787,746,000
Feb. 4	395,854,000	154,498,000	550,352,000	796,492,000
Feb. 11	406,182,000	159,337,000	565,519,000	787,938,000
Feb. 18	431,681,000	159,465,000	591,146,000	791,991,000
Feb. 25	419,169,000	158,104,000	577,273,000	796,383,000
Mar. 4	444,162,000	156,321,000	600,483,000	801,916,000
Mar. 11	456,024,000	154,097,000	610,121,000	791,404,000
Mar. 18	509,811,000	152,087,000	661,898,000	789,920,000
Mar. 25	588,293,000	151,624,000	739,917,000	780,740,000
Apr. 1	682,234,000	151,207,000	833,441,000	783,461,000
Apr. 8	618,979,000	151,272,000	770,251,000	776,791,000
Apr. 15	637,046,000	130,428,000	767,474,000	762,173,000
Apr. 22	645,768,000	122,972,000	768,740,000	756,071,000
Apr. 27	667,602,000	117,433,000	785,035,000	741,460,000
May 4	678,479,000	106,974,000	785,453,000	739,004,000
May 11	656,830,000	102,282,000	759,112,000	725,430,000
May 18	683,444,000	96,806,000	780,250,000	718,909,000
May 25	709,621,000	90,923,000	800,544,000	707,350,000
June 1	758,330,000	85,957,000	844,287,000	715,951,000
June 8	810,085,000	86,000,000	896,091,000	696,928,000
June 15	823,495,000	86,826,000	910,321,000	688,966,000
June 22	848,601,000	85,081,000	933,682,000	675,424,000
June 29	871,941,000	81,611,000	953,552,000	671,523,000
July 6	832,056,000	72,921,000	904,977,000	684,615,000
July 13	830,498,000	74,102,000	904,600,000	654,260,000
July 20	843,557,000	71,667,000	915,224,000	645,313,000

Total deposits, Federal reserve bank of New York, 1919-1921.

Date.	Government deposits.	Due to members' reserve account.	Other deposits, including foreign Governments.	Total deposits.
1919.				
Jan. 3.....	\$35,640,000	\$705,371,000	\$108,898,000	\$850,877,000
Jan. 10.....	5,871,000	694,632,000	101,282,000	801,785,000
Jan. 17.....	7,009,000	706,918,000	102,947,000	816,874,000
Jan. 24.....	25,134,000	685,483,000	102,276,000	812,893,000
Jan. 31.....	3,482,000	708,910,000	101,550,000	813,942,000
Feb. 7.....	20,070,000	659,132,000	99,481,000	778,683,000
Feb. 14.....	43,132,000	673,336,000	101,583,000	818,051,000
Feb. 20.....	44,352,000	635,846,000	104,470,000	784,668,000
Feb. 28.....	33,543,000	671,818,000	113,744,000	819,105,000
Mar. 7.....	32,054,000	678,210,000	112,562,000	822,826,000
Mar. 14.....	15,063,000	715,361,000	105,704,000	836,128,000
Mar. 21.....	43,766,000	687,643,000	107,714,000	839,123,000
Mar. 28.....	51,959,000	665,138,000	105,393,000	822,490,000
Apr. 4.....	25,079,000	698,383,000	109,978,000	833,440,000
Apr. 11.....	23,776,000	685,637,000	116,119,000	825,532,000
Apr. 18.....	17,169,000	707,853,000	118,400,000	843,422,000
Apr. 25.....	23,189,000	702,830,000	122,422,000	848,441,000
May 2.....	27,912,000	691,492,000	115,335,000	834,739,000
May 9.....	19,753,000	706,952,000	113,039,000	839,744,000
May 15.....	21,581,000	731,494,000	113,626,000	866,701,000
May 23.....	7,215,000	733,225,000	114,524,000	854,964,000
May 29.....	18,094,000	692,133,000	139,551,000	846,778,000
June 6.....	8,795,000	710,129,000	118,557,000	837,481,000
June 13.....	22,642,000	676,417,000	114,188,000	813,247,000
June 20.....	15,948,000	691,557,000	111,861,000	819,366,000
June 27.....	15,363,000	730,278,000	103,869,000	849,510,000
July 3.....	32,502,000	678,669,000	108,639,000	819,810,000
July 11.....	39,387,000	707,647,000	105,647,000	852,681,000
July 18.....	7,204,000	708,863,000	59,850,000	767,917,000
July 25.....	28,872,000	694,244,000	59,412,000	773,528,000
Aug. 1.....	10,541,000	741,754,000	49,534,000	801,829,000
Aug. 8.....	54,660,000	732,343,000	48,694,000	835,697,000
Aug. 15.....	4,845,000	734,166,000	48,271,000	787,282,000
Aug. 22.....	28,812,000	666,383,000	43,484,000	738,679,000
Aug. 29.....	7,124,000	709,654,000	42,740,000	759,518,000
Sept. 5.....	15,890,000	714,736,000	44,742,000	775,368,000
Sept. 12.....	163,000	751,893,000	76,891,000	828,937,000
Sept. 19.....	169,000	646,592,000	49,203,000	695,964,000
Sept. 26.....	14,844,000	698,699,000	41,309,000	754,852,000
Oct. 3.....	13,573,000	740,091,000	43,819,000	797,483,000
Oct. 10.....	8,276,000	738,429,000	43,178,000	789,883,000
Oct. 17.....	45,907,000	752,519,000	43,878,000	842,304,000
Oct. 24.....	40,206,000	737,434,000	44,146,000	821,786,000
Oct. 31.....	22,341,000	756,343,000	41,937,000	820,621,000
Nov. 7.....	21,359,000	806,972,000	44,922,000	873,253,000
Nov. 14.....	30,609,000	751,665,000	43,796,000	826,070,000
Nov. 21.....	50,747,000	733,912,000	42,506,000	827,165,000
Nov. 28.....	37,272,000	787,739,000	44,065,000	869,076,000
Dec. 5.....	11,455,000	746,535,000	43,117,000	801,107,000
Dec. 12.....	30,467,000	735,659,000	43,263,000	809,389,000
Dec. 19.....	630,000	681,610,000	43,935,000	726,175,000
Dec. 26.....	12,641,000	706,234,000	42,685,000	761,560,000
1920.				
Jan. 2.....	194,000	785,043,000	56,232,000	841,469,000
Jan. 9.....	6,282,000	702,354,000	43,336,000	751,972,000
Jan. 16.....	309,000	767,364,000	50,112,000	817,785,000
Jan. 23.....	47,571,000	718,116,000	42,844,000	808,531,000
Jan. 30.....	31,510,000	729,545,000	42,394,000	803,449,000
Feb. 6.....	4,602,000	734,709,000	40,045,000	779,356,000
Feb. 13.....	7,942,000	730,617,000	42,713,000	781,272,000
Feb. 20.....	38,035,000	707,113,000	42,165,000	787,313,000
Feb. 27.....	91,635,000	735,151,000	41,915,000	868,701,000
Mar. 5.....	45,296,000	701,471,000	39,314,000	786,081,000
Mar. 12.....	5,979,000	729,691,000	43,048,000	778,708,000
Mar. 19.....	846,000	698,626,000	41,876,000	741,348,000
Mar. 26.....	644,000	735,239,000	45,334,000	781,217,000
Apr. 2.....	602,000	745,746,000	57,452,000	803,900,000
Apr. 9.....	444,000	720,474,000	44,485,000	765,403,000
Apr. 16.....	179,000	752,072,000	46,585,000	798,836,000
Apr. 23.....	18,835,000	749,020,000	43,625,000	811,480,000
Apr. 30.....	14,571,000	748,555,000	47,139,000	810,265,000
May 7.....	4,587,000	717,737,000	41,924,000	764,248,000
May 14.....	10,634,000	754,428,000	40,072,000	805,134,000
May 21.....	5,396,000	725,214,000	42,958,000	773,568,000
May 28.....	19,359,000	760,577,000	42,129,000	822,065,000
June 4.....	9,322,000	753,272,000	43,503,000	806,097,000
June 11.....	980,000	763,525,000	37,287,000	801,792,000

Total deposits, Federal reserve bank of New York, 1919-1921—Continued.

Date.	Government deposits.	Due to members' reserve account.	Other deposits, including foreign Governments.	Total deposits.
1920.				
June 18.....	\$602,000	\$715,451,000	\$32,985,000	\$749,038,000
June 25.....	244,000	745,307,000	31,332,000	776,883,000
July 2.....	242,000	779,520,000	27,726,000	807,488,000
July 9.....	612,000	738,232,000	23,974,000	762,818,000
July 16.....	777,000	757,420,000	23,444,000	781,641,000
July 23.....	665,000	713,737,000	21,316,000	735,718,000
July 30.....	410,000	710,488,000	26,024,000	736,922,000
August 6.....	10,014,000	722,701,000	21,340,000	754,055,000
August 13.....	3,127,000	727,642,000	21,895,000	752,664,000
August 20.....	19,069,000	706,633,000	21,409,000	747,131,000
August 27.....	20,139,000	717,985,000	20,692,000	758,716,000
September 3.....	27,006,000	719,621,000	19,171,000	765,798,000
September 10.....	9,494,000	719,672,000	19,312,000	748,478,000
September 17.....	94,000	732,127,000	19,502,000	751,723,000
September 24.....	10,785,000	712,049,000	17,216,000	740,240,000
October 1.....	16,062,000	685,654,000	16,745,000	718,481,000
October 8.....	16,979,000	726,592,000	15,333,000	759,104,000
October 15.....	257,000	744,132,000	20,077,000	764,466,000
October 22.....	453,000	675,180,000	12,252,000	687,885,000
October 29.....	4,536,000	708,701,000	12,572,000	720,829,000
November 5.....	14,730,000	683,343,000	18,154,000	716,227,000
November 12.....	3,834,000	712,744,000	16,869,000	733,447,000
November 19.....	255,000	688,639,000	16,352,000	705,246,000
November 26.....	913,000	660,024,000	13,140,000	674,077,000
December 3.....	22,143,000	696,393,000	13,036,000	731,572,000
December 10.....	8,981,000	683,465,000	15,001,000	707,787,000
December 17.....	723,000	683,866,000	13,068,000	697,657,000
December 23.....	941,000	696,124,000	12,256,000	709,321,000
December 30.....	2,260,000	693,474,000	11,284,000	707,018,000
1921.				
January 7.....	10,217,000	695,942,000	11,783,000	717,922,000
January 14.....	417,000	677,492,000	12,893,000	690,822,000
January 21.....	12,343,000	681,542,000	12,160,000	706,045,000
January 28.....	19,932,000	662,083,000	12,029,000	684,044,000
February 4.....	22,520,000	670,954,000	14,040,000	707,514,000
February 11.....	22,007,000	655,629,000	13,496,000	691,132,000
February 18.....	16,069,000	656,664,000	11,790,000	684,523,000
February 25.....	23,390,000	655,730,000	11,506,000	690,626,000
March 4.....	7,233,000	650,418,000	12,481,000	670,132,000
March 11.....	23,341,000	672,966,000	14,023,000	710,330,000
March 18.....	410,000	639,336,000	14,610,000	654,376,000
March 25.....	25,245,000	639,486,000	24,122,000	688,853,000
April 1.....	10,096,000	659,620,000	15,776,000	685,492,000
April 8.....	5,921,000	631,535,000	17,432,000	654,888,000
April 15.....	633,000	661,184,000	18,466,000	680,283,000
April 22.....	18,073,000	638,884,000	13,685,000	670,652,000
April 27.....	10,798,000	647,896,000	15,333,000	674,227,000
May 4.....	6,811,000	651,039,000	17,593,000	675,443,000
May 11.....	2,701,000	666,330,000	15,598,000	684,629,000
May 18.....	471,000	633,657,000	15,894,000	649,932,000
May 25.....	471,000	633,641,000	16,303,000	670,415,000
June 1.....	4,635,000	664,213,000	14,332,000	683,180,000
June 8.....	1,552,000	682,696,000	13,799,000	698,037,000
June 15.....	209,000	789,073,000	23,728,000	813,010,000
June 22.....	930,000	665,765,000	13,616,000	680,331,000
June 29.....	1,602,000	664,103,000	12,149,000	677,854,000
July 6.....	7,409,000	651,727,000	11,907,000	671,043,000
July 13.....	276,000	650,310,000	11,515,000	662,101,000
July 20.....	12,970,000	637,422,000	11,893,000	662,285,000

Gov. STRONG. I also wish to submit for the record, or for the information of the commission, if it does not appear of sufficient value to print, a table of official discount rates of central banks for the years 1919 to 1921, inclusive, for Italy, Japan, Norway, Portugal, Rumania for a portion of the period down to 1921, Spain, Sweden, Switzerland, and the Federal reserve bank of New York.

The CHAIRMAN. I think it had better go into the record.

(The table of official discount rates of central banks is here printed in full, as follows:)

Official discount rates of central banks, in percentages, 1919 to 1921.

End of month—	Italy.	Japan.	Norway.	Portugal.	Rumania.	Spain.	Sweden.	Switzerland.	New York. ¹
1919.									
January.....	5	6.5	6	5½	.....	4½	6½	5½	4½
February.....	5	6.5	6	5½	.....	4½	6½	5½	4½
March.....	5	6.5	6	5½	.....	4½	6½	5½	4½
April.....	5	6.5	6	5½	.....	4½	6½	5½	4½
May.....	5	6.5	5½	5½	.....	4½	6½	5½	4½
June.....	5	6.5	5½	5½	.....	4½	6	5½	4½
July.....	5	6.5	5½	5½	.....	4½	6	5½	4½
August.....	5	6.5	5½	5½	.....	4½	6	5½	4½
September.....	5	6.5	5½	5½	.....	4½	6	5½	4½
October.....	5	7.3	5½	5½	.....	4½	6	5½	4½
November.....	5	8.03	5½	5½	.....	5	6	5½	4½
December.....	5	8.03	6	5½	.....	5	6	5	4½
1920.									
January.....	5	8.03	6	5½	.....	5	6	5	6
February.....	5	8.03	6	5½	.....	5	6	5	6
March.....	5	8.03	6	5½	.....	5	7	5	6
April.....	5½	8.03	6	5½	.....	5	7	5	6
May.....	6	8.03	6	5½	.....	5	7	5	6
June.....	6	8.03	7	5½	.....	5	7	5	7
July.....	6	8.03	7	5½	.....	5	7	5	7
August.....	6	8.03	7	5½	.....	5	7	5	7
September.....	6	8.03	7	7	.....	6	7½	5	7
October.....	6	8.03	7	7	.....	6	7½	5	7
November.....	6	8.03	7	7	.....	6	7½	5	7
December.....	6	8.03	7	7	.....	6	7½	5	7
1921.									
January.....	6	8.03	7	7	.....	6	7½	5	7
February.....	6	8.03	7	7	.....	6	7½	5	7
March.....	6	8.03	7	7	.....	6	7½	5	7
April.....	6	8.03	7	7	.....	6	7	4½	7
May.....	6	8.03	7	7	.....	6	6½	4½	6½
June.....	6	8.03	7	7	.....	6	6½	4½	6

¹ Federal reserve bank of New York changed to 5½ per cent on July 21, 1921.

Gov. STRONG. I would also like to submit a memorandum which has been compiled from sources which we believe to be reliable, and in certain cases as the result of direct cable inquiry, which gives a little statement of rates for commercial accommodation recently prevailing in England, France, Germany, and Japan. That has a bearing in that it brings out the relation between market rates and the rates established by the banks of issue.

The CHAIRMAN. That may go into the record.

(The memorandum presented by Gov. Strong is here printed in full, as follows:)

RATES CHARGED BY COMMERCIAL BANKS FOR ADVANCES TO COMMERCIAL CLIENTS FROM JANUARY 1, 1920, TO JULY 28, 1921, IN ENGLAND, FRANCE, GERMANY, AND JAPAN.

Advances to commercial clients in these countries and elsewhere on the continent of Europe ordinarily are in open account, i. e., overdraft of the customer on the books of the bank. No negotiable evidence of debt is given, and therefore these advances are not discountable at the central bank.

In this regard they differ from advances made by commercial banks in the United States to their borrowing commercial clients upon promissory note of the client, which is discountable, but the character of the accommodation, although in different form, is the same as that which is taken by our commercial borrowers upon a single-name note discounted by their banks or sold in the open market.

Special inquiries as to the cost of this accommodation have brought information from authentic sources as to the respective countries, as follows:

England: In general, it is related to the Bank of England rate and has ranged from one-half to 1 per cent over the Bank of England rate during the period. This applies both to secured and unsecured advances except in exceptional instances where special rates have been arranged. Such special circumstances would be that the bank rate might be charged only to undoubted customers of long standing and on first-class collateral, and in cases of extra borrowing outside of long-standing arrangements generally 1 per cent above the bank rate was charged. When the bank rate was 7 per cent, however, the banks frequently charged at the bank rate to one-half per cent above instead of one-half to 1 per cent above, thinking 8 per cent excessive for loans to good clients.

France: Minimum charge has been 7 per cent, and usually a commission in addition of one-fourth per cent quarterly on maximum amount utilized. Depending upon the relations between bank and borrower, even higher charges have obtained.

Germany: Recognized rate is 1 per cent over bank rate, but is not adhered to. Quite larger rates have often been charged. Consensus of opinion seems to indicate 6 to 6½ per cent, although in actual transactions during last half of year 1920 overdraft from two German banks cost an American international banking firm 6 per cent at one bank and 7 per cent at the other. They believe commercial rate would undoubtedly be 1 per cent higher. Special recent transactions have taken rates up to 10, 12, and 16 per cent. Cable advice of more definite information not yet received.

Japan: Rate varies according to the nature of the business occasioning the accommodation. Foreign banks in Japan charged 6 to 7 per cent on export overdraft and 7 to 8 per cent on import overdraft, and native banks in domestic business charged 8 to 10 per cent. This latter charge conforms with the discount rates for commercial paper in Tokyo, which, on January 25, 1920, were 9.49 per cent and on July 25, 1921, were 8.03 per cent. These broken rates per annum result from the Japanese method of computing interest charges on bank accommodation at so many yen per day for each 100 yen of accommodation. They have fluctuated between the extremes indicated with gradually decreasing tendency up to the present time.

Gov. STRONG. There is also a supplemental memorandum dated July 28, 1921, revising the information in regard to the market rates in Germany, as we were not certain whether the information was down to date. Their cable was sent a few days ago, and this is the memorandum containing the substance of the cable.

(The addenda as to Germany are here printed in full, as follows:)

ADDENDA AS TO GERMANY.

Cable received to-day states that average rate during the past 18 months has been 2 per cent above Reichbank rate of 5 per cent, or 7 per cent, plus commission of one-fourth per cent per month on highest monthly debit balances. The above charge refers to blank or unsecured credits. On cover credits the commission, in addition to the 7 per cent rate, varies from one-eighth to three-sixteenths per cent per month.

Gov. STRONG. And I also wish to place in the record a table of the official discount rates of certain other foreign State banks which are probably of more value for comparison than those which I first read, Austria, Belgium, Denmark, England, France, Germany, Greece, and Holland, through the period 1919, 1920, and 1921 to date.

(The table of official discount rates of foreign State banks is here printed in full, as follows:)

Official discount rates of foreign State banks, in percentages, 1919 to 1921.¹

End of month--	Aus- tria.	Bel- gium.	Den- mark.	Eng- land.	France.	Ger- many.	Greece.	Hol- land.
1919.								
January.....	5	5	5½	5	5	5	.....	½
February.....	5	5	5½	5	5	5	.....	½
March.....	5	5	5½	5	5	5	.....	½
April.....	5	5	5½	5	5	5	.....	½
May.....	5	5	5½	5	5	5	.....	½
June.....	5	4	5½	5	5	5	.....	½
July.....	5	4	5½	5	5	5	.....	½
August.....	5	4	5½	5	5	5	.....	½
September.....	5	4	5½	5	5	5	.....	½
October.....	5	4	6	5	5	5	.....	½
November.....	5	4	6	6	5	5	.....	½
December.....	5	4	6	6	5	5	.....	½
1920.								
January.....	5	4	6	6	5	5	.....	½
February.....	5	4	6	6	5	5	.....	½
March.....	5	4½	6	6	5	5	.....	½
April.....	5	5½	7	7	6	5	.....	½
May.....	5	5½	7	7	6	5	6½	½
June.....	5	5½	7	7	6	5	6½	½
July.....	5	5½	7	7	6	5	6½	½
August.....	5	5½	7	7	6	5	6½	½
September.....	5	5½	7	7	6	5	6½	½
October.....	5	5½	7	7	6	5	6½	½
November.....	5	5½	7	7	6	5	6½	½
December.....	5	5½	7	7	6	5	6½	½
1921.								
January.....	5	5½	7	7	6	5	6½	½
February.....	5	5½	7	7	6	5	6½	½
March.....	5	5½	7	7	6	5	6½	½
April.....	6	5½	7	6½	6	5	6½	½
May.....	6	5	6½	6½	6	5	6½	½
June.....	6	5	6½	6½	6	5	6½	½

¹ The standard commercial discount rate in Canada has been 6 per cent since before January, 1919.

² Apr. 1.

³ Changed to 5½ per cent on July 22, 1921.

Gov. STRONG. I also wish to present a table giving the effective discount rates of the Federal reserve bank of New York for the years 1919, 1920, and 1921 to date. This is submitted for the record if the commission thinks it is of value.

The CHAIRMAN. It may go into the record.

(The table of rates of discount effective at the Federal reserve bank of New York in 1919, 1920, and 1921, is here printed in full, as follows:)

Rates of discount effective at the Federal reserve bank of New York in 1919, 1920, and 1921.

	15 days or less (including collateral loans).	16-90 days, inclusive.	Agricultural paper, 61 days to 6 months.	Special, ¹ 16-90 days.	Trade acceptances, 16-90 days.	Rediscount of bankers' acceptances.			Open market purchases: bankers' acceptances.	
						15 days.	16-60 days.	61-90 days.	Authorized rates, minimum.	Actual rates.
1919.										
January.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
February.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
March.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
April.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
May.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
June.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
July.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
August.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
September.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
October.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
Nov. 1-3.....	4	4½	5	4½	4½	4	4½	4½	4	4-4½
Nov. 5-30.....	4½	4½	5	4½	4½	4	4½	4½	4	4-4½
Dec. 1-11.....	4½	4½	5	4½	4½	4	4½	4½	4	4-4½
Dec. 12-30.....	4½	4½	5	4½	4½	4	4½	4½	4	4-4½
Dec. 31.....	4½	4½	5	4½	4½	4	4½	4½	4	4-4½

¹ Secured by Liberty bonds or United States certificate of indebtedness.

² Only certificates of indebtedness bearing 4½ per cent interest; rate was 4½ for other certificates of indebtedness and Liberty bonds.

³ Eligible commercial paper only.

⁴ Certificates of indebtedness only.

	Rediscount.					Collateral loans secured by—				Open market purchases: bankers' acceptances.	
	Commercial paper, 1-90 days.	Secured by Liberty bonds, 1-90 days.	Secured by certificates of indebtedness.	Agricultural paper, 61 days to 6 months.	Bankers' acceptances, 1-90 days.	Certificates of indebtedness.	Liberty bonds.	Commercial paper.	Bankers' acceptances.	Authorized rates, minimum.	Actual rates.
1920.											
Jan. 1-22...	4½	4½	4½	5	4½	4½	4½	4½	4	4-5	
Jan. 23-Feb 5.....	6	5½	4½	6	5	4½	5½	6	5½	6-6½	
Feb. 6-25.....	6	5½	4½	6	5	4½	5½	6	5	6-6½	
Feb. 26-29.....	6	5½	5	6	5	5	5½	6	5	6-6½	
March.....	6	5½	5	6	5	5	5½	6	5	6-6½	
April.....	6	5½	5	6	5	5	5½	6	5	6-6½	
May.....	6	5½	5	6	5	5	5½	6	5	6-6½	
June.....	7	6	5½	7	6	6	6	7	6	7-6	
July.....	7	6	5½	7	6	6	6	7	6	7-6	
August.....	7	6	5½	7	6	6	6	7	6	7-6	
September.....	7	6	5½	7	6	6	6	7	6	7-6	
October.....	7	6	5½	7	6	6	6	7	6	7-6	
November.....	7	6	5½	7	6	6	6	7	6	7-6	
December.....	7	6	5½	7	6	6	6	7	6	7-6	
1921.											
January.....	7	6	5½	7	6	5½	6	7	6	7-6	
Feb. 1-4.....	7	6	5½	7	6	5½	6	7	6	7-6	
Feb. 4-Mar. 31.....	7	6	6	7	6	6	6	7	6	7-6	
April.....	7	6	6	7	6	6	6	7	6	7-6	
May 1-4.....	7	6	6	7	6	6	6	7	6	7-6	
May 4-June 15.....	6½	6	6	6½	6	6	6	6	5	6-6	
June 16-July 21.....	6	6	6	6	6	6	6	6	5	6-6	
July 21.....	5½	5½	5½	5½	5½	5½	5½	5½	5	5-5½	

Representative SUMNERS. Governor, in normal times is there much of an international flow of capital influenced by interest and rediscount rates among the several more important nations of the world?

Gov. STRONG. In normal times the discount rates are a great influence upon the flow of credit.

Now, Congressman, there has been a good deal of discussion of the flow of capital. Capital can not be transported like a trunk full of clothes. When you speak of a transfer of capital from one country to another, the only capital that is capable of being transferred in a trunk or in your pocket is gold. You may ship goods that are produced by one country to another for consumption or employment in industry, but the transfer of capital from one country to another is really only effected in a basic sense by shipments of gold, and the great transfer of capital that has taken place in recent years has been from other countries to the United States through the great movement of gold to this country.

Now, speaking of normal times, that flow of gold is regulated to some extent by the changes in the relative rates for money in the different markets of the world. It is regulated to some extent, but I do not think completely. Presenting the picture rather simply, we may say that if there is a tendency for gold to flow out of London, say, to New York, and it reaches a point where it is beginning to impair the reserves of the Bank of England to a point where they must take measures of protection, they advance their discount rate. The advance of the discount rate starts a flow of credit to London, and that flow of credit stops the outflow of gold. But I must deprecate such transactions as representing an export of credit; they do not represent anything of the kind.

Representative SUMNERS. You think, then, that the rate of interest which may be offered in other countries during normal times would not probably influence the rediscount situation in the Federal reserve bank sufficiently to make it necessary for it to change its rediscount rate to meet that situation?

Gov. STRONG. I think when normal times come, if they do—and I hope they do soon—that it will be necessary and desirable that arrangements be effected between the important banks of issue throughout the world, so as to effect some regulation of those matters.

The CHAIRMAN. If there is nothing further with Gov. Strong this evening, we will take a recess until to-morrow morning, to go on to-morrow with other matters, and will resume with Gov. Strong on Thursday morning at 10 o'clock.

(Whereupon, at 5 o'clock and 30 minutes p. m., the commission adjourned until to-morrow, Wednesday, August 10, 1921, at 10 o'clock a. m.)

AGRICULTURAL INQUIRY.

THURSDAY, AUGUST 11, 1921.

CONGRESS OF THE UNITED STATES,
JOINT COMMISSION ON AGRICULTURAL INQUIRY,
Washington, D. C

The joint commission met, pursuant to adjournment taken on yesterday, at 10 o'clock a. m., in room 70, Capitol Building, Representative Sydney Anderson (chairman) presiding.

The CHAIRMAN. The commission will come to order.

Before we proceed this morning I would like to read into the record a telegram which I received yesterday, as follows [reading]:

St. MATTHEWS, S. C.

SYDNEY ANDERSON,

Chairman Joint Commission of Agricultural Inquiry:

Your telegram even date, complete stenographic report Washington conference, to which Gov. Harding refers, is proof positive that his statement: "In other words, they wanted us to sanction a loan of 30 cents a pound on cotton which was worth at that time normally on the market, I think, 28 cents a pound," is absolutely incorrect. No such request has ever been made of Federal Reserve, nor could we be induced make such unreasonable request which lacks first element of sound banking and business.

Request at September Federal Reserve conference was read to full board, with Gov. Harding presiding, explained by section, and then presented to Gov. Harding personally in writing, and most assuredly should be in his files. Stenographic report of conference proves conclusively no such request, as stated by Gov. Harding, was made. Only request made was that necessary renewals be granted on loans based upon agricultural paper, to enable gradual and orderly marketing of crops, and on which credits were based, either by renewal of agricultural paper or substitution thereof of commodity secured paper where expedient, or by rediscounting on cotton in warehouse with proper receipts, as provided in section 13, Federal reserve act. Had our request been granted it would have brought benefits to agriculture and commerce, Nation wide, and distressing condition confronting us to-day would not be one-tenthfold as serious.

Gov. Harding's statement appearing in press, which statement is confirmed by your telegram of to-day, has aroused indignation of officials and members our association throughout cotton belt, who strenuously protest over incorrectness and injustice of statement and insist it has done serious injury to association and officials, including myself, and I urge immediately request Gov. Harding to make correction of said erroneous statement to commission and through press. I therefore telegraphed Gov. Harding urging that he refer to written request made at September conference, copy of which was filed with him at the conference, and immediately issue correction, both in justice to himself, myself, and the association.

Gov. Harding has just replied by telegram as follows: "My statement referred to resolutions passed at Montgomery conference September, 1920, with reference to market value of cotton at time these resolutions were presented to board meeting on September 14. Think you will be satisfied when you see full report of proceedings that I did not misrepresent you. Am not responsible for newspaper accounts."

I am now telegraphing him a second request for correction based upon written request of September conference, of which I hold stenographic report, and copy of which was filed with him, and should certainly be in his records. If Gov. Harding issues correction please telegraph me copy of same. If he declines to promptly

make correction as requested, I then request that commission permit me to furnish statement for purpose of keeping records straight, supplying them with correct facts, and undoing the injustice that has been done us.

Please read this telegram to commission. I also request that you make this telegram and my telegram of 8th on same subject part of official proceedings of investigation.

J. S. WANNAMAHER,
President American Cotton Association.

I also desire to insert into the record at this place, as a part of yesterday's proceedings, a statement addressed to this commission on behalf of the wool-growing industry of the United States.

(The statement referred to is here printed in full, as follows):

A STATEMENT—THE POSITION AND NEEDS OF THE SHEEP INDUSTRY IN THE UNITED STATES.

The COMMISSION OF AGRICULTURAL INQUIRY,
Washington, D. C.

GENTLEMEN: It having been impossible for us to have a representative appear before your commission at the time mentioned in the chairman's telegram, we are submitting the following statement for your consideration. We shall be ready to make any further statements or to assist in presenting matters and devising the means for giving needed stability to all branches of agriculture.

The National Wool Growers' Association through its individual members and affiliated organizations represents a majority of the sheep owners of the country. A list of the affiliated organizations is attached to this statement.

Our discussion of this question is arranged under the following principal topics:

1. Position of sheep raisers and prospects for wool and mutton production.
2. Measures for immediate improvement.
3. How the needed stability and development of sheep raising can be secured.

POSITION OF RANGE SHEEP RAISERS AND PROSPECTS FOR WOOL AND MUTTON PRODUCTION.

Speaking first for owners of over 20,000,000 sheep in the range States (considerably more than one-half of the total in the United States with most of whom sheep raising is an exclusive business), we will state that more than a majority of them are to-day insolvent.

The following facts have served to depress the sheep business beyond what can be attributed to general deflation:

1. A considerable part of the 1920 wool clip is still unsold. The part sold brought prices equal to 25 per cent of 1919 prices. This clip was grown altogether on a very high cost basis.
2. The 1921 clip has a very low value. Expenses could not be reduced until November, 1921, at which time wage reductions were possible through lessened competition of railroads and mines.
3. The winter of 1919-20 was an unusually severe one and followed a dry summer and fall. Losses of stock were severe and expenses for feed purchased at high rates left most growers deeply indebted to their banks even before the collapse of the wool market on May 20, 1920.
4. The 1918 wool clip was, in effect, commandeered by the Government at less than the 1917 price. This, together with taxes paid, prevented accumulation of reserves for difficult times.

The future is entirely dependent upon the ability and willingness of the banks and loan companies to afford sufficient time to work out the loans. However, there is considerable doubt as to this being done. Within the last few days the State bank commissioner of Utah has notified banks regarding the need of liquidating outstanding loans, particularly mentioning overdue live-stock paper. If such action is started it will naturally become more general and a very great decrease in the numbers of breeding stock will be inevitable. (The cause of this credit condition and its prevention in the future are discussed in section 3.)

At present flocks are very much below their usual numbers as a result of forced marketing of ewe lambs last year, coincident with an unusually expensive winter in 1919-20, an a very short lamb crop following. The 1922 production of wool and of lambs can not possibly amount to as much as 75 per cent of the average yield and the

further liquidation which seems likely will in all probability further reduce production. This condition is upon us in the face of the range feed supply, which is, with the exception of parts of two or three States, the best that has been known for many years. It must be remembered that the grazing of live stock is the only possible method of utilizing the principal part of the area of the 11 principal range States (including Texas). In Nevada, Idaho, and Utah, for example, seven-eighths of the acreage is not in cultivation. This figure applies to the lands outside national forests and other reservations. The cattle grazing business is in no better condition than the sheep business and suffers from the same fundamental defects in our national land and financial policies.

The very drastic depletion of the breeding flocks and herds which was started in 1920 and which threatens to go further this year means (1) an acute shortage in wool, mutton, and beef, and (2) the paralysis of the principal rural industry of Western States.

The crippling of range stockmen affect the farmers of the West and Central West no less vitally. The principal products of the irrigated farms are feed crops. Their natural market is for winter feeding of range-breeding stock and the fattening of steers, wethers, or breeding stock that has passed the age of safety for running on the range. The western farm areas can not be prosperous if the range sheep and cattle business is cut down. Large quantities of 1920 hay are in the fields and the growers are unable to meet any payments upon their loans.

The movement of feeder stock to corn-belt farms is the smallest known since this movement was established, and corn and rough feed are either piled up on the farms that grew them or forced in oversupply upon a market that can not possibly absorb for export or industrial purposes.

In the farming States the low price of wool has stopped a logical expansion of sheep raising on high-priced land which had well started and was greatly needed in the truly economic use of the products and by-products of valuable land and also as a large contribution to the problem of maintaining farm incomes with a scant supply and high cost of farm labor.

In this connection we hope your commission is fully appreciative of prospective wool-trade conditions. The meat problem is usually more fully considered. The farm production of lamb and mutton offers the best prospect of increasing our meat supply without making necessary any reduction of cattle or swine populations. But mutton production can not be separated from wool values.

In 1914, prior to the war, the wool trade was rudely awakened to the fact that world production was falling short of consumption. The war increased consumption of wool in some countries but completely checked civilian trade in wool fabrics. In Europe and in the rest of the world as well there is a vast accumulation of needs of woolen goods but financial conditions prevent resumption of trade. Recently Germany has resumed buying in British wool sales and the surplus that has piled up will soon disappear and demand and supply will be as in the first half of 1914. The United States will then be, as it was in 1917, dependent upon Great Britain for military requirements of wool. In peace our mills will be increasingly dependent upon a diminishing foreign supply. The distress of present conditions would seem really to be secondary to the seriousness of our national safety in the future and our industrial future is endangered unless we clear the way for a larger wool production upon the farms and upon the ranges of our own country.

Measures for immediate improvement: The emergency tariff, the live-stock finance corporation, freight rates.

THE EMERGENCY TARIFF.

A drop in wool values, following the war, was anticipated by sheepmen. It was not anticipated that our markets would be left open as a dumping place for accumulations of other countries and our importers enabled to receive the bonus of 25 per cent which the exchange conditions afforded them. Nor was it anticipated that the Federal Reserve Board's suggestion for deflation would be made in the early part of the regular marketing season of a wool clip produced at the highest cost ever known.

The emergency tariff came into effect on May 27. Its great value has been too lightly estimated by many, who do not consider that in the case of wool the political juggling between December 7, 1920, and April 9, 1921, caused an overloading of the American market with imported wools, that can not fail to keep the market at an abnormally low level for at least a year.

THE LIVE-STOCK FINANCE CORPORATION.

The delayed and drastic deflation of our national financial affairs revealed a dangerous defect in our normal financing of agricultural production. Loans on breeding sheep and cattle had, and still have, no standing in the discounting market, if drawn for

a period longer than that provided for the service of speculative stock feeders. i. e., months.

Our efforts to secure temporary relief from this inequitable plan, through Senator Stanfield's amendment to the War Finance Corporation act and the Sterling-Smith resolution, were set aside. The Treasury Department sought to evade the delay incident to Congressional action by the organization of a special \$50,000,000 corporation. Five serious weeks have passed and not one new loan has been made nor an old loan renewed. We still hope for a practical service from the corporation and adherence to the early announcement of intention to carry loans secured by breeding stock through a period of 30 months in order to allow time for a turnover of the investment.

FREIGHT RATES.

Prohibitive and unjustifiable rates of charge for transportation of live stock had a great deal to do with pulling down values of collateral and increasing expense to the point where it was, not a matter of reduced profits but rather one of increased losses.

The reduced wage scale for railway employees has gone into effect, but the same high freight rates apply and are bringing the live-stock business to a condition in which it will be unable to furnish any business to the carriers.

We recommend and urge upon your commission that you insist upon immediate readjustment of freight rates upon wool and live stock.

How the needed stability and development of sheep raising can be secured: Stabilizing home markets; adequate financing of production and distribution; instituting a national policy pertaining to public lands, education, and research.

STABILIZING HOME MARKETS.

To prevent extreme fluctuations in prices and profits is the only certain means of stabilizing an industry to the point of insuring efficiency and safe and reasonable expansion. An importing country must have regard to the kind of competition that home producers must face in home markets. We believe that the Fordney regular tariff bill is well calculated to stabilize our various lines of business and properly recognize the interests of employees and consumers generally. Unfortunately, schedule 11 contains some features which would operate to defeat what appears to be and what we believe should be the real objects of the bill. We refer to (1) the indefensible 35 per cent limitation upon wool duties, (2) to inadequacy of 25 cents per pound, and (3) to a manufacturer's compensatory protection of from 20 to 36 cents per pound upon goods when, as a matter of fact, the protection to growers would in many cases be less than 10 cents. We particularly call the attention of your commission to this latter point, because nothing but evil can possibly come from giving extra protection to manufacturing under the guise of protection to a branch of agriculture.

We have confidence that the final form of the regular tariff bill will be such as will serve to stabilize the business of agricultural protection and harmoniously to relate it to other industries and to the present and future welfare of this Nation.

ADEQUATE FINANCING OF AGRICULTURAL PRODUCTS.

We suggest to your commission:

1. That loans upon breeding live stock be made eligible for discount by the Federal reserve system when drawn for 30 months.

2. That a workable system be established for financing wool and other agricultural articles from the time of production to the time of actually entering consumption.

The range-sheep business is in its present deplorable state largely as a result of what is now seen to have been overloaning. To some extent the freedom with which loans were made was a reflection of practices in other industries affected by war trade. That the error was carried to an extreme in our case can not be charged wholly to the borrowers. The lenders must have been at fault to at least an equal degree. It is now time to locate and remove the cause of such error in order that the business may be able to stand future strains and in normal times may have the benefit of sound methods.

To a very large degree, the temptation to overborrowing and overloaning arise from the lack of any national policy governing the use of the public domain. This case is given separate discussion on pages 10 to 11.

Loans to sheep raisers are chiefly secured by the sheep themselves and necessarily made for a period of not over six months. In good times the value of the ewe is based on her earning power as a producer of lambs and wool. When lamb and wool markets tumble, confidence is shaken and holders of paper begin to figure the ewe's value in accordance with her immediate carcass value. This greatly depreciates the collateral.

but it is a necessary course so long as such paper is subject to call in six months. To give the live-stock producer the same financial service now accorded the merchant or manufacturer, his loans should have a life sufficient to allow a turnover, and a return of the investment from the increase. This is not class legislation. So long as one set of men are given loans under terms that allow a turnover, and another set are denied that service, just so long will we continue to have class legislation that discriminates against those engaged in agriculture.

The question of financing distribution is much the same for wool as for wheat, with the exception that there is, and probably can be, no wool exchange and no dependable quotations for guidance of sellers, enabling the growers to sell in accordance with their judgment rather than because of necessities in good business for the producer and the consumer. We urge that you give prominent consideration to wool when formulating your recommendation for financing the orderly distribution of agricultural commodities.

INSTITUTING A NATIONAL POLICY PERTAINING TO PUBLIC LANDS.

It was stated (p. 9) that the lack of a Government policy toward the use of public lands was responsible in part for the overfinancing of sheep.

It must first be remembered that our country has never adopted any semblance of a plan for regulating the grazing upon public lands outside national forests. Use has been permitted but without provision for avoiding abuse or for giving the users any certainty of tenure that would permit them to develop water, erect control fences or invest in stock and equipment from which returns could only be obtained in a number of years.

The possibility of getting into the business with nothing more than a flock of sheep and a camp outfit has led to financing of men practically without capital and without property—frequently not citizens. In good years these parties compete with bona fide stockmen for range feed and for capital. In times of stress they are insecure; their stock is the first to be forced into liquidation at the slaughter houses with the result of pulling down collateral values and discrediting the standing of all sheep paper.

The unsystematic designation of lands for grazing homesteads has diminished the area of grazing lands and placed many of the homesteads in hands of persons who never can use them for live-stock production. It has forced real stock raisers to lease or buy such and other private lands at figures that do not render possible a fair return on the investment. In other words, we have passed the point where we can continue to reduce the size and scope of stock-raising concerns in the interest either of the country or of the so-called "small man" himself.

To-day we are unable to ask to be allowed to lease or buy Government lands in order to put range stock raising upon a more secure basis. Such requests have been made and refused. The time will return when the stockmen can stand a proper adjustment of the question and its need is always most pressingly called for. Right now a thorough study should be made of the use of public lands and a plan that is fair to all worked out and held ready for adoption as soon as conditions permit.

EDUCATION AND RESEARCH.

Neither the Department of Agriculture nor the land-grant colleges and the experiment stations have ever regarded the range live-stock industry as a permanent one calling for the scientific study of its economical problems and for the training and education of those to be engaged therein. True, the regular course of instruction in the agricultural college deals with principles of plant and animal life, but no such effort has been made to provide education for the ranchman's son as for the farmer's son. It is time we recognized the fact that a large part of our western lands can serve the country only under a range live-stock system of use. We have been seriously remiss in our attention to the duty of providing suitable education for this industry. Not more than two western agricultural colleges pretend to offer courses dealing with the production, preparation, and handling of wools, and yet we are facing the day when our industrial independence in war or in peace demands a larger and more intelligent and more scientific domestic woolgrowing industry.

The problem of experimental study of live-stock production upon the range is too broad and too expensive in pursuit to permit of proper attention by a single agricultural experiment station. Some of the contingent and secondary matters are receiving worthy attention.

The Federal Department of Agriculture has made a serious effort to handle this regional or interstate question.

At the Jornada Station in New Mexico and the United States Sheep Experiment Station in Idaho facilities have been provided for a practical investigation of production problems of range cattle and of range sheep, respectively. Those stations have hardly begun their work. They have had to train their own investigation and to labor under the handicap of wholly inadequate support from Congress and attention of higher executive officers.

SHEEP RAISERS' ASSOCIATION AFFILIATED WITH NATIONAL WOOL GROWERS' ASSOCIATION.

American Hampshire Sheep Association, Robert Blastock, president; Comfort T. Tyler, secretary, 36 Woodland Avenue, Detroit, Mich.

American Rambouillet Sheep Breeders' Association, Frank R. Cock, president; Dwight Lincoln, secretary, Marysville, Ohio.

American Shropshire Registry Association, J. C. Andrews, president; J. M. Wade, secretary, Lafayette, Ind.

Arizona Wool Growers' Association, E. Campbell, president; F. W. Perkins, secretary, Flagstaff, Ariz.

California Wool Growers' Association, F. A. Ellenwood, president; E. L. Hart, secretary, Red Bluff, Calif.

Idaho Wool Growers' Association, Hugh Sproat, president; John Ridenbaugh, secretary, Boise, Idaho.

Lincoln County Wool Growers' Association, J. D. Noblitt, president; L. G. Baker, secretary, Cokeville, Wyo.

Modoc County Wool Growers' Association, G. E. Williams, president; John Davis, secretary, Alturas, Calif.

Montana Wool Growers' Association, C. H. Williams, president; C. N. Arnett, secretary, Bozeman, Mont.

New Mexico Wool Growers' Association, Prager Miller, president; Bertha Benson, secretary, Albuquerque, N. Mex.

Oregon Wool Growers' Association, J. H. Dobbin, president; Mac Hoke, secretary, Pendleton, Oreg.

Park Country Wool Growers' Association, George M. Buckley, secretary, Hartsel, Colo.

Saguache County Wool Growers' Association, F. H. Means, president; Alva A. Simpson, secretary, Saguache, Colo.

San Luis Valley Live Stock Association, J. C. Gilbreath, president; W. W. White, secretary, Monte Vista, Colo.

Utah Wool Growers' Association, J. C. Hooper, president; Willard Hansen, jr., secretary, Salt Lake City, Utah.

Washington Wool Growers' Association, T. J. Drumbheller, president; J. F. Sear, secretary, Prosser, Wash.

Western Slope Wool Growers' Association, A. M. McAnally, president; James G. Brown, secretary, Montrose, Colo.

Wyoming Wool Growers' Association, Dr. J. M. Wilson, president; J. B. Wilson, secretary, McKinley, Wyo.

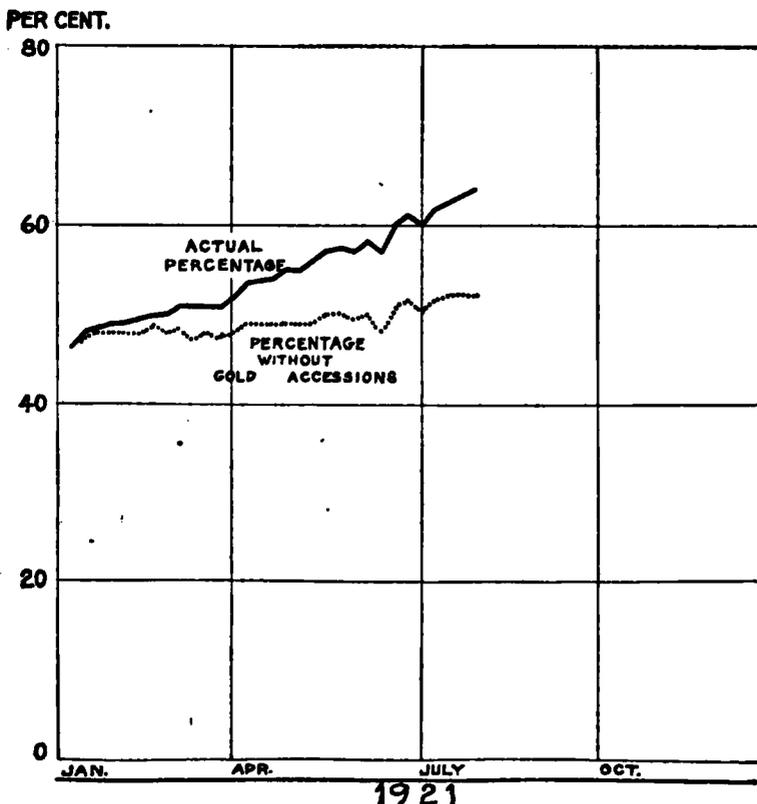
The CHAIRMAN. Very well, Gov. Strong, you may proceed.

STATEMENT OF HON. BENJAMIN STRONG, GOVERNOR OF THE FEDERAL RESERVE BANK OF NEW YORK—Resumed.

Gov. STRONG. In the course of the statements that I made on Monday and Tuesday before the commission, I referred to various tables and figures and charts, some of which had not yet been prepared. They are in course of preparation, and if agreeable to the commission, I would like to have them inserted in the record, if they appear to be of value to the commission. These charts that have been prepared will be of greater value if the sources from which the information is compiled are attached to them; and we are therefore having prepared, or have had prepared, notes indicating the sources of the statistical information that apply to those charts, and we would like also to introduce them at the proper places.

The CHAIRMAN. Without objection, they may be introduced into the record. [After a pause.] The Chair hears none.

(The tables and charts and data referred to by Gov. Strong were afterwards furnished, and have been inserted in their proper places.)



RESERVE PERCENTAGES OF THE FEDERAL RESERVE SYSTEM—WITH AND WITHOUT GOLD ACCESSIONS.

Actual reserve percentage and percentage as it would have been without any increase in gold reserves since December 30, 1920.
Source of information: Federal Reserve Bulletin and weekly press statements.

Gov. STRONG. We would also like to prepare a chart which would indicate what would have been the position of the Federal reserve system and the Federal reserve bank of New York, if it is possible to prepare such a chart, covering the period from January 1, 1918, to date, had there been no importations of gold during that period. (See this page and also p. 760.)

And as relating to the distinctly war period, after our declaration of war, and especially in the year 1918, I would like to insert into the record extracts made from the minutes of the meetings of the directors of the Federal Reserve Bank of New York, so far as they relate to the general policies of the bank during that period. I have them

with me, and if you would care to have me read and discuss them I will do so.

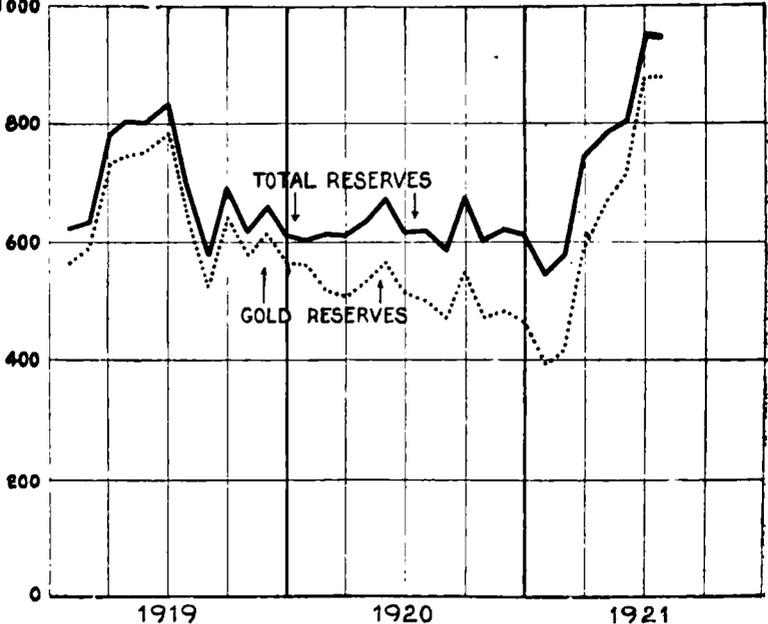
The CHAIRMAN. Without objection, you may proceed.

Gov. STRONG (reading):

July 24, 1918. Board of directors.

Mr. Woodward submitted for the auditing committee its report dated July 24, 1918, dealing with the lines of credit extended to the borrowing banks. Discussion followed, during which Mr. Thompson left the meeting. Upon motion duly made and seconded, it was "Voted that this report be received and placed on file and that the committee be tendered the thanks of the board for the careful and thorough study given the subject; and that Mr. Treman be requested to prepare a resolution for adoption by

MILLIONS
OF DOLLARS
1000



RESERVES OF THE FEDERAL RESERVE BANK OF NEW YORK.

Total reserves and gold reserves on the last report date each month.

Source of information: Annual reports of the Federal reserve bank of New York and weekly press statements.

this board at its next meeting after submission to the executive committee for its approval, the resolution to outline the policy of the bank with respect to the necessity for the curtailment and conservation of credit and to contain a direction to the officers to institute among the member banks a campaign of education to bring this about."

July 31, 1918. Board of directors.

Mr. Woodward, in behalf of the executive committee, read a resolution prepared by that committee with respect to the necessity for the curtailment of credit. Whereupon, on motion duly made and seconded, the following resolution submitted by the executive committee was duly adopted:

"It is clear that the increasing volume of Government financing makes necessary a far more united and consistent effort on the part of the bankers of the country to conserve and save credit than has heretofore been undertaken. The Federal Reserve Board, accordingly, on July 6 addressed a letter to all banks and trust companies requesting them to exercise 'a reasonable discretion to restrict credits which are clearly not needed for the prosecution of the war nor for the health and necessary comfort of the people,' and at the same time asked the Federal reserve banks in every practicable way to bring about a better understanding of the necessity for the conservation of credit: Therefore, be it

"Resolved, That the directors of the Federal reserve bank of New York, in full sympathy with the views of the board, hereby direct the officers of the bank, in such ways as may be appropriate, to express to the banking institutions of this district the importance and necessity of conserving credit 'by endeavoring to secure such gradual reductions as may be practicable of loans now carried for nonproductive or non-distributive purposes; by gradually reducing the amount of credit granted for purposes not clearly necessary for the prosecution of the war or the health and necessary comfort of the people; and by educating borrowers of all classes to keep their demands for credit down to the very minimum.'

"Such a concerted campaign of action and education by the banking institutions of this district will surely lead to a spirit of economy in credit transactions, as well as to an actual saving of credit comparable to the saving already effected in food and other commodities, and will enable the Government to command the credit thus saved and use it directly and with full force for the winning of the war.

"It is of the highest importance, however, that nothing should be done to cause undue embarrassment to borrowers or affect necessary credits."

July 31, 1918. A joint meeting of the executive committee of the Federal reserve bank of New York and the New York Clearing House committee was held at the office of the bank at 3 o'clock p. m. this day.

Present: Mr. Treman, acting chairman; Messrs. Jay, Saunders, and Woodward; Mr. Case, deputy governor.

Messrs. Frew, Hine, Pierson, and Wiggin, of the New York Clearing House committee also attended the meeting.

Mr. Treman explained briefly the object of the meeting, namely, the importance of the conservation of credit to insure the success of the Government financing, and Mr. Woodward was asked to explain the matter in detail, which he did, outlining the importance of it as viewed by the directors of the Federal reserve bank.

An exchange of views then followed.

Mr. Woodward read the resolutions which had been adopted by the directors of the Federal reserve bank and the general opinion was that it was advisable to have these resolutions made public.

Mr. Wiggin suggested that an announcement should be made from Washington urging wage earners and others who are profiting by the war to curtail extravagance and assist in the purchase of certificates of indebtedness.

Mr. Case gave illustrations of the ways in which banks were discreetly reducing some of their loans, especially those of long standing.

Mr. Frew, as chairman of the clearing house committee, stated that their committee would meet on Monday next and would give careful consideration to the ways and means in which clearing house banks could assist the Government in the matter of curtailment of credit.

It was agreed to have another joint meeting of the two committees after the clearing house committee had determined upon its plan of action.

August 14, 1918. Joint meeting executive committee and New York Clearing House committee.

It was the consensus of opinion among the clearing house members present, that there was no undue speculation at the present time in the stock market. A difference of opinion manifested itself as to the existence of some undue accumulation of raw material.

Mr. Frew reported that the matter of the conservation of credit had been carefully considered by his committee, and the members present submitted their respective views thereon and assured the bank that the New York Clearing House committee would cooperate with the bank in this connection. It was understood that the officers of the bank would draft a letter in this connection to be sent to its member banks, and would send the same to the clearing house committee for its consideration as to the extent of its cooperation.

August 21, 1918. Board of directors.

The chairman read a letter dated August 20, 1918, from the New York Clearing House Committee, on the subject of the curtailment of credit. Whereupon, on motion duly made and seconded, it was "voted that the chairman be requested to acknowledge the communication with an expression of the appreciation of this board, and that it then be received and placed on file."

August 26, 1918. Executive committee.

It was decided to give to the press the circular letter dated August 23, 1918, sent by Mr. Jay to the banks in the district on the subject of the necessity of conserving credit.

August 28, 1918. Joint meeting executive committee and New York Clearing House committee.

Mr. Jay reported briefly the tenor of the replies received from the circular letter sent out by the bank on the subject of the curtailment of credit, and it was understood that the officers would take advantage of Mr. Frew's suggestion that if any specific banks which were overextended were brought to the attention of the New York Clearing House committee, that committee would be glad to exert its influence in remedying the condition.

Gov. STRONG. We have also had a table prepared which compares the total borrowings from each Federal reserve bank to the total basic discount line of all banks in the corresponding district for the dates June 10, 1920; October 9, 1920; February 10, 1921; and June 15, 1921 (see pp. 695 and 696), as follows [reading]:

Percentage relation of total borrowings from each Federal reserve bank to total basic discount line of all banks in the corresponding district.

[Sources: Records of the Federal Reserve Board.]

Federal reserve bank.	June 10, 1920.	Oct. 9, 1920.	Feb. 10, 1921.	June 15, 1921.
Boston.....	68	60	54	41
New York.....	59	77	81	28
Philadelphia.....	113	72	77	72
Cleveland.....	48	32	43	6
Richmond.....	116	117	99	121
Atlanta.....	125	195	156	120
Chicago.....	95	107	83	65
St. Louis.....	123	126	74	66
Minneapolis.....	99	130	101	102
Kansas City.....	81	108	75	60
Dallas.....	88	116	90	84
San Francisco.....	71	80	68	71
Average.....	91	102	83	71

Gov. STRONG. I have also a similar table showing percentage of basic discount line borrowed by the five largest borrowers in each Federal reserve district on October 15, 1919; February 16, 1920; June 15, 1920; October 15, 1920; February 15, 1921; and June 15, 1921, which is as follows [reading]:

Average percentage of basic discount line borrowed by 5 largest borrowers in each Federal reserve district on dates specified below.

[Sources: Records of the various Federal Reserve Banks.]

Bank.	Oct. 15, 1919.	Feb. 16, 1920.	June 15, 1920.	Oct. 15, 1920.	Feb. 15, 1921.	June 15, 1921.
Boston.....	105	138	89	100	126	92
New York.....	96	115	88	128	160	82
Philadelphia.....	244	222	162	135	184	167
Cleveland.....	128	168	114	88	116	132
Richmond.....	449	243	249	258	292	181
Atlanta.....	374	313	307	395	315	161
Chicago.....	61	158	150	207	154	144
St. Louis.....	464	293	393	685	735	78
Minneapolis.....	131	205	233	263	160	300
Kansas City.....	289	195	199	271	172	119
Dallas.....	214	145	146	189	133	211
San Francisco.....	135	150	130	127	182	201
Average.....	223	195	188	237	227	211

Gov. STRONG. Mr. Chairman, I have really concluded the discussion of all the matters covered by the preliminary preparation that we had made, down to the point of discussing what might be considered constructive suggestions. But before taking up that part of the discussion I would like to say that on three points I have not felt quite satisfied that what I have stated has fairly presented to the commission what can be no more than my personal opinion. And the questions which have been addressed to me by the members of the commission indicate that they are seeking an opinion on those three points. They have not been brought together, and if you will permit me to state them, I will then ask you if you care to continue the discussion along that line.

Now, those inquiries indicated that the members of the commission desire to ascertain, first, whether, by an earlier advance of the discount rates of the Federal reserve banks the expansion of loans and deposits could have been arrested in any way beyond what they were.

Second, whether, failing to advance rates earlier, other measures were taken to arrest this increase in the loan account, which we call expansion, and what is considered to be a consequent advance in prices during the period of 1919, and the first three or four months of 1920.

And, third, the decline in prices having occurred, whether a reduction in the discount rates of the banks would have afforded any relief to the situation, and whether they would have been justified by conditions.

Now, in thinking over the whole subject of our discussion, it seemed to me that it was boiled down to those three points upon which the commission especially desired information. I am frank to say that I do not think it is possible to give such information. One can only state an opinion about those matters, and if it would be of any value, I will endeavor to express my personal opinion and discuss it.

The CHAIRMAN. I think the three propositions that you have suggested, Governor, are the three propositions in which the commission is interested, and I think the commission would be very glad to have your personal view with respect to those propositions.

Representative TEN EYCK. I would say that these three are not the only propositions that we are interested in, however.

The CHAIRMAN. No.

Representative TEN EYCK. Before he leaves the stand, I would like to have him give me some information as regards the extending of the short time loans.

The CHAIRMAN. I think Gov. Strong intends to follow this by suggesting constructive remedies for this situation.

Gov. STRONG. I do.

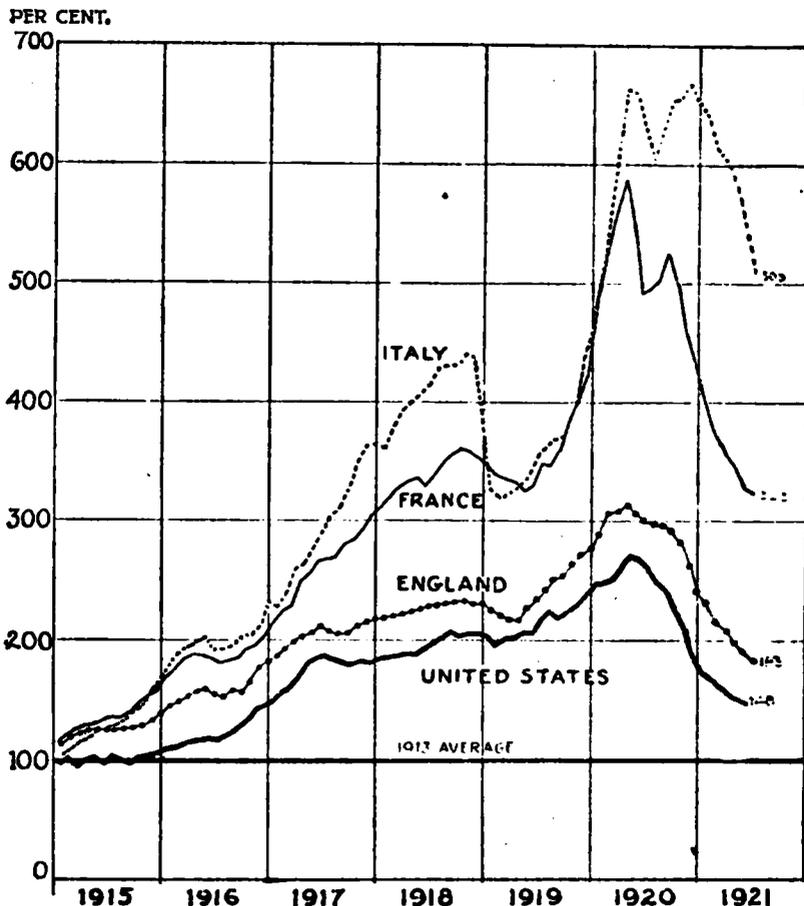
Representative TEN EYCK. Very well; that is fine.

Gov. STRONG. Will you please remember now that I am expressing my personal opinion, and upon a subject upon which personal opinions vary widely?

I believe, if it had been possible, it would have been desirable for the Federal reserve system to have advanced its rates at some point in the period between January and March, 1919, which you will recall I described as the period of decline in prices which occurred

after the turn of the year after the armistice—you will notice on the chart, that price declines are common in all four countries, Italy, France, England, and the United States, although less pronounced in the United States, probably, than in any other. (See also opposite page.)

At that time, when these questions of policy were being discussed, the Treasury was faced with a situation which seemed to

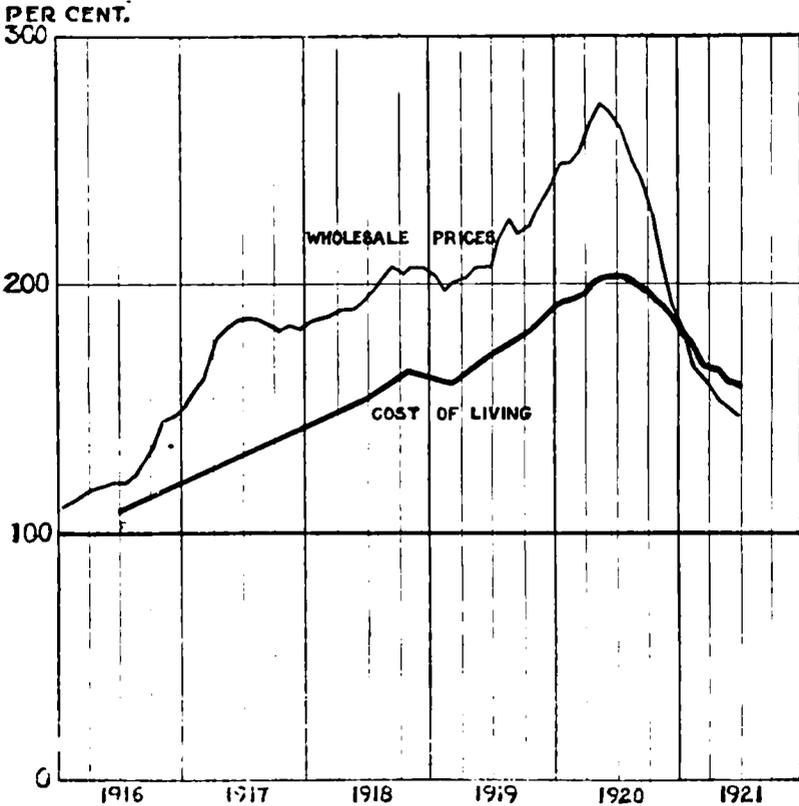


Department of Labor index for the United States; Statist index for England; index of the Bulletin de la Statistique general for France; and the index of Prof. Bachi for Italy.

Source of information: For the United States, Monthly Labor Review; for foreign countries, Division of Analysis and Research of the Federal Reserve Board.

us to be controlling. That is to say, it had a very large loan to face; the largest that had yet been asked from the country, as then estimated. In the spring of 1919 it appeared that the amount of the Victory loan might be \$6,000,000,000. And not only that, but the postwar expenditures of this great war machine that had been set up by the Government made its expenditures still in excess of its revenues. In other words, the volume of Government borrowing was increasing.

By referring to the tables that I have already submitted (see pp. 688-690), showing the relation between the total expenditures of the Government during this entire period since the 6th of April, 1917, to the revenues of the Government, it will be seen that the revenues did not actually overtake expenditures until about July, August, or September, of 1919. I refer to that because, while the war was over and the pressure for relaxation of control was very great, the same influence was operating, as regards Government finance, as was operating during the war. It was, in fact, one of the controlling influences which seemed to make it impossible to reduce the rates, and it should be also



WHOLESALE PRICES AND THE COST OF LIVING IN THE UNITED STATES.

Wholesale price index of the Department of Labor and cost of living index of the National Industrial Conference Board. Figures for July, 1914=100 per cent.
 Source of information: Monthly Labor Review, National Industrial Conference Board.

borne in mind that at that period the Treasury was still a very large borrower upon short certificates of indebtedness, then being sold to the banks, and rate increases necessarily would have elevated the whole rate level on the Government's borrowings.

Representative TEN EYCK. These certificates of indebtedness were what the Government sold to obtain money in between the bond issues?

Gov. STRONG. In between the permanent loans, and until the time when revenues overtook expenditures. Assuming, therefore, for the

purpose of this discussion that it was impossible to make rate increases in the spring of 1919, the management of the Federal reserve system was confronted with the necessity of taking other measures than that afforded by rate control—and those are the measures which we discussed at great length on Monday and Tuesday—through what we describe in discussing the matter among ourselves as “direct action,” as distinguished from “rate action.”

I want to enlarge upon the argument on that point by emphasizing to the commission that the application of rate control is universal, democratic, and applies everywhere and requires no argument; it does not need to be expounded at bankers' meetings. It is a fact. It operates directly and evenly upon every borrower.

Abandoning rate control as impossible, you then introduce the element of human error, because it is quite impossible for the management of this system, dealing with 10,000 member banks, to reach them all. They are the only ones that we reach directly, and there are 20,000 banks we do not reach, because they are not members. It must be borne in mind that considering the human element, there is also the exaggeration of the chance of error, because if you can not control by rate, then you have to deal individually with the people who are abusing, if you please, the system. That I regard as having been done as effectively as such an imperfect method could enable it to be done. I never considered that it was possible to make it effective. The widest possible propaganda and the widest educational work could not make it entirely effective.

The CHAIRMAN. Did this particular policy begin to apply in 1919?

Gov. STRONG. In New York it was applied during the autumn of 1918. I can not speak in detail for the other reserve banks especially, because I was unable to attend the conferences of the officers of those banks during 1920, but I have no doubt from my general knowledge of the system that that type of control was undertaken in all the districts. The last meeting that I attended, in December, 1919, I think it was, would have indicated that.

The CHAIRMAN. As I understand, this policy of direct control took the form, on the part of the Federal reserve banks, to induce the member banks to exercise discretion and control, particularly to limiting the so-called nonessential loans and speculative loans?

Gov. STRONG. Yes, sir. Now, this is the way in which this problem was attacked in New York, and I think it was common to the system.

Mr. Chairman, this letter and circular which I have here is of so much importance to this discussion that I think I ought to read it at this particular point. This is a letter addressed by the chairman of the board of the Federal reserve bank of New York, who, as you know, is the Federal reserve agent, to every bank in our district. This was written on August 23, 1918, indicating how early it was necessary to apply this control in New York as a substitute for rate control. This relates to the direct control. [Reading:]

August 23, 1918.

DEAR SIR: The Federal Reserve Board wrote you on July 6 relative to the necessity of conserving credit in order to furnish the Government the increasing volume of credit it requires to finance the war, and the directors of this bank have instructed its officers to discuss the subject further with every bank in the district.

That circular was sent to every Federal reserve bank in the United States, I believe. [Continuing reading:]

While no general rules or program for the conservation of credit can be laid down, the duty of each bank is to do its share in securing the desired results, acting reasonably and judiciously, in such ways as its own conditions make practicable and as will spare borrowers undue embarrassment. We have no doubt that, like most bankers, you have already made some progress toward conserving credit, and our directors wish to supplement the Federal Reserve Board's letter by asking you now to take up this necessary work systematically and conscientiously.

Saving of credit by banks, in order to help the situation as a whole, must be the result of saving on the part of borrowers. Shifting loans from one institution to another, or sales of collateral which merely throw the burden upon other shoulders, save no credit. Credit conservation can only be accomplished by business or personal economies, and requires cooperation between banks and their borrowers and education of borrowers by their banks.

Producers, manufacturers, and merchants may do their part and reduce their credit requirements by not overbuying; by carrying as small stocks as practicable, by postponing new construction, or expansion of their business, by effecting business economies.

Individuals may do their part by studying their personal expenses and effecting economies which will enable them gradually to pay off their loans.

May we suggest that you make a careful analysis of your loans and lines of discount in order to determine definitely what credit now in use is not directly connected with Government financing, or the production or distribution of things necessary to maintain the health and efficiency of our armed forces and our civilian population. While the majority of bank loans will prove to be for these purposes, most institutions also have a considerable volume of loans to individuals made for other purposes, many of them of long standing. It is to loans of this character, as well as to the less necessary commercial borrowings, that credit conservation should first be applied.

New commercial lines or new loans to acquire or improve property, or for non-productive purposes, will rarely be justified unless they are to aid directly in the prosecution of the war. A spirit of saving in the use of credit will naturally lead the banks themselves to exercise restraint in offering new or additional lines of credit in competing for business. A frank discussion of the principles and the necessity of credit conservation with a borrower will usually gain his cooperation, and where a borrower is asked to reduce a loan having securities or commodities as collateral, emphasis should be laid on the necessity of gradual and steady reduction by personal economies rather than by selling the collateral.

Several of our member banks, wishing to discuss the matter with their borrowers have asked us to prepare a brief statement on the subject. We have prepared such a statement, which banks, if they so desire, may either use as a form letter or inclose with a letter of their own. We shall be glad to furnish either statement in any quantity to any bank in the district. Copies are herewith inclosed.

Will you be so good as to acknowledge this letter, advising us what you are doing or are willing to do in order to save credit and giving us your views as to the best method of accomplishing the necessary results? We suggest that one most effective step would be for all the banks in your city or county to reach an agreement for common action. Whenever this bank can properly assist, you may count upon our cooperation.

Very truly, yours,

PIERRE JAY,
Chairman Board of Directors.

Then there were inclosed two forms for the banks to use, and I may say that thousands of them were distributed to the banks in the district, and by the banks were distributed to their customers.

The circulars are as follows [reading]:

(NOTE.—This is a letter which a bank, if it so desires, may send to its borrowers or its depositors. Copies of this letter will be furnished free of charge in any quantity to any bank in the district with its letterhead and the name of the signing officer printed upon it, in accordance with instructions furnished by such bank.)

FIRST NATIONAL BANK,
Blankville, N. Y., August 23, 1918.

To our depositors:

Nothing is more vital to the winning of the war than credit.

The Government often has to borrow immense sums, temporarily, and the banks must stand ready at all times to lend the Government what it needs. The ability of the banks to lend is not unlimited. It is just as necessary for them to conserve their lending power as it is to conserve coal, food, steel, and other commodities for which the war brings abnormal demands. Those who are producing, manufacturing, or distributing things needed to prosecute the war or maintain the health and efficiency of the civilian population, will be able to obtain the credit to which their needs and their standing entitle them; but new loans will rarely be justified unless they are to aid directly in the prosecution of the war, and every bank has been asked by the Government to request all its borrowers to keep their demands for credit down to the very minimum.

Patriotic citizens, whether in business or not, will want to cooperate with this necessary Government policy.

The way for producers, manufacturers, and merchants to do their share and reduce their credit requirements is:

By not overbuying.

By carrying as small stocks as practicable.

By postponing new construction or expansion of their business.

By effecting business economies.

The way for individuals to do their share and reduce their loans is to study their personal expenses and effect economies.

Borrowers whose loans are secured by Government bonds or other collateral, should remember that reduction of loans by selling collateral is not helpful, since it usually merely shifts the burden to other shoulders.

The banks are asked to save their credit, which means that their customers must use less of it. The saving of credit is an integral part of the great saving policy which the war requires the Government to adopt, and every man, woman and child to support to the utmost. Saving to reduce loans is a patriotic service only second in importance to saving to buy Liberty bonds and war savings stamps. Both help to transfer to the Government the ability to command the labor and materials of which President Wilson has said the Allies are in such desperate need. Both also help to accumulate for the saver a purchasing power which he may need when the war is over.

We are asked by the Government to send this message to our depositors, and we ask for your cordial cooperation with this necessary Government policy.

Very truly, yours,

JOHN JONES, *President.*

(NOTE.—This is a statement which a bank, if it so desires, may send to its borrowers or its depositors, accompanied by a supporting letter of its own. Copies of this statement will be furnished free of charge in any quantity to any bank in the district.)

To bank depositors:

Nothing is more vital to the winning of the war than credit.

The Government often has to borrow immense sums, temporarily, and the banks must stand ready at all times to lend the Government what it needs. The ability of the banks to lend is not unlimited. It is just as necessary for them to conserve their lending power as it is to conserve coal, food, steel, and other commodities for which the war brings abnormal demands. Those who are producing, manufacturing or distributing things needed to prosecute the war or maintain the health and efficiency of the civilian population, will be able to obtain the credit to which their needs and their standing entitle them; but new loans will rarely be justified unless they are to aid directly in the prosecution of the war, and every bank has been asked by the Government to request all its borrowers to keep their demands for credit down to the very minimum.

Patriotic citizens, whether in business or not, will want to cooperate with this necessary Government policy.

The way for producers, manufacturers, and merchants to do their share and reduce their credit requirements is:

By not overbuying.

By carrying as small stocks as practicable.

By postponing new construction or expansion of their business.

By effecting business economies.

The way for individuals to do their share and reduce their loans is to study their personal expenses and effect economies.

Borrowers whose loans are secured by Government bonds or other collateral, should remember that reduction of loans by selling collateral is not helpful, since it usually merely shifts the burden to other shoulders.

The banks are asked to save their credit, which means that their customers must use less of it. The saving of credit is an integral part of the great saving policy which the war requires the Government to adopt, and every man, woman, and child to support to the utmost. Saving to reduce loans is a patriotic service only second in importance to saving to buy Liberty bonds and war savings stamps. Both help to transfer to the Government the ability to command the labor and materials of which President Wilson has said the Allies are in such desperate need. Both also help to accumulate for the saver a purchasing power which he may need when the war is over.

The Federal reserve bank of New York asks the banks in its district to send this message to their depositors, feeling sure that it will meet with their prompt cooperation.

FEDERAL RESERVE BANK OF NEW YORK.

NEW YORK, August 23, 1918.

Gov. STRONG. That is an evidence of the policy adopted by the Federal reserve bank in New York, and I think it is fairly representative of the spirit which prevailed in the management of the Federal reserve banks at that time.

This point of distinguishing between rate action or control and direct action or control is the best illustration that I know of the statement that I have already made that under such conditions as war brings about, it is not possible to make a choice of an ideal 100 per cent policy of perfection; it is a choice of evils, as a rule, and that was the choice that was imposed upon the Federal reserve bank at that time.

Now, as to the rate reductions—

The CHAIRMAN (interposing). Before you get to that, I do not want to interrupt your line of thought, but I want to ask a few questions to help along my thought a bit. Apparently this policy of direct action had some effect, assuming that the recession of prices and speculation along in February and March, 1919, were taken as the effect of the policy that was adopted. Now, what change occurred in the economic situation or in the psychology of the people generally in March and April, 1919, which resulted in the wave of speculation that followed, notwithstanding these steps or policy of direct control?

Gov. STRONG. Mr. Chairman, there probably were a number of elements that entered into it.

Sentiment had a great deal to do with it. The feeling of relaxation from war control had some influence. But I think there were two other great factors, both of which had to do with it. In the early part of this decline, early in 1919, fears were expressed—very natural ones—that we might lose our export trade overnight, almost. That export trade had depended very much for its volume upon the loans being made by the United States Government to the allied governments, and upon a certain amount of private credits, and credits which were obtained by the sale of American securities that had formerly been held abroad. These fears were not realized, for several reasons. One, the United States Government had to continue to make advances—roughly, my recollection is that about two and a half billion dollars were advanced after the signing of the armistice. They were under contract, so to speak. It was these advances that enabled the foreign governments to wind up their contracts in this country. That was one element. I think another element was that we had all underestimated the capacity of the European nations to continue to

buy in this country, getting credit from a great variety of sources and channels that probably had not been considered by us.

And then the third element which came in somewhat later in the year—possibly between July and September—was the fact that when the Government's revenues overtook its expenditures, the Government was then in the position of collecting taxes from all the people and applying those taxes to the reduction of its gross debt. That, of course, had the effect of making available in the hands of the people a fund for buying things. They were all more or less of consequence; all situations that developed were difficult to foresee. I think those three are possibly the most important; those four, at least.

The CHAIRMAN. Did not this situation probably exist also: During the war there were restrictions upon so-called nonessential production; upon luxuries of one kind and another; the general sentiment against spending money had some effect in restricting consumption and buying upon the part of the public? With the release of these restrictions following the war and the general relaxation of the public, there came a great desire to buy everything and to go the limit without respect to what the cost was; did not that have some effect in this horizontal or perpendicular rise in prices?

Gov. STRONG. Very much so. And the continuance of high wages was the second enormous factor. The continuance of high wages as represented, for example, by the horizontal raise in pay paid by the railroads. It threw this great buying power into the hands of the people.

Just to illustrate: I have tried to avoid telling stories here, but to illustrate the point by the experience of a friend of mine in Buffalo who had a gardener in his employ, and who left his employment to take a position with the Curtiss airplane factory, I believe it was, where his wages were something like three times what he had been receiving as a gardener—I suppose more than three times as much. And my friend, who was at one time a director of the Federal reserve bank, and was inspired by the policies of the bank with reference to economies, met this gardener on the street one day and asked him what he was doing with all the money he was getting. The man said: "Well, I am spending it; I am having a porterhouse steak every day. It is the first time in my life that I have had the opportunity to get the best inch-thick porterhouse steak every day, and I am going to enjoy it while it lasts."

I think that will indicate the general feeling of the people, and it had its effect upon this general rise in prices. I can tell you many stories of that kind.

Representative SUMNERS. During that time, and bearing upon your story, and I think it is illustrative of what happened, butchers told me it was practically impossible to sell many of the good but lower grades or cuts of meats; they practically could not get rid of them at all.

Gov. STRONG. Congressman Sumners, we must not assume that that development was common to this country alone. This country has been regarded with reference to its expenditures as the most extravagant and thoughtless.

I listened with interest yesterday to the statement regarding marketing in Philadelphia, but I did not hear anything with reference to the habits of the people even there. But if you have watched, as I

have, a French peasant woman doing her shopping and marketing, and have seen the customs and methods that prevail even in household shopping in France, you will realize that the general psychology is an immense factor in this country. It was a case of "easy come and easy go" during that period.

Representative SUMNERS. Is this not also true that during the time of difficulty in getting manufactured goods, when rationing of the output of the factories was enforced, that there was a custom of repeating or pyramiding orders; if a man wanted 100 units he would order 300 units, so that he could get what he wanted?

Gov. STRONG. Yes; that was a very great factor in bringing about this later price decline. These orders would frequently come as a duplication, or a triplication of the original order, and when prices began to decline and these orders were canceled, thereupon goods began to pile up.

Now, as to the third point, the point of rate reductions. I was in London in December, 1920, when reports that I had received from the bank, and discussions that were taking place in London, led to many discussions there with bankers as to this very policy; what should be done about the bank rates. I think possibly as the best contemporaneous expression of the view at that time, I should now read to you a cable which was sent to me by the officers of the bank in New York, on the 23d of December, which reached me on Christmas Day, and which was the result of two days of careful thought and study and concentration and preparation at the bank. Reading only the part of the cable which is important to the commission it is as follows [reading]:

First as to commodity deflation. Our index of 12 basic commodities—

I had inquired as to what the situation was here at home—

First as to commodity deflation. Our index of 12 basic commodities, namely, cotton, hides, hogs, rubber, copper, sugar, wheat, corn, iron, lead, lumber, and petroleum shows following declines from peak expressed in per cents: May, 1; June, 2; July, 3; August, 4; September, 6; October, 14; November, 13; first three weeks of December, 4.

It looked as if the decline had been arrested, as it subsequently proved it was, near the 1st of December. [Continuing reading:]

First six commodities near or below prewar prices. The slowing up in December indicates deflation of great raw materials fairly well accomplished but not yet appreciably reflected in wholesale prices of manufactured goods and still less in retail prices. Speculation in commodities is greatly reduced. Apparently we are reaching end of first phase of deflation in which basic commodities fall acutely and entering a second slower phase in which unemployment increases and wage reductions become effective, thus permitting lower prices for consumers' goods. New England textile mills have generally instituted 22½ per cent wage reductions which are being accepted with but few strikes by employees. Movement gradually spreading to other industries but as yet only very small percentage of wage earners affected. From observation of British indices we conclude our acute raw-material deflation is somewhat ahead of England's.

Second, as to credit deflation. While American price indices have fallen 25 per cent to 35 per cent since May, the volume of commercial bank loans has decreased about 5 per cent and currency none. Various elements have kept credit volume high. Anticipate some January liquidation due to dull business and postholiday reduction of currency. In 13 months volume of call loans declined one-third and prices of 30 industrials 43 per cent, but in spite of high rates credit has always been kept elastic.

Third, as to rate policy. Our present view is that we should not consider reducing rates, at least until market rates have fallen below ours and appear likely to remain lower. Under present inflated conditions, should we now reduce our rate and later

be obliged by more active business or speculation to raise it again the effect would be more discouraging than if we maintained present rate but kept credit thoroughly elastic. Only motive for reducing rate in January would seem to be to deflect natural course of prices or encourage resumption of business! This seems somewhat akin to various schemes proposed in Congress to raise agricultural prices or stimulate exports. Purchasing power in agricultural section is badly damaged but that of wage earners is but little affected yet. People will probably begin buying again when retail prices are substantially reduced. Statistical history of postwar readjustments shows rebounds after acute declines, and though there are no precedents for present worldwide inflation, already many lines of merchandise stocks here are low and inquiries are slightly improving. It may possibly be that at some point a decrease in our rates, if entirely justified by credit conditions, would be just the thing needed to complete the resumption of normal purchasing and production, but at present we think it would be unjustified, premature, and ineffective. Foregoing refers, of course, only to conditions here.

Representative SUMNERS. At some stage of your testimony I would like to get some information, or rather an expression of your judgment on the point as to why it was regarded as inevitable that deflation had to come. At some point of your testimony I want to get your view on that.

Gov. STRONG. Well, that bears upon this next question. I might go right to that.

Representative SUMNERS. We will wait for the next question, then.

Gov. STRONG. I think from the standpoint of the student or economist, if you please, the deflation was bound to come.

Representative SUMNERS. I do not care to have you discuss it now, if you are going to discuss it later.

Gov. STRONG. I will come to that.

Representative SUMNERS. Then wait until you arrive at it in natural course.

Gov. STRONG. I shall ask the commission to bear in mind that our theory is that our function as a Federal reserve system is to deal with credit and not with prices; that we should consider conditions from the standpoint of credit, resources, loans, and so on, and the general rates which are being paid for credit. Always having that in mind, let me state that I do not think that any policy of the Federal reserve system, even the rate advance, would have been equal to the task of arresting that expansion. Rate advances might have moderated the expansion, but I do not think that they would have controlled it. And the converse of that is true, that once that decline was started, I do not think that any policy adopted by the Federal reserve system could have arrested it until it had worked itself out by natural causes.

As illustrating my point, the chart discloses—not so well as it might—the fact of what actually happened. (See p. 764.) If I had another chart for the Far East, it would show most graphically that the decline started first in other parts of the world, and was more precipitate there. It was more sudden. I think, in fact—referring to statistic countries—I think it started first in Japan and extended through other parts of the East and France and Italy next. I think the decline in Italy and France was in anticipation of ours, but the decline in England and the United States started about the same time.

Representative SUMNERS. In what sense do you mean that Italy and France's decline was in anticipation of ours?

Gov. STRONG. I mean it started ahead of ours.

Representative SUMNERS. I wondered in what sense you meant in anticipation of ours.

Gov. STRONG. In advance. I should not have used the word "anticipation."

The reason why I think the decline could not have been arrested is because I believe, first, that the stimulation of production and that the increase in facilities of production, which were really very great during the war and subsequently, led the world to a state of production beyond the power of consumption; that prices and quantities had both overtaken the power of the people to buy.

Representative SUMNERS. Do you speak of the total of production, including the war activity production, or do you have special reference to production in those commodities of which the people ordinarily buy?

Gov. STRONG. I mean ordinary production, leaving out war production.

Representative SUMNERS. When the war ended, in addition to the result of war activity production, had we accumulated an abnormal surplus of such commodities as people in their ordinary circumstances use?

Gov. STRONG. My belief is that the process of producing and accumulating goods that people ordinarily consume in time of peace was stimulated during the period commencing, say, in March, 1919, and extending through to the spring of 1920. The capacity to produce had been increased by the war activities, undoubtedly, and that production had been diverted from war uses to things that people ordinarily buy and consume, and the inspiration to economize had been largely removed by the ending of the war and by the removal of those controls that we have discussed.

I do not think there is any difference of opinion among economists, Congressman Sumners, that the situation had become top-heavy in quantity of production and prices of things, and that it was bound to topple over. In that connection, let me point out a significant thing that has not been referred to as yet in these hearings. The price decline began—the earliest manifestations of it—possibly in February or March.

The CHAIRMAN. 1919?

Gov. STRONG. 1920, the decline. It was at that time that the jewelry stores noticed a sudden cessation in the demand for diamonds, and a little later came silk, and other things in order.

Now, that price decline commenced, in its early symptoms, just when the farmers were planting their crops. And here I am coming to the main point of the discussion of rate reductions.

The farmer could not produce a crop that would sell for cost until the cost of production had been reduced, and he was caught with his land plowed, possibly his seed in the ground, but no crop to sell until the decline in the value of what he was going to produce had been completed. If this decline had started, say, in November or December, and had concluded its course in the planting season, you would not be listening to the complaints of the farmers of the United States about credits. You would be listening to the difficulties, possibly, of the manufacturers of the United States, who would have been a different class of sufferers than the farmers. There, unfortunately, the effect of this development worked distinctly to the disadvantage of that class of our country, which is such a large class, which produces from the soil every year large crops.

Representative TEN EYCK. Of course, the manufacturer's business being more flexible and mobile, could have stopped production immediately.

Gov. STRONG. Yes; the manufacturer could adjust himself more quickly.

Representative TEN EYCK. Whereas the farmer, after the planting season, has to go through the whole year.

Gov. STRONG. Yes, sir.

Representative SUMNERS. And his current crops and prices of carried-over portion of the preceding crop which he counted on selling during the year while he was producing a new one, went down also.

Gov. STRONG. Yes, sir.

Representative SUMNERS. And the things he had to buy stayed up.

Gov. STRONG. Yes.

Representative SUMNERS. And then when he got to the harvest time the prices had fallen.

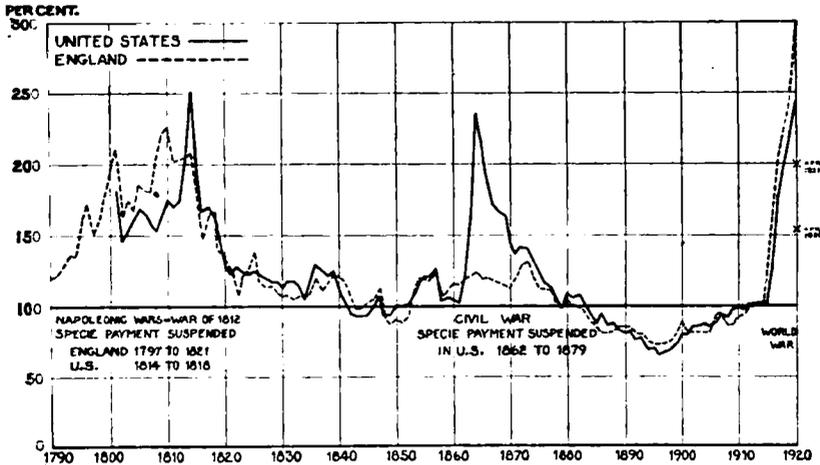
Gov. STRONG. Yes. Now, Mr. Congressman, you are making my argument for me, which is this: While the policy of the Federal reserve system is adopted entirely through studies of credit, and inasmuch as one of the reactions from this policy is prices, we must necessarily give consideration to this matter of prices. All of those charts and studies that I have brought over to submit at these hearings were not prepared especially for these hearings. A few of them were, but most of them were the charts which we have had worked out and prepared in the bank for the purpose of studying conditions.

Just as soon as the decline occurred in raw materials and the first produce of the soil, then I think consideration of policy from the standpoint of prices must necessarily change from consideration of the interest of the producer to the interest of the consumer. And for this reason: Take the case of the farmer himself. I have no doubt that these gentlemen who have appeared before the commission have, every one of them, complained because of the fact that the cost of making this crop did not come down. Implements and labor and every element that goes to make a cheap crop did not come down. Every farmer, just as every other individual, is from an economic standpoint two people. He is interested in getting good prices for what he produces, and he is likewise interested in getting prices down as low as he can for what he must buy.

This cycle of declining prices always begins with raw materials; that is, the things that come out of the earth. After the decline in raw materials had occurred the only relief possible to the farmer was bound to be a reduction in the cost of making his crop. He must go on making his new crop a cheap crop. Now, the control I have described is a very imperfect machine, especially when it acts as I have described, by direct action. Many of these farmers have suffered many serious and almost fatal losses. But their remedies to enable them to work out are two—one is to market the crop that has not yet been sold and reduce their debts, and the other is to be maintained, as producers, at a lower scale of costs. In considering that we have to look at all of those points in our policy, does it not become important that we should consider how prices and wages are coming down, and what effect our policies will have on them?

Representative TEN EYCK. At the beginning of this condition of depression, can you tell us, from your experience and study of statistics, what first declines, as a rule; is it raw material, is it labor, is it manufactured materials, or is it credit?

Gov. STRONG. As disclosed by the experiences that we have recently had, and confirmed by all the studies that we have made, and those studies go back to the period of the Napoleonic wars, the first decline occurs in raw materials. It is just as I described, Congressman; you hit the blow at the point of the retail distribution, and it is reflected back to the original producers in a price collapse. And it extends through all the stages of production, until it finally results in retail prices coming down, and the last to fall is wages. It is wages that rise last in a period of rising prices, and it is wages that come down last in a period of falling prices.



WHOLESALE COMMODITY PRICES IN THE UNITED STATES AND ENGLAND, 1790 TO 1920.

Average prices each year in currency. 1913 figures=100 per cent.

Source of information: United States index compiled by Federal reserve bank of New York from indices prepared by A. H. Hansen (1901-1840), C. H. Juergens (1825-1863), R. P. Falkner (1840-1891), and the United States Department of Labor (1891-1920), and computed for England from indices of W. Stanley Jevons (1782-1817) and the Sauerbeck-Statist index (1818-1920).

Representative TEN EYCK. But it starts with raw materials?

Gov. STRONG. It starts with raw materials.

Representative TEN EYCK. And next is manufactured materials?

Gov. STRONG. Partly manufactured materials. What we call wholesale goods come in between raw materials and final distribution.

Representative TEN EYCK. And then the retail and labor?

Gov. STRONG. Yes, sir.

Representative TEN EYCK. Where does finance come in?

Gov. STRONG. The charts indicate that when that first blow is struck at prices—that is, when materials accumulate, such as iron ore, farm products, oil, and other raw products—you will see by reading the figures that congestion is occurring. I am told—I have not verified this, and have not investigated it myself—but I am told that to-day oil is produced beyond the storage facilities to care

for it. It is being taken out of the ground faster than it can be cared for. The effect upon oil prices is common knowledge. They have come down sharply.

Representative TEN EyOK. But nowhere near to what they were before the war.

Gov. STRONG. It may come yet. But what I am leading up to in this discussion is that if you consider that the responsibility for bank management, from the standpoint of the bank of issue, applies to all the people of the country in all of their capacities and all of their activities, you must admit that the bank has got just as great a responsibility to those people who are consumers as it has to those who are more distinctly producers. That is the only sound fundamental law that we should keep in front of us all the time, I believe.

If we did operate the Federal reserve system—which we do not—with sole regard to prices, instead of resources and reserves and volumes of loans, and so on, what a one-sided operation it would be, and what a thoroughly unwholesome influence it would exert, to say that the only interest we should consider would be the interest of those who produce goods, and that we were going to ignore the wage earners, and the college professors, and clerks, etc., and even Members of Congress, if you please, who are on fixed salaries, and who, though there be rises in prices, have no increase in their incomes.

Now, I do not think that this discussion has brought out that feature of it, that the real remedy which we have always had in mind in dealing with this matter—the real remedy—is to get a proper and orderly distribution of surplus stocks into consumption and at the same time enable this readjustment to take place to a lower cost of production and a lower living cost. I am arguing this, as will be clear to you, from the standpoint of those who attack the policies of the system; who claim we should have done something to correct these price disturbances.

Our point is that these price disturbances will correct themselves. Our job is to regulate credits. And I believe one of the most important elements in the interest of the farmer is to see that his cost of production comes down; and to the extent that our credit policy is reflected in the cost of living and production, that policy is defensible, even from the standpoint of price regulation, which we did not attempt.

Representative SUMNERS. I understand that the Federal reserve system is not the whole Government, nor the whole influence affecting prices?

Gov. STRONG. No, sir.

Representative SUMNERS. You have indicated that you have just one certain thing to do—to make some rulings.

Gov. STRONG. Yes.

Representative SUMNERS. But viewing the problem of the agricultural interests as a whole, and in line with your suggestion that marketing is part of the problem, even in this emergency, where the reserve banks serving the South are undertaking to do something to help the cotton situation, which includes with the surplus brought over from last year—I note this in a Dallas paper under date of August 3. The headlines preceding the statement indicate

it was given out by the bank. The heading is this: "No reserve loans for holding crop; reserve bank will make advances for marketing and harvesting."

There is mighty little support to the farmer or the morale of the market in that.

Gov. STRONG. Congressman Sumners, in my opinion there is going to be plenty of credit for this next crop. We are dealing with a situation that is peculiar, and if I may say it, not with the thought of criticism, but just from the human point of view, the situation has come to be a bit hysterical. In dealing with this crop, there is going to be plenty of credit. I think we might organize a little better, but I do not doubt that this crop will be amply furnished with credit in order to be marketed gradually and in an orderly way. And unless I am mistaken, the thing that would interfere with it to the detriment of the farmer, would be to have the sentiment that there is not enough credit continue to prevail up to the harvest and selling time.

Representative SUMNERS. I think you are absolutely right.

Gov. STRONG. And unquestionably, for the Federal reserve system to place unlimited credit at the disposal of the people, would result in speculators buying the crop and then disposing of it at a higher price.

Representative TEN Eyck. At a reasonable rate, of course?

Gov. STRONG. Yes.

Representative SUMNERS. It seems, however, that we must take into consideration the unsold part of last year's crop, because with this forced onto the market by the farmer, he would break the price to the same extent as he would if he sold same number of bales out of the new crop under pressure.

Gov. STRONG. Now; as to these people—I do not want to revert especially to that part of the discussion that was covered by Gov. Harding's talk: When I am told that there is a large part of the 1918 and 1919 crop and especially of the 1920 crop of cotton still on hand in the South, it always raises the question in my mind: Why did they keep it? They had a chance to sell the 1919 crop.

Representative SUMNERS. I believe there is not so much of the 1919 crop, but there is a good deal of the 1920 crop.

Gov. STRONG. At a meeting which we attended in the Treasury—I do not think you were there—bankers from Texas were present, and they said that their estimate was that the largest amount of cotton in their section was of the 1919 and 1918 crops.

Representative SUMNERS. Well, I do not think their judgment is correct about it, but suppose it is so, it is true that more cotton has gone to the mills—or as much cotton has gone to the mills as the mills have been willing to consume, or have been able to consume.

Gov. STRONG. I think that is true.

Representative SUMNERS. And assuming that it was poor judgment on the part of the people to hold it, yet if that cotton comes on the market and stampedes the price for the man who exercised good judgment, he is injured just as much as his neighbor who did not sell in 1919.

Gov. STRONG. Yes. Dealing with that subject as a whole, with regard to credit and surplus production, there is a very nice balance required to see that two things are accomplished, which are operating

in conflict with each other. One is that the crops are being marketed and sold and realized upon and loans paid to the extent that it is feasible to do so, without serious price declines; on the other hand, that the other part should not be pressed upon the market, but should have sufficient credit to carry it.

Representative SUMNERS. There was this true during the season of 1920: While middling cotton was quoted at a high price during that time, there was considerable of the crop of a low grade.

Gov. STRONG. Yes.

Representative SUMNERS. And that low grade was at a tremendous disadvantage.

Gov. STRONG. Very great.

Representative SUMNERS. The statement as to the cotton holdings of the South, considered in connection with the quoted prices of cotton in the South, cast an unfair reflection upon the judgment of the people. The price which they were offered for the high-grade cotton took most of their high-grade cotton, I assume, to the market.

Gov. STRONG. Well, there were three major causes, I believe, for the wide differential—

Representative SUMNERS (interposing). Let me add that it took a large part of that high-grade cotton to the market. Now, having gotten that high price for that cotton, and some of the low-grade cotton being tremendously low proportionately, it did not seem good business judgment for them to accept the low offers for their lower grades.

Gov. STRONG. And it was not salable, in many cases.

Representative SUMNERS. It was not salable, in many cases.

Gov. STRONG. I am reminded of the fact that the newspaper article that you just read, Congressman Sumners, really does not put a correct interpretation upon the circulars issued by the other reserve banks. There were a number of them issued, as you know. If you care to have me do so later we can discuss those circulars, but I always hesitate to discuss the policies and transactions of the other banks.

Representative SUMNERS. Yes; and you noticed that in the statement I made, I made the statement on my own responsibility. It was not a question. I understand the delicacy of the situation in so far as you are concerned. In my own judgment, this occasion to make that statement was a good opportunity to put a little pep and confidence into the situation. But they are telling the people what they can not do; they have been told enough about what they can not do; I think we need somebody to tell us what we can do.

Gov. STRONG. I agree with you entirely on that policy. As to the differential between the high-grade and low-grade cotton, I think there were three elements that made the low grades practically unsalable. During the war there was a tremendous demand for cotton linters, because it is used for nitrocellulose, as you know. There was this tremendous demand for linters and the low-grade cottons. Further than that, the low-grade cottons are largely consumed in two countries, namely, Germany and Poland, the two countries that are shut off from our exports. One other country is Japan, where the market for it almost completely closed in the early summer of 1920. The operators of those Japanese mills were going back to the farms by tens of thousands, and that deprived us of the three most important demands that we had for that type of cotton.

Representative SUMNERS. There is another reason for the abnormal stimulation, and that is that the Government in specifications for cotton commodities to be furnished for war purposes provided, so I understand, that contracts were to be filled by middling and better.

Gov. STRONG. Yes.

Representative SUMNERS. That was a very unfortunate specification. The colored goods could all have been made out of the lower grade cotton.

Gov. STRONG. You are referring to cotton for spinning, as distinguished from cotton for explosives?

Representative SUMNERS. Yes, for explosives. And during the war we cut that kind of cotton a good deal closer from the seed than before. I am just referring to that unfortunate condition of the contract, or specifications. So we had all that accumulation.

Gov. STRONG. Yes.

Representative SUMNERS. Then there was the accumulation of the low-grade stuff by reason of the markets of Germany and Poland and to a large degree Japan being shut out. So when you read in the papers of this amount of cotton that the southern people held when cotton was 40 cents you are getting an entirely erroneous idea. They were getting 40 cents for some and they were getting 10 and 12 cents, when the spread had not been more than 4 cents normally. And they said, naturally enough, "if we can get 40 cents for the higher grades, the lower should sell later for 20 or 25 cents." So they held onto it.

Gov. STRONG. I am wondering, from what you have stated, Congressman Sumners, whether the cotton planters took the advice which Gov. Harding gave them or the advice the other fellow gave them. It seemed to me when I heard his statement that he had sized the situation up and had given them good advice.

Representative SUMNERS. Well, viewed with a hind sight, naturally

Gov. STRONG. To conclude one last word on rate reductions: The theory upon which we have proceeded in New York—somewhat due to the fact that it is the central money market, and the most sensitive money market, where the fluctuations in the money market are felt more promptly and more promptly reflected than in any other market—is that the same competition should develop to reduce the cost of credit that must likewise develop in order to reduce the cost of goods before it is possible for us to reduce our rates; that is to say, as this process of gradual liquidation takes place and as retail prices come down and new and cheaper things come into the market the loan accounts of the various borrowing banks come down; they pay us off. As they pay us off they begin to compete to make loans. That is the process of reducing the cost of credit. It is safe for us to reduce our rate as soon as that competition has proceeded to the point where rate reductions by the Federal reserve system will not be an inducement to speculative operations.

Representative SUMNERS. When we came out of the war, this country had a tremendous national debt?

Gov. STRONG. Yes, sir.

Representative SUMNERS. And, of course, there were vast volumes of indebtedness existing everywhere; the money of many of the nations of the earth was relatively worth little. Could this Govern-

ment then or could this Government now, irrespective of the limitations imposed by present law upon the power of the Federal reserve banking system, safely inaugurate any financial policy which would tend to send prices to a higher level, the objective being to enable the people who have contracted these debts and whose debts could not be deflated, and to enable the Government, which had contracted this debt, which debt can not be deflated, to pay off those debts by the result of a smaller amount of human achievement?

Gov. STRONG. I think it would be possible to do that, if the country were willing to risk the consequences of such a policy.

Representative SUMNERS. I put in the word "safely."

Gov. STRONG. Safely; well, I do not think safely that it could or should be done, Congressman; no, sir.

Representative SUMNERS. I will ask you this question then: Could it be done with a relatively small element of risk, considering the object to be attained?

The CHAIRMAN. Ask him what the risks are.

Gov. STRONG. What are the risks of such a policy?

Representative SUMNERS. Yes.

Gov. STRONG. Well, the first and obvious risk is that we would begin by embarking deliberately upon a policy of inflation and expansion in order to raise the price level, and if we do so we may do the very thing that we do not want to do, get our costs of production and price level up to the point where we can not export and compete with the rest of the world. I think one must distinguish in these unusual times between a policy which appears to be a palliation at the moment, and a policy which in the longer future will put the business of this country on a sound foundation, and those who look far enough ahead into the future, and who adopt a policy that may seem harsh and stern at the time, are always the ones that come in for abuse.

You must not for a moment think that the management of these Federal reserve banks is in the hands of a lot of cold-blooded economists who do not think about the human problems involved. That is the most distressing feature about the policies adopted during this period of declining prices. I am tempted to read some purely personal communications on this matter that passed in some personal correspondence of mine with friends two years ago—more than two years ago—looking forward to this period. It was bound to come. People were looking forward to it.

The real future prosperity of this country, in my opinion, will not be promoted by building a stone wall around it so that it can not trade with the rest of the world. One element of that stone wall—the foundation of it—is too high prices; too high cost of living. I do not mean standard of living. That is a very different thing from the cost of living. I, personally, do not want to see it done. I do not want to see a country that has our great capacity to produce a surplus of goods with which to trade with the rest of the world relapse into a narrow, self-contained, wholly exclusive position in its dealings with the rest of the world in trade and commerce.

Representative TEN Eyck. To accomplish that, I beg to revert to the question that Mr. Sumners put to you—would it necessitate keeping the price levels high until the loans were paid off, or the

indebtedness, or could we do that and accomplish the same thing at the lower level of prices?

Gov. STRONG. That leads me right to the answer, I think, that I was going to make.

Suppose the Federal reserve system was managed solely with regard to prices, and that the problem with which we were dealing was to insure, for instance, that the cotton crop and the wool crop and other raw materials that suffered a severe decline should be looked after—paying attention to the cotton crop only—what kind of a management would we have? It would not be a management; it would convert the Federal reserve system into an instrument for the treatment of special interests.

Representative SUMNERS. Governor, my question was not directed to the Federal reserve system. I asked you with reference to general governmental policies with respect to governmental situations. And I asked the question, not as indicating my attitude, but for the purpose of asking you in this connection what the situation is.

Gov. STRONG. I believe, Congressman Sumners, that the policy of the United States Government in dealing with these matters should be directed toward certain assistance which will permit the natural operations of readjustment to work possibly more smoothly. If the Government were to embark upon a program of taking care of these special cases, like cotton, or any other commodity, there would be no limit.

Representative SUMNERS. I did not have that in mind.

Gov. STRONG. It changes prices generally.

Representative SUMNERS. I did not make myself clear. A good many people have it in their minds that, in view of the fact that the debts of the people of the country which they now owe were incurred on, say, a 40-cent dollar, and the debts of the Government, which the people owe, were contracted on the basis of a dollar of the same relative value, it would seem that in a situation of that sort if any governmental policy could be inaugurated which would help to counteract the tendency of commodity price deflation until the debts have been paid, which were contracted at a time when commodities were high, in justice to all its citizens, in so far as sound public policy would permit, that policy ought to be exercised in that direction. Now, my question is just what, in your judgment, could be done, if anything?

Gov. STRONG. It could be done, but I firmly believe that it would be done at the expense of our commerce. I have discussed that very thing with a number of people. There would be two ways of doing it, Congressman, if sound judgment permitted it, but I do not think it would. One way would be for the Government to print paper money. That would raise prices, and depreciate the currency again. Another way to do it, and a very much simpler way, would be to have the Federal reserve system print money and issue it. When I say "print money" I do not mean just print irredeemable paper money; I mean create a larger volume of bank deposit currency and bank note currency. That could be done, if we were willing to do what we regard as being ultimately a disastrous thing.

Representative SUMNERS. How would that printed currency get into circulation, if it is true that you are now having brought back to your banks their notes which are no longer desired?

Gov. STRONG. Well, we could do it—you know. I am embarrassed in suggesting such a thing as this, because, if it found favor, I am afraid somebody might like to try it.

Representative SUMNERS. Well, then, I will not press that matter any further.

Representative MILLS. It is being tried on a very extensive scale in some parts of the world to-day, is it not?

Gov. STRONG. That is just it. It has been tried and is being tried, not for that purpose altogether, but because it can not be avoided, in other countries—there is no need of specifying them, and the result is that they have depreciated their currency to a greater extent than it was during the war. They have a very much higher price level, and they have with it a growing condition of poverty of all the people that earn wages. If it is continued, those people are going to revolt against it; they can not stand the pressure.

Representative SUMNERS. What will be the condition of this country as to international trade if these countries that are producing on the basis of the low-value currency, form trade relationships among themselves and trade with each other in this cheaper currency? I have heard it stated that in Germany, for instance, while they pay more in their depreciated currency, of course, than they formerly paid when they were on a gold basis, wages in this depreciated currency would seem about half of what they would be if they were paid in gold. It would seem that a good many people in the world are operating on the same basis, and it would seem to be rather difficult for us to trade with a people so operating, with our currency so much greater in value.

Gov. STRONG. Congressman, I am coming to that subject in my discussion of foreign exchange, if you will bear with me while I go into that.

The CHAIRMAN. You started to refer to the fact that the policy of soft money, with the depreciated value of the dollar, could not be followed without destroying our commerce. I would like to ask you to develop that briefly if you can. I think it ought to be made clear.

Gov. STRONG. If we raise prices we can not compete, or if we do compete—if we are able to compete—it is because we do not raise the price of labor correspondingly. You cited Germany, Congressman, as an illustration. The price level in Germany is from 10 to 14 times what it was before the war. True, wages there are probably not over half what they were before the war. I do not think that is a sound social or economic condition. So if Germany does get a world trade because costs of production paid in the depreciated currency are below costs of production in other countries, it will not be a permanent thing, and it will bring in its train some sort of social disorder, because people will not continue to work at the pace at which they would have to work in order to maintain that production, when they are underpaid and underfed.

Representative MILLS. Is it not a fact that when you disregard international trade and consider a country as self-contained, the only fair way of regarding wages is not in terms of money wages, but in terms of true wages?

Gov. STRONG. Yes, sir.

Representative MILLS. And that the productive capacity of the German laborer and his willingness to work for less than the true wages which he received in prewar times is wholly independent of the value of the particular medium of exchange that is used? Is not that so?

Gov. STRONG. That is true, and it is especially represented just now in the case of Germany, where industry is springing up. Wages should be properly expressed, in order to deal with this matter, in terms of what the wage earner is able to buy and consume rather than in what he receives in pieces of paper.

Representative MILLS. Is not this a familiar economic phenomenon during a period of inflation, owing to printing money—a very great rise in credit? Prices rise very rapidly and wages lag behind?

Gov. STRONG. Yes, sir.

Representative MILLS. And the wage earner suffers severely, owing to the fact that there is a rapid diminution in the true wage which he receives, or in the commodities which he can get in exchange for his labor. On the other hand, speculators make very large profits, because they hold the goods and are selling them on a constantly rising market.

Gov. STRONG. Exactly.

Representative MILLS. The third class of people who suffer very severely are all those, for instance, who are receiving fixed salaries—clerks, wage earners, and that class. A fourth class of people who also suffer very severely are all those small investors who hold investments with a fixed rate of return. So that the economic phenomenon of a period of inflation with rising prices is one of social injustice in which one class, and one class only, profits at the expense of the rest of the community. Is not that so?

Gov. STRONG. That is absolutely true, Congressman.

Representative SUMNERS. And during the period of deflation the people who suffer most are those who have contracted debts?

Gov. STRONG. Yes, sir; including governments.

Representative MILLS. Or those who hold goods purchased at high prices or produced at high prices?

Gov. STRONG. Yes, sir.

Representative MILLS. Pardon me for asking these questions; we have evidently entered on a general discussion of inflation as a means for curing our ills.

As an economic proposition, is it not generally regarded as the worst kind of a patent medicine for the cure of the evils from which we may temporarily suffer?

Gov. STRONG. It is a species of painless dentistry, but there is generally an abscess there that has got to be dealt with later.

The CHAIRMAN. But does it not also bring you to the answer to the question, that it is an attempt to create a condition of a general level of prices representing a fairly decent division of the rewards of industry which can be maintained without serious change over a long period of time?

Gov. STRONG. That is what we are coming to.

The CHAIRMAN. That is the condition under which humanity as a whole is best off?

Gov. STRONG. Yes, sir; and the interest of the man who makes his living by his labor is best protected by insuring that the currency has its largest buying power.

Representative SUMNERS. When prices were being inflated, the person who had a debt paid to him suffered, because he was paid in a cheaper currency relatively than the value of the currency at the time the debt was contracted?

Gov. STRONG. Yes, sir.

Representative SUMNERS. And then when we go down again the other man gets the worst of it?

Gov. STRONG. Yes, sir.

Representative SUMNERS. And you can only hope that when we get to the proper level and get it established there will be justice as among creditors and debtors?

Gov. STRONG. Yes, sir. Now, Congressman, I believe we are headed in that direction. I firmly believe it. I think that the course of developments in this country is now in the direction of doing justice to those who live by their toil. I am very sorry for the debtors, and very sorry for the principal debtor in the United States, the United States Government, because this increase in the purchasing power of money means, of course, greater difficulty in collecting taxes, etc. Profits are reduced all along the line, profits of trade and of production and so on, and to make a budget balance on the basis of a restored dollar is going to be a very difficult problem. But I think this country can stand it, and when we get over this intervening period of agony and suffering we are going to be on a sound basis, and we can face the world. That is what we want to see.

Representative SUMNERS. It is one of the penalties that nature imposes on a people who do not find some better way to settle their differences than war affords.

Gov. STRONG. Well, there may come a time when systems of Government and social systems and economic systems will enable us to avoid these miseries, but it has not come yet. Unfortunately we have to deal with things as they are, and not as we would like to have them.

Representative TEN EYCK. Is it not a fact, that if you keep these inflated prices until the Government is able to pay off all its indebtedness it would mean that the Government had shifted the indebtedness to the other borrowers in the country and that they would take the loss in time of deflation?

Gov. STRONG. I think probably it would mean this, rather than as you express it, that with the taxes collected in a depreciated currency it would enable the Government to pay off its debt—

Representative TEN EYCK. It would be equally distributed throughout the entire country, and each man would take his proportion of the great loss during the war?

Gov. STRONG. Yes.

Representative TEN EYCK. But if that was paid off at a high price somebody else would have the debt, and it would fall upon the debtor.

Gov. STRONG. It would, ultimately, in one form or another.

Representative TEN EYCK. Instead of being distributed over the entire country through taxes.

Gov. STRONG. I think that with the possible reservation of just a little space in the record for errors and omissions, if the commission is ready, I will go ahead with the wind-up of my long talk, for which I apologize.

Some of the difficulties that have surrounded the financing of the agricultural and cattle industries in this country are, I believe, rather fundamental. One to which we have referred more than once is the fact that the farmers' cycle of production is a year, or a substantial part of the year, and in the case of cattle it is from two to three years. Under those conditions the farmer is unable to shift his position in order to meet changed conditions, as was so strikingly the case with the crop of 1920.

Now, those difficulties of course can not be overcome. The business of the farmer is a seasonal business. But his difficulties have been accentuated by certain peculiarities of our banking system that I would like to discuss with the commission.

We have in the United States substantially 30,000 credit institutions which have no legal relation to each other, except about 10,000 of them which are related through the Federal reserve system; and even those relations which existed prior to the establishment of the reserve system have been reduced in their effectiveness, because, as I stated on Tuesday, the old relation of reserve agency has been almost entirely removed in the case of the member banks. Many of the services which a bank requires to be performed in a money center, as in New York City, are in fact now performed through the instrumentality of the reserve banks, and there has been to some extent—it is impossible to measure it—a breaking down of the old relationship of the small bank in the country with the large bank in the city.

May I ask you to look at this banking system of ours, with these 30,000 institutions, entirely unrelated to each other, as a sort of sprinkler system which sprinkles credit over the agricultural sections of the country, just as you would sprinkle fertilizer to invigorate the soil? It requires an even, uniform distribution. It is one characteristic of this period of difficulty that credit has not had uniform, even, equal distribution in the parts of the country where it is needed, and I believe the difficulty lies in the fact that the different elements in the banking system are not properly linked up together, even by the Federal reserve system.

In the first place, there are 20,000 banks, or thereabouts, that have no direct connection with the reserve banks. See how that affects the psychology of the banker, his mind, in time of strain and difficulty. As you have heard stated, when credit conditions become difficult a great many bankers stop making loans. They get frightened. Some small banks run up to a certain point, as was stated here yesterday, and they have to stop because their reserves are exhausted. That must be peculiarly true of the State banks, which can not fall back upon the Federal reserve system for additional credit. It is just as though in sprinkling this credit throughout the country at the time when it is most needed, something interfered with the flow of the fluid, so that half or more of these orifices are closed up. It seems to me that that must be corrected.

Now, under a system of banking such as they have in Canada or in France or in Great Britain or in Germany, or in almost any modern banking country, these little branches of banks are the orifices to which I refer, which directly connect up with the money centers, and distribute surplus credit at the point where it is needed and where there is a shortage of credit. Under those conditions the limitations

of law as to how much an individual bank may loan to an individual borrower, or how much it may loan in toto in relation to its capital and resources do not apply. Take such a great institution as the London Joint City and Midland Bank, which has 1,500 branches in the United Kingdom alone, and which owns a bank in Scotland and owns a bank in Ireland. If there is a very great demand for credit up in Yorkshire or in Lancashire, or any other part of the island, why, the limitation there is not the capital of a little bank of fifty, one hundred, or five hundred thousand dollars; the limitation is simply the resources of that entire bank which has a billion dollars of resources, and credit flows through that avenue, or through that pipe, to the point where it is needed.

The necessity for such a condition in this country is greatly increased over what it is in those snug little islands, by the fact that this is an agricultural country where we have two things to deal with; one is the seasonal demand in the different parts of the country, and the other is what we might call the occasional demand, due to active industries in one place or another, or due to crop failures.

The simple answer to that difficulty would be to modify the laws so that we could have a system of branch banking. But I hesitate to suggest that, for a number of reasons. One reason is that a very large part of the development of the agricultural sections of this country, in the minds of the local people, has been made possible by the establishment of local banks. They think that they enjoy a certain local banking autonomy that they would not have if they were dependent upon a branch of a big bank. They have a certain civic pride. There are many prejudices that are involved in the matter, but greatest of all is the fear that would develop in case of a trend toward branch banking in the United States, that the big banks in the money centers would gobble up all the little banks and we would have a great money autocracy in the United States that would gobble up everything.

That is something against which this country must be protected, if it is a possibility. I do not think myself, from what I know of the temper of the banks of the country and of the people, that it would be feasible to have a complete system, as they have in other countries, of branch banking, and I would not advocate it. I believe, however, that it may be well to consider undertaking some plan by which, within limited areas, whether of counties or of some other limitation, that process could be promoted.

In almost every county in the United States there is a county seat, where business naturally centers and where they have a stronger banking condition than out in the smaller hamlets where they have little banks. I have no doubt that this distribution of credit would be facilitated if some such system could be devised, within limited areas, so as to afford protection against the overdevelopment of branch banking and that some such plan would be of assistance.

But more than that, what we really need in the United States is to overcome the uncertainty, hesitation, and timidity on the part of the little country bank—the State bank—in granting accommodation when it is needed. When the national bank act was amended some 20 years ago or thereabouts, in order to deal with this very situation and to enable the system to meet the competition of State bank development, the required capital of national banks was reduced from

\$50,000 to \$25,000. To my mind, in the absence of a system of branch banking, some such modification of the law was necessary. There certainly was a very great demand for it. But at that time it might have been better had we permitted to some limited extent branch banking, to supply the need which was then felt for small banks in small communities. Not having done so at the time, and having had this enormous development of little, unrelated banks all over the United States, I think some step must be taken—and I am not prepared to recommend just how it should be taken—by which the great majority of these little State banks can be brought into the Federal reserve system.

These banks go down to as low as \$10,000 of capital, and even smaller, and I admit that the problem of organization and management of the Federal reserve system through the admission of this great number of small banks would be a very heavy task. I think it would involve a reconsideration of the whole subject of how bank supervision should be conducted.

Representative TEN EYCK. You do not restrict a State bank from coming into the system on account of its capitalization?

Gov. STRONG. Oh, yes; yes.

Representative TEN EYCK. Is there a limit to that?

Gov. STRONG. Yes.

Representative TEN EYCK. What is the limit, may I ask?

Gov. STRONG. The limit is the same capitalization as that required by national banks in the same communities.

I do not want to give the impression that I am making a radical suggestion. I do not think it is radical, but I would not be willing to suggest and defend it for the correction of this situation if I did not think, in the first place, that it was necessary, and if I did not hope, on the other hand, that if any such program were adopted there would be coupled with it some adequate protection to the system in the way of supervision of these banks which are now under the supervision of the various State authorities.

In our district the supervision which is afforded by the bank authorities of the States of New York, New Jersey, and Connecticut is excellent and admirable, and we are satisfied with it and have no complaint to make about it. I am not sure that that same degree of care in supervision is exercised in all the other States, and it would be such a responsibility for the Federal reserve system to assume to take care of the credit requirements of an additional, say, 10,000 or 15,000 members, that I think if anything is done to encourage such a development by making admission to membership more attractive, or by any measure to require it, before doing so the Federal reserve banks themselves and the Federal Reserve Board should be very carefully safeguarded and given ample powers to protect the system.

Representative SUMNERS. Could it possibly be arranged so that it could safely be done that the primary banking risk in communities where there is an extraordinary demand for credit could be distributed?

Gov. STRONG. Well, it might be done by associations of banks. That is a development that has not taken place in the United States at all, practically, as you know. There are in some sections what they call chains of banks, where the same interests own quite a number of banks. That has developed in Georgia. But such an association,

as a rule, I should say, would be like a chain; that is, just as strong as its weakest link. What I would like to see is a more complete binding together of all the banks in the country into a system which will result in a more even distribution of credit and a more effective protection against the withholding of credit at times when it is needed.

Representative SUMNERS. The country bank's difficulty does not arise primarily out of any inability to get good loans, but arises out of the fact that if it takes a great many good loans, which may be paid off seasonally, and its own debts are called, and it can not renew its rediscounts, it will go broke. I think that is the primary difficulty with regard to the country banks.

Gov. STRONG. From the discussions I have had with the officers of other reserve banks, regarding that very situation—it has not arisen in our district—where these great, excessive advances are made, which are common in the agricultural sections, by the Federal reserve bank to its member bank, the reason that situation arises is this, Congressman. The member bank has made large loans, very large loans, to all of its agricultural customers, at a period of high prices when a large volume of credit was required. It has borrowed in corresponding volume from its reserve bank, and subsequent to the creation of the debt of the customer to the member bank, and of the member bank to the Federal reserve bank, it has lost deposits heavily. That reduces the basic line and increases the proportion of borrowing by that member bank.

In examining all these figures of excessive borrowings by member banks, I think it should be borne in mind that the picture they present results from a reduction of deposits rather than, in the first place, an excessive advance. Then, of course, with this price decline, it has left not only the member bank but the Federal reserve bank with loans on hand that are not well secured at the present time. They will be in time, they will be worked out, but they must be carried for the present.

Representative SUMNERS. I do not think we will have to provide as a permanent system one which is necessary to carry us through this emergency. I do not think that is indicated.

Gov. STRONG. Well, speaking for the Federal reserve system, I do think that no permanent legislation should result from the present unusual, extraordinary conditions that will distort the purpose of the Federal reserve system beyond its sound and original purpose into something wholly different, simply to meet an emergency which I hope we shall not have to face again. There is danger in that. The act is pretty sound, and I think we can depend upon it through the years, as it develops and as we have greater experience.

I did not intend, Mr. Chairman, to do any more in this part of the discussion than to suggest some points that had occurred to me as exceedingly important for consideration. The unrelated situation in which all of these little banks stand with reference to the system as a whole is one of the principal ones, which I think makes them ineffective.

The CHAIRMAN. What you say in that respect is emphasized by such examinations as I have made of the statements of banks in even relatively small communities. Take, for instance, a county in which the industry is wholly agricultural. The status of the banks varies widely. Some of the banks will be very much expanded, others will

not be expanded at all, and there is no correlation through which the banks which have not been pressed can in any way assist the banks which have been pressed.

Gov. STRONG. What controls it is competition, and the element of competition carried too far in banking may become dangerous. We had a threat of that very thing during the war in the payment of excessive interest on balances, which was checked, I think, by the effective action taken by the Federal Reserve Bank. (See pp. 595-622.)

Now, if you are willing to assume that this inequality in the distribution of credit is promoted by the lack of a suitable relationship between the banks of the country, then I think it is necessary to state definitely that we feel that situation can not be corrected by over-extension of credits to those banks that are willing to overborrow. That is the situation that we are in to-day in some sections of the country. Just as you say, it is very spotty. In a certain community out through the country districts there may be some banks that have unwisely and dangerously overextended, and in the same community a banker with a different point of view of what is good banking may not be owing anything to his reserve bank at all. The complication of the present situation, with 20,000 banks not members of the Federal reserve system, throws us back on the possibility of aid that may be afforded by overextensions of credit to those few that are willing to overloan. I do not think that is a sound method of dealing with the fair and equitable distribution of credits throughout the country.

There is another difficulty that has been discussed frequently, and was mentioned to-day, and that is the fact that the Federal reserve act does, as it is designed, furnish short-time credit for the promotion of the industry and commerce of the country—to finance the production and movement and sale of goods, and fundamentally the paper which it takes was originally expected to be that paper which represented an actual sale of goods. As I understand, in the earlier drafts of the Federal reserve act it substantially limited the reserve banks to such paper, and it was only in its later edition, so to speak, that the language was introduced which permitted the reserve banks to make loans upon distinctly agricultural paper which had a maturity of six months.

Then at the other end of our banking development, or our credit development, we have the system of farm-loan banks which provides, and will, I believe, in increasing amounts, and upon sound principles, provide the farmer with mortgage loans for long periods, properly amortized, and so on.

The paper which is eligible for discount at the reserve banks, being short-time paper, and the mortgage loans, which are handled by the farm-loan banks, being long-time paper, undoubtedly result in leaving a gap between the need of the farmer for a long mortgage loan at one end, and the need of the manufacturer and merchant for a 90-day loan. The farmer's requirements, I should gather from what little I have heard and observed about it, would in the case of the wheat grower, run, say, from six to nine months, and there is the extreme case of the cattleman who would need a credit of from two to three years.

Now, it is a fact, and we must admit it, that the existing machinery of our credit system is not quite adequate to provide credits of that length of time. The Federal reserve system should not do it, and much of it, a very large amount of it, undoubtedly is not of a character

that should be made the subject of permanent mortgage loans on a man's farm. But I am inclined to think that it would be a good thing if some arrangement could be made through the employment of private capital by which either the Federal farm-loan system or some other agency—I should think the former would be the better—could provide a certain amount of credit of that character, distinctly for agricultural use.

The difficulties can not be overlooked. There are a number of them. One is that that type of credit is now furnished by the banks of the country in very large part, and if another type of credit institution or credit service is developed I should apprehend that it would develop a good deal of antagonism from the country bankers who would feel that they would lose their farmer customers.

Another difficulty lies in the fact that agriculture being a seasonal operation requires a large volume of credit at the peak of the planting and harvesting seasons, and during the intermediate seasons the amount of credit required is more moderate, at times very small. Now, there should be a regulator in there, so that an uneconomical arrangement of credit would not result if any such plan were adopted.

My notion of what would be a proper regulator is this. When a farmer borrows money for nine months, say, he borrows it in the first instance early in the season, and his borrowings increase as the season progresses. His first borrowings are possibly for the purpose of purchasing fertilizer, stores for the farm, possibly some farm implements, and he has to begin paying his labor, plowing the ground, and preparing the crop. At that time nothing has been produced as the basis of credit. As the season progresses, however, he has a crop growing, and toward the end of the season he has a crop matured and harvested.

Now, it seems to me perfectly proper that whatever institution engages to furnish that farmer with nine months' credit should be permitted, when that credit approaches within a short period of maturity, say, three or four months, to go directly to the reserve bank and discount the paper. My point is that if this is done, then we are still observing the principle which should be observed in the reserve system, that the paper which the reserve banks hold should be paper representing actual value. The crop then would be further matured, there would be value behind the paper, and the time would shortly be approaching when the actual sale of the crop would liquidate the paper. This plan would overcome the difficulty which might be encountered of providing the very maximum of credit for crop making and crop moving purposes, a large part of which would be idle during a large part of the year.

These are suggestions that I am making quite modestly. I do not claim to know a great deal about the conditions of agricultural credit. So far as the principles here involved are concerned, I can not see any objection. Assuming that the Federal farm loan system will be used for this purpose, I can not see any objection to such a relationship being established between those banks and the Federal reserve banks as would enable the former to discount good paper, with their indorsement, directly with the Federal reserve bank, under proper safeguards.

Representative TEN Eyck. Is it your suggestion that the farm loan banks should discount this paper?

Gov. STRONG. Yes, sir.

Representative MILLS. Is it not true that, generally speaking, the fund which the Federal reserve system is intended to mobilize is the fund of liquid capital that turns over very rapidly in a comparatively short term?

Gov. STRONG. Yes, sir.

Representative MILLS. Now, if the farm credit is limited so far as this particular fund is concerned, it is limited because the length of time for which that credit is required is so great that it exceeds the time limit for which this particular fund is primarily intended?

Gov. STRONG. Yes, sir.

Representative MILLS. That is to say, when you get from nine months to two years you are no longer dealing with what we may call the most liquid capital, but you are rapidly approaching the point where you will be dealing with an investment, or something in the nature of an investment?

Gov. STRONG. Yes; it is not self-liquidating paper.

Representative MILLS. Now, I notice in a letter which Mr. Hoover wrote to Senator Capper dealing with this very question, he suggested that for these farm credits of a more or less extended period, the funds would have to be obtained, not from the particular liquid capital that is available in the Federal reserve system, but from that capital which is ordinarily available for investment purposes; in other words, that we should turn to the investment funds rather than to the short-term commercial paper funds. What have you to say as to that?

Gov. STRONG. I think, Congressman, that the plan I propose lies right in between. The paper would have a self-liquidating element toward its maturity to a very large extent. It would not represent goods actually sold, but it would represent goods that are certain to be sold if they are produced.

Representative MILLS. Let us take these farm loan banks. To-day they obtain their funds, as I understand it, from the sale of bonds, and they hold as security the mortgages on which their funds are loaned?

Gov. STRONG. Yes, sir.

Representative MILLS. Is it your idea that they would obtain their funds to loan out for these purposes by short-time securities, with these various notes as security for their own short-term notes?

Gov. STRONG. Possibly the ideal situation, were it possible to bring it about, would be to have the new credit provided by some such mutual relationship in the farming communities as would result in the surplus credits of the wealthier farmers being applied to financing those farmers who have no surplus of credit. To do that, it seems to me, would involve introducing the land banks, as now called, into the deposit business and bringing them pretty close to doing commercial banking. That would certainly encounter the opposition of all the country banks of the country; they would not only lose their deposits, but they would lose their customers who borrow those deposits.

Representative MILLS. Well, now, you suggested that before. That course is one way of obtaining funds and for them to grant this credit. Now, assuming they can not go into the deposit business, would it be possible for them to obtain the funds by issuing a series of short-term notes, for one, two, and three years, against which the

commercial paper, let us say, which they would get, would be the security?

Gov. STRONG. Yes, sir. Now, carrying that program into actual operation, see what would result. I think that as a part of the program some form of obligation should be issued and sold to investors, possibly a short-term note. At the peak of the season, when borrowing is at its height, there would be a large volume of those notes outstanding. When the crop came in and was sold, a very large part of the paper that was behind those notes would be liquidated and paid, and the bank would have a volume of paper outstanding with no earning assets to support it. A very much smaller amount of obligations outstanding at a permanent interest charge would be necessary for such loans, if the farmers' notes, or whatever they might be, could be taken directly to the reserve bank and discounted. That would take the peak off the load of borrowing which the land bank would be required to carry.

Representative MILLS. Just a minute. How much of this paper could the Federal reserve banks afford to discount, and so tie up their funds for comparatively long periods of time?

Gov. STRONG. Only for three or four months. I would not take that paper into a reserve bank until it had run to within three or four months of maturity.

Representative MILLS. I get your point. Just let me complete this proposition, because it seems to me that this is one of the propositions which this committee can deal with in the way of making a constructive suggestion.

Is it your opinion, Gov. Strong, that the solution of the problem of taking care of this gap, which admittedly exists, lies along the line which we have just been discussing?

Gov. STRONG. I think if the two matters which we have discussed—getting the whole banking system tied together more closely, and taking care of these credits of from nine months to two years—are properly done and put into operation, we will hear very little more complaint from the farmers about credit.

Representative MILLS. Well, if you were called upon now to make a choice as between these two funds, one of which we may describe as the deposit fund and the other of which we may describe as the investment fund, which one of the two funds would you select for this particular form of credit?

Gov. STRONG. I would select the investment funds, without any question.

Representative MILLS. Because of the opposition which would come from the country banks?

Gov. STRONG. Not only the opposition, but I think if the plan succeeded it would result—I mean—if that plan of using the deposit fund were tried and succeeded, it would result in hardships in other directions as the result of the withdrawal from these country banks of deposits which should not be withdrawn. Those are banking deposits, and they perform a great service in the community where the bank does its business.

Congressman, I hope you understand one of the reasons for my making this very tentative suggestion. Most of the country banks throughout the United States, I believe—I certainly know it is so in

our district—make loans to farmers, and take from them a mortgage on their farm. The mortgage is not recorded; it is held as a sort of collateral security to be employed in case the farmer does not pay. Much of the paper which goes to the Federal reserve banks, or will go to the Federal reserve banks, from the farming communities is that very paper. It is from the standpoint of the country bank a more or less permanent investment. The farmer is always borrowing a little, more or less, and he has lodged this mortgage with the bank to secure the bank for whatever he does borrow, which fluctuates. That is the paper which we get in the Federal reserve bank, and frankly, it is not the kind of paper which we should get. If the paper which we got was such paper as passed through the land bank under the conditions I have described, it would really improve the character of the paper that comes to the reserve bank rather than the reverse. That is my belief.

Representative TEN Eyck. To make your suggestion a little clearer, will you explain again where the land bank is to get this money that they are going to loan in this way to the farmers?

Gov. STRONG. When the land bank now makes a mortgage loan it pledges the loan as security for a bond, which it issues, and sells the bond to the public.

Representative TEN Eyck. I mean the particular kind of loan that we are going to make on this short-term mortgage.

Gov. STRONG. The land banks might do the same thing, only they might adopt a different kind of obligation adapted to a short period.

Representative TEN Eyck. I understand your suggestion. Along that line, did you say before that if we started another system of depository banks or loan banks they would come in competition with the present national banks?

Gov. STRONG. If they were permitted to receive deposits they would be; yes, sir.

Representative TEN Eyck. And in that way we would really have two banking institutions to do the work of one?

Gov. STRONG. Yes, sir; and it would be indirectly applying deposits payable on demand to the making of loans for a longer period than that kind of deposits should be applied to.

Representative TEN Eyck. The present system of loaning to the farmer is through the national banks in their particular localities, is it not?

Gov. STRONG. The commercial bank, National or State.

Representative TEN Eyck. If that is the case, and they still want these deposits of the farmer, why should we not utilize them to loan to the people whose deposits they are really looking for? The reason I ask that is this: I believe that all the strength of our national banks lies in the fact that their business is done with all the various industries of the country. When one is prosperous another may be not so prosperous, but the balancing of the different accounts helps to sustain the business throughout the entire year.

We have in the country peak times of borrowing, peak times of deposits, and if the farm loan bank puts out certificates in the way you suggest, so that it will have money enough to loan at the peak time of borrowing, there will be times when they will have a surplus that they will have to loan in competition with the national banks. From that standpoint I feel that we ought to utilize that which we

have, the national banks, to extend the credit, by extending the discount privileges of the reserve bank if it is necessary. It was not perfect at the time when it was first enacted; we have extended it to meet requirements vastly greater in volume than we would have to if we extended it to take care of the farmers' loans. When it was first conceived, as I understand it, the reserve bank was to take care of loans upon articles or products in commerce. Now it has gone beyond that to a certain extent—

Gov. STRONG. Only in two respects, Congressman.

Representative TEN EYCK. Yes; in two respects. Let us make the third respect that it will go further in relation to the farmer. Now, I believe the duty of the banking institutions is to consider the length of the turnover of the industry to which it is loaning. If the manufacturing plants deserve 90 days, there is no reason why that same institution should not give nine months to another industry whose turnover is nine months. There is only one branch of the farming industry that needs more than nine months, or a year at the outside, and that would be the cattle-raising industry of the country. I doubt very much whether there is any other, and I believe that some special arrangements can be made by them, if worked out properly, either through our national banks or through the loan bank, if you choose that—I believe that even that could be worked out with the national bank. The only way in which I think it might be detrimental to the national bank is in the fact that they can not make as much money out of long-time paper as they can out of short-time paper.

Gov. STRONG. Of course, you realize that the abandonment of the principle of this short-time self-liquidating paper is an abandonment of the very first and most fundamental principle of reserve banking.

Representative TEN EYCK. I realize what you mean.

Gov. STRONG. We have gone a very long way in issuing what is known as assets currency in the United States—in fact, almost the limit. And if other means can be found to meet this situation, as I believe there can be, how much better it is going to be for us to stick to the tried principles of banking that we know have stood the test. I mean the type of banking which involves making the loans or assets of the bank the basis of the country's currency.

Representative TEN EYCK. My idea is this, that we are taking one industry—and I think it is a bad precedent to establish—and making a certain class of bank do its business, where its own investment is not wound up in the institution or the particular organization that is carrying on the institution. It might happen later on that the United States Steel Corporation would be unable to get the accommodations that it needed, and we would have a community bank backed by the Government to take care of the accommodations of the United States Steel Corporation. Of course, that is a far-fetched comparison, but nevertheless when we are establishing short time loans through a land bank that is established for the purpose of taking care of one industry I believe we are separating that industry too far from the others, and destroying their interdependence, and their particular needs at certain seasons of the year will not be balanced by the particular needs of other industries at other times of the year. I think that is establishing a bad precedent.

Now, I want to see them get proper credit even though they have to get it in that way, but still believe they can get proper accommodations from the small national banks.

Gov. STRONG. I think, Congressman, we are conforming to precedent in doing that. For instance, we have established a special class of banks to enable them to get long time mortgage loans. The same principle would apply to a life insurance company. A life insurance company in a sense is a bank, and we establish a different class of institution to insure the risk of life, a risk which can be reduced by a certain computation as to what it involves, which permits life insurance companies to buy long time investments, which they do.

I want to look at this from the standpoint of banking a little bit, in order to preserve a sound banking system. Here is a class of business which happens to be conducted by men that we call farmers. It calls for a character of accommodation which to my mind should not be afforded up to the point you have mentioned by the institution upon which the country's currency depends for its prompt liquidation when it is no longer needed.

This would not deprive the farmer of access to the Federal reserve system. He would still be able to go to his ordinary bank, where he would still be obliged to carry his ordinary banking account, and borrow to the limit now provided by law, and that paper would still go to the Federal reserve bank. I am simply suggesting a means of taking care of not only the peak of the load but the longer time credit that the farmer requires.

Representative TEN EyCK. But in so doing we are practically admitting that the national bank is not the bank to take care of the entire needs of the farmer in what he might call his short time loans.

Gov. STRONG. Admittedly so; that is true of his mortgage loan requirements.

Representative TEN EyCK. Mortgages are an entirely different proposition. This is what we call the short term borrowing of the farmer. Now, in arranging another institution to take care of this we are admitting that the national bank has not been able to take care of the turnover of the farming industry of the country. And I do not believe that is so.

Gov. STRONG. Well, I myself think that the need of the farmer just now has been very greatly exaggerated in this regard. He has been pretty well financed—I think at rather too high rates in some sections.

Representative TEN EyCK. I am not discussing that; I am bringing it down to what we should do in the future to give him what he needs, and to cut out undue criticism as regards the accommodations he is being given. But the very fact that you admit here that there should be another institution organized to take care of the needs of the farmer is an admission that the farmer has not been given the proper credits up to this time.

Gov. STRONG. I think he has.

Representative TEN EyCK. Well, then, we do not need the other.

Gov. STRONG. I might be inclined to agree with you on that.

Representative TEN EyCK. Well, I do not agree with you on that. I believe he needs it, and I think that the national banks to-day should be so regulated that they could give it to him and keep him within the circle that circumscribes all the industries of the country, instead of putting him off to one side by himself.

Gov. STRONG. Now, is not this the fact, Congressman, that we have developed this enormous agricultural industry of the United States with the facilities that we have had, and it has been an enormous development. The great West has been built up on it, and it has been done with these very institutions that you refer to—

Representative TEN Eyck. But you do not see the psychology of this thing—let me say this, and then I will hear your explanation: Do you not see that the farmer will come back and say, "All our deposits are being used by the other industries of the country, and we are put off to one side to make our borrowings, and what we want is short-time loans on our turnover, which is a year or nine months in length. We are not permitted to have money that we have deposited in the banks loaned back to us on our products. The psychology of the thing is not right.

Gov. STRONG. Well, sir, I am sorry that I can not agree with you.

Representative TEN Eyck. I understand your viewpoint, but I want you to consider mine.

Gov. STRONG. I think farming is a very different industry from the buying and selling of goods. I think it is a very different industry from manufacturing goods, and I think that the principles which apply to the operations of a bank that issues the country's currency, soundly administered, should not admit paper that may run from nine months to two years as security for those note issues.

Look at the experience of the rest of the world in these matters. We take commercial paper, as we call it, in the Federal reserve bank, and employ it as security for note issues. There is no such thing as commercial paper in France and England. They take bills that represent goods that have been actually sold—not altogether, but in the main. We are far ahead of anything that those institutions have done in liberality of credit. As I stated the other day, the commercial loans that are made by the commercial banks—the joint-stock banks, as they are called in England—are not represented by notes of hand; they are overdrafts on the books of the bank. Those great banks practically never borrow from the Bank of England at all; they have no "commercial" paper of that kind in their portfolios to borrow upon if they wanted to. But the paper that goes into the Bank of England is the bill that represents goods actually sold and will be paid out of the proceeds of the sale of the goods when it is completed. And even that paper is not made the security for the notes of the Bank of England at all; they have not even gone so far as that.

I would very much deprecate the addition of this great mass of farming paper to the paper upon which we issue our notes. We do not get very much of it now, I admit, but I would very much regret seeing the door opened to an increase in the volume of such paper as the basis of the country's currency; and it can be taken care of so easily otherwise.

Representative TEN Eyck. But I would hate to see the national banks pass the buck, and then not have the farmers get what they really want.

Gov. STRONG. Let us take the objection which you raised in regard to the farmer feeling that his funds are being diverted to other purposes. If deposits were not received by the land banks the farmer would maintain his account with his local bank, would

he not? And for his ordinary borrowing for a short period he would go there and borrow just the same. The result would be that that bank would have more credit to use in the community. What I have heard over and over again from the members of this commission and from those I have heard testifying here is that there are not enough loanable funds in these little communities to keep the rates of interest down. This is one of the things that will do it. It will produce a surplus for the development of those sections of the country where local borrowers are paying at these little banks from 10 to 15 per cent, and in some parts of the country they tell me that when the bank says, "Well, we will let you have this money for 6 or 8 per cent," it does not mean 6 or 8 per cent per annum, but 6 or 8 per cent for the money, whether for three months, six months, or a year.

Representative TEN EYCK. That is due to the fact that the class of paper he has to accept from the farmer is not rediscountable?

Gov. STRONG. Well, he can discount, I believe, from 75 to 90 per cent of it to-day.

Representative TEN EYCK. Then you are doing just what we want done?

Gov. STRONG. That is what I have said from the beginning. This business has been financed.

Representative TEN EYCK. And if that is so, then why should we have the land bank start out on another line entirely, of handling these credits?

Gov. STRONG. Because I believe to-day that the farmer is convinced, and especially the cattle man, and possibly you are convinced, that the maturity limit of six months does not afford the farmer the certainty that he will get the credit when he wants to make a note of nine months, or two years, or three years. And that kind of paper I do not think we should take. If there is a need for that—and I do not assume to pass upon it finally, because we have not had the experience that the other reserve banks have had—if that is what the farmers need—what I believe they have stated here that they need—the certainty of credit for this long period, then I think other facilities should be created for them.

Representative TEN EYCK. Well, there is a question whether the cattle raiser really needs three years' credit in this way. He might borrow on a young calf, for instance, and when that calf is a year old he should to my mind, readjust his note, and a new note could be given whereby he could borrow more on a larger steer. And when it becomes 20 months old, inside of another year, he can pay that note off and readjust it, and another note could be given for another year, because he can borrow more money on the older steer. And so on up to 26 months or three years.

I do not think that when the little calf is running in the field the man that makes the borrow of the bank wants three years, or that that is all the money he wants on that calf. The calf increases in size and in value, and there is no reason why the note should not be paid off at intervals of a year or less and a new note made which would keep the note always within a year's duration.

Gov. STRONG. Congressman, when the farmer expresses the belief that his money has been diverted to some other and awful purpose—speculative, possibly—is it not because he has just been told so, and really he does not know? Is not that the fact?

Representative TEN EYCK. I am not discussing that. I am merely bringing up the psychology of telling the representative of one industry that he has got to go in a particular stall to borrow, when all the other industries of the country can go into another stall to borrow except him, on the kind of paper that is within the limit of his own turnover.

Gov. STRONG. Would you regard the note which the middleman makes in order to finance his yearly operation, which you referred to, as self-liquidating paper? In order to pay it he has got to borrow again, has he not?

Representative TEN EYCK. In order to pay he has got to borrow again, and that is done every day. That is nothing unusual, I imagine, in the reserve bank, and through your member banks paper is paid at the end of 90 days or 6 months, and rediscounted without a change, except the date on it. Is not that a fact, and is not that the policy of your bank on some instances?

Gov. STRONG. Of course they do, and there is no relation in the reserve bank between the two transactions. The difference between what you have in mind and what I have in mind is this, that in one case you want the reserve bank committed to carry that loan, if it is rediscounted with us, two years, or nine months, or a year and a half. What I want is to see the paper in the reserve bank of a character that will be paid when it matures because the goods which that credit has produced are sold, and have thus provided the funds for the retirement of the note. That is the ideal condition.

Representative TEN EYCK. That may be right as far as that is concerned, on certain classes of commodities, but I do believe that as to other commodities you do not give enough consideration to the natural length of time of the turnover of the industry which you are taking care of. I believe that due consideration should be given to every class of industry as regards its turnover, or you are discriminating.

Representative SUMNERS. Mr. Ten Eyck, is not this Gov. Strong's position, that his bank is organized to take care of securities that are self-liquidating and that the farmer has a need for credit that is not self-liquidating, and therefore that credit ought to be provided by an institution which is not organized to handle purely self-liquidating paper? Might not this statement clarify the situation with regard to the farmer's note? The ranchman is now financed largely through big commission houses that have the contract to furnish the money and sell his cattle. As the ranchman puts it, tersely, when you call the loan you call the cattle, and they want to have it so that they can go to some institution and get a loan for a period of time that will enable them to control the marketing of their stuff.

Representative TEN EYCK. I appreciate that, but what he suggests doing is creating an institution to loan them that is not correlated with the other money markets of the world, and they are liable to apply there at a time when the money is not there, and again at other times they will carry too much money, which is costly to them to carry, which will create a higher rate of interest unless the Government steps in and subsidize it.

The CHAIRMAN. The commission will take a recess until 2 o'clock this afternoon.

(Thereupon, at 12.55 o'clock p. m., the commission took a recess until 2 o'clock p. m.)

AFTER RECESS.

At 2 o'clock p. m. the commission reassembled, pursuant to the taking of recess.

The CHAIRMAN. Very well, Gov. Strong, you may proceed.

I interrupted your conversation with Mr. Ten Eyck this forenoon. I have no objection to its being resumed, however.

**STATEMENT OF HON. BENJAMIN STRONG, GOVERNOR OF
FEDERAL RESERVE BANK OF NEW YORK—Resumed.**

Gov. STRONG. We have had a little private discussion, but this last word I hope to say on that subject, Mr. Chairman, can be covered in just a word, and that is that inasmuch as the commercial banks which hold the deposits of farmers, hold those deposits generally subject to check, I feel that it is quite likely that even if the national banks were given the right to discount at the Federal reserve bank paper having a maturity up to, say, two years, that it might not give the farmers, and especially the cattle men the relief that they feel they need, because banks that have their deposits subject to withdrawal by check do not like to make loans for as long a time as that.

I would fear that even if that privilege were given to the Federal reserve bank—and I do not like to admit that it is a privilege—I doubt whether it would be very much relief to the farmers, because bankers are so reluctant, with demand deposits, to tie their funds up for longer than six months. They will give indefinite credit to a good customer that is borrowing from them right along, expressed in notes that mature in three to six months, but they like to be in a position, if the need arises, where they can get the money.

Representative TEN EYCK. I do not think that the farmers are looking for a three year accommodation at the present moment, but want to be reasonably assured of loans to accommodate their turnover. As I understand, the majority of farmers are looking forward to a loan of nine months to a year, the time of the majority of the turnover of their production. Now, referring back to the land bank, through which you made the suggestion that the borrowing be done; would the Federal reserve bank rediscount the loans in a land bank in a different way from the way they are now rediscounting loans in a national bank?

Gov. STRONG. They would take the paper when it approached maturity, within the time limit provided in the act, whenever that may be; and they would relieve the land bank of a very large amount of paper, and consequently of the necessity of borrowing a very large amount and paying high interest for it permanently, so to speak, so as to carry the peak of the load.

Representative TEN EYCK. In other words, if a borrower took a paper for two years, as you suggested, which is, as you say, the objection to the national bank taking it, it would mean that the land bank would have to hold that paper 20 months before the reserve bank accepted it?

Gov. STRONG. It would, sir, and that 20 months would be represented on the whole by the amount of permanent borrowing that the land bank would do by way of debentures, or other loans.

Representative TEN EYCK. Why could not that same system of operation be carried through in the national bank, provided the same accommodations in discount be given? But I figure that it would be a very small portion of the loans to the farmers that would be of that length of time; if a farmer to-day wants a loan of two or three years, he generally secures it on a mortgage; that is the practice, as I understand it at the present time.

Gov. STRONG. I think it is, to some extent, but I do not think it is that kind of credit which is now afforded by the Federal land banks, because they run for longer terms and are amortized each year; they run for 10 years.

Representative TEN EYCK. Twenty years.

Gov. STRONG. Twenty years.

The CHAIRMAN. Is there any reason why a State bank or land bank should take a debenture or paper for two years or any length of time any more than a national bank should do it? Perhaps I do not make it clear. Is there any more reason why a national bank should not do it than that a land bank should do it?

Gov. STRONG. I think, sir, it would come well within the scope of Federal land banks. They could do it through the agency of the National banks.

The CHAIRMAN. The trouble is, you have to extend the agency of the land bank and have an agency in every community. The question then arises whether you have enough business of the character suggested to warrant that; if there is no economic reason and no financial reason why a State bank should not issue its own debentures for maturity in a year or more, and turning it out to investors, why not use that agency that you have, rather than create a new one for that purpose?

Gov. STRONG. Well, I think the national bank act now places a limitation upon the amount that a borrower may borrow, except at the reserve bank. I have not the provision exactly in mind, but there is such a limitation.

The CHAIRMAN. That is a difficulty easily corrected, if there is no reason why it should not be corrected.

Gov. STRONG. A bank of that kind with depositors is going very far afield in issuing debentures.

The CHAIRMAN. Substantially the same thing was said when it was proposed to let the national banks loan on mortgages. We had a great fight about it when the Federal reserve act was amended; a lot of gentlemen from New York, and others, insisted that it would destroy the whole Federal reserve system; and it was done, and the system is surviving.

Gov. STRONG. Do you think that has resulted in the development of any large volume of mortgage loans in the hands of the national banks? I do not believe that it has.

The CHAIRMAN. I imagine it is perhaps relatively small, although my guess is based on limited knowledge of the operations of banks in very limited areas, but most of the national banks that I know anything about are not only loaning their limit on farm loans, but they are finding ways to loan more than their limit.

Gov. STRONG. That would seem to indicate a need for some agency of that kind.

Representative TEN EYCK. Or a more liberal policy in relation to discounting what they already have.

The CHAIRMAN. Now, I would like to get back again for just one question to the expanded condition of the banks. Apparently all deposits and loans and discounts of all national banks since 1913 have increased about 100 per cent. In the same length of time the capital and surplus of national banks have increased about 30 per cent. That, I take it, to mean that the margin of safety represented by capital and surplus has been reduced from about 17 per cent to about 10 per cent?

Gov. STRONG. Yes; that is about it.

The CHAIRMAN. Is it not possible that the fact that there has not been a corresponding increase in banking capital would represent a limitation upon the ability of the bank to compete in the emergency through which we have just been passing?

Gov. STRONG. It is both a legal limitation and a limitation of judgment. The ill consequences of such a condition developing is exhibited by the fact that banks supporting a large volume of credit or loans, when they lose their deposits, as they are losing them now, are under the necessity of borrowing constantly increasing amounts from the Federal reserve bank. That, in a very large measure, explains the large proportion of loans to basic lines that many banks have to-day. It is one of the situations resulting from an expansion which subjects the banking system to peril, and which will be remedied by natural operation through the liquidation of loans now taking place. In the debt-paying period in the economic cycle of postwar adjustment those loans will gradually come down.

The CHAIRMAN. Yes; but they are not going to get into any such relation with banking capital as existed in 1913 or prior to 1913?

Gov. STRONG. Oh, no; and they should not. Such a development would represent an excessive swing of the pendulum on the side of liquidation, because the normal growth of our banking system and total resources before the war was slightly in excess of 6 per cent per annum. I speak of the normal growth as distinguished from the abnormal during the war. The normal growth is not so great as the 100 per cent you quoted, but probably 50 per cent would be nearer.

The CHAIRMAN. I do not want to get you off of the line you were discussing, but there is one phase that I do not think you have discussed; that is the influence of the large borrowings for investment to bring about the inflation; I mean the method by which your replacements were accomplished.

Gov. STRONG. The peak of that borrowing occurred, Mr. Chairman, throughout the early part of the year 1918, and running down to about December, 1918, and some time thereafter, at which time the deficit of expenditures over ordinary receipts was running at the rate of \$1,400,000,000 to \$1,800,000,000 a month. The maximum deficit was in December, 1918, when it was \$1,857,000,000.

Now, that deficit had to be met in the interval until the Victory loan by these temporary borrowings, and they were in such great volume that it was necessary to sell the Treasury certificates directly to the banks. One of the inducements in the sale was to leave the proceeds on deposit with the buying bank until the Government needed it, and then, when the deposits were being withdrawn, and to the extent that the certificates had not been sold by the bank that had purchased them, it borrowed money of the Federal reserve bank

to make good the drafts on the cash balances that the Government had with it. That, in brief, was the machinery employed in financing these short loans, which resulted in the growth of bank deposits, and bank loans and, in turn, in the growth of discounts at the Federal reserve banks. It was a policy that was in existence during the entire period, I should say, down to about March, April, or May, of 1920, at which time it was regarded as safe to permit trading in those certificates in the open market, so that they would find their natural interest level—investment level. From that time on the rates were more nicely adjusted, so that they would be distributed to the public. They then became a rather important element in contracting the loan account rather than in expanding it. I suppose to-day there can not be more than 10 per cent, or thereabouts, of all the outstanding issues held by the banking institutions of the country—possibly a little more than that—whereas at the time of the heaviest borrowing, when the issues ran for a short period at the rate of \$750,000,000 a fortnight, something like 80 per cent, or over 80 per cent, or thereabouts, were owned by the commercial banks and trust companies.

The CHAIRMAN. Referring again to this question of mortgage loans by banks, I have some figures here which indicate that the total loans to the farmers loaned on farm mortgages, in 1918, amounts to 4½ per cent; in 1920, 5.52 per cent, the country over, but in the State of Minnesota the proportion was 19 per cent; in Iowa, 23 per cent; in Missouri, 23 per cent; in North Dakota, it was 14 per cent. These figures are fairly representative in the agricultural States.

Gov. STRONG. Yes.

The CHAIRMAN. So that in the agricultural States it is quite clear, I think, that a very considerable proportion of the funds of the banks are employed in mortgage loans.

Gov. STRONG. How do those figures compare with similar figures in those States for 1913?

The CHAIRMAN. Unfortunately, I can not give you the figures for 1913.

Gov. STRONG. Is not that the answer, however, as to whether they did increase, in response to the amendment of the national bank act?

The CHAIRMAN. The proportion of loans made by national banks, as compared with State banks, I suppose, is very small.

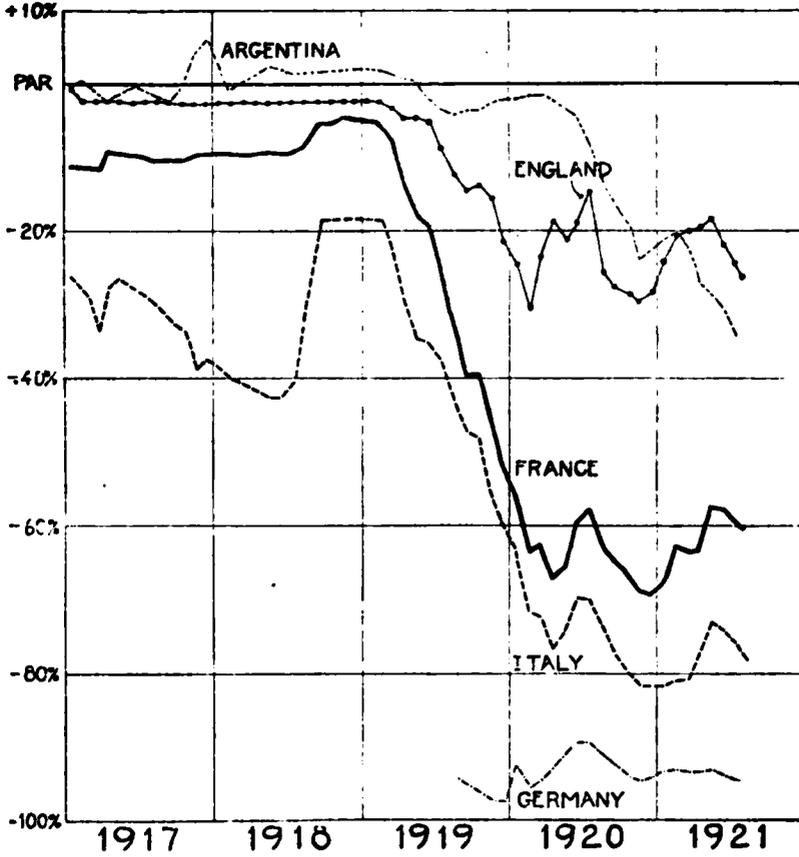
Gov. STRONG. Shall I proceed, Mr. Chairman?

The CHAIRMAN. If you will, please.

Gov. STRONG. One of the most important causes to which is assigned the responsibility for the decline in prices, and the difficulties that the farmers have encountered in marketing their produce, has been the closing of the foreign markets. There is difficulty in moving our surplus products of all kinds, including agricultural produce, to foreign markets, and I think it is generally attributed, in the popular mind at least, to the fact that adequate credit facilities do not exist for financing that movement, and especially for financing the purchasers abroad—the people abroad who would like to buy on credit, but can not get the credit.

Now, I am not sure that that is the reason. In fact, I am inclined to think that it is the least reason, and that other causes are more important than that. The most important of these is the extent

to which the value of foreign currencies, measured in dollars, fluctuates up and down. There are, of course, a good many causes, and credit is one of them. At one time transportation was one cause, and when the war broke out the difficulty of getting insurance was a cause. But at the present time the condition of all the foreign exchanges is such that I am rather disposed to think that violent fluctuations in exchange rates are as great a deterrent against buying



MOVEMENT OF REPRESENTATIVE FOREIGN EXCHANGES.

Percentage above or below par of foreign exchanges at New York.
 Source of information: European exchanges, Times Annalist, and Commercial and Financial Chronicle; Argentina, Davis & Co., New York City.

farm and other goods as anything; that is, as related to foreign markets.

The CHAIRMAN. Let me see if I understand you. The possibility of exchange rates changing adversely, increases an element of uncertainty in a hazard which otherwise would not appear?

Gov. STRONG. Yes, sir.

The CHAIRMAN. And I suppose it is true generally that every increased hazard, or every uncertainty that is injected into every

sort of business transaction not only increases the difficulty of the transaction, but usually widens the margin or price.

Gov. STRONG. It does; and that difficulty requires a little analysis to see just how it operates. Fluctuations in foreign exchange—and I will ask you to distinguish between the fluctuation in the exchange and the normal operation of an exchange market within a narrow range. Fluctuations in foreign exchange are generally illustrated as though they resembled a rise and fall in a barometer, say, or in a thermometer.

Now, that is not a good illustration, because a fluctuating foreign exchange is one of the effects of a condition which reacts upon the cause—that is, fluctuations in foreign exchange and their effect should be likened, I think, to the operation of a thermostat. When exchange is rising—that is to say, when dollars are increasing in value all over the world as they have recently—almost since the World War started—the effect of that is gradually to close our export door and open our import door. The reason for this is obvious, because as a foreign purchaser buys our goods he has to pay for them in dollars, and the dollars cost him an increasingly higher amount, expressed in his own currency, and consequently the goods that he has purchased have got to be sold in his own country at an advancing price in his own currency. The effect of it is that while that advance is taking place, and before the readjustment in world prices is made to correspond to the new level of exchange, he is facing a new cost of those goods so that he must advance the price at home at which he sells them. If those goods are raw materials which must go through the process of manufacture, and if it takes time to transport them and he has not got dollars to lay down when he makes his original contract for purchase, then he faces the possibility of a very serious loss when he does buy his dollars in order to pay for the goods. But it works both ways. Suppose he has been shrewd enough to buy only those things for which he has ample funds in dollars to make cash payment and insures himself in that way against an advance in dollars, he is not, however, insured against a decline in dollars which may occur at any time, whereupon some competitor of his, having purchased in a declining market for dollars, is able to undersell him at home. I bring that out to illustrate the point that the difficulty is the fluctuation in exchange.

Now, as you have stated, the great elements of risk in every commercial transaction are the risk in the fluctuation in the value of the goods purchased between the time of purchase and the time of resale; and the second great element of risk in a commercial transaction is the goodness of the credit of the man to whom the goods are sold by the merchant in case he sells on credit.

Far beyond anything possible at the time when the world was settling balances by gold shipments, exchange fluctuation introduces an element that has such an effect upon the ability of the operators to operate with certainty that it has a very serious effect upon the amount they are willing to buy, when payment must be made in foreign currencies. In fact, those who buy goods in the United States to-day and subject their transactions to these risks of foreign exchange fluctuation are, in a sense, dealing in futures—that is, they are dealing in exchange futures, and are liable to be beaten in market prices by some one

who has the credit and employs it when exchange is more favorable. So that what we should aim at, if possible, in eliminating that difficulty is to eliminate the fluctuation in exchange. It is perfectly obvious that the American exporter or would-be exporter of goods is not going to take that risk. If the American producer wants to sell cotton or wheat or any other commodity abroad, he wants to get a contract in dollars, and then he knows that he is going to get his cost and a profit back, assuming that the credit is good. Now, the foreign buyer is in no different position whatever. He does not want to buy those goods unless he knows he has the means of payment without loss. It operates, if you please, at both ends of the line.

The American producer insists on the buyer taking the risk of the exchange, and the buyer would naturally seek to put that risk and responsibility on the seller. And, if you please, that operates more especially in the case of that kind of trade which is usually conducted upon credits of three months or six months or any length of time. The buyer of goods is subjected to all the hazards of exchange fluctuation over quite a long period. That is one of the answers to the question that has been so frequently raised, Why don't we get up big organizations to sell goods abroad on long credit? If we do get them up, and if we do have the goods to sell and to export, how are we going to extend long credits to buyers who do not know, within a range of 5, 10, 15, or 25 per cent how much they are going to be called upon to pay when that credit matures? And that is exactly the situation in an exchange market which fluctuates over as wide a range as all the exchanges have covered within recent months or years. It was not very long ago that we saw sterling exchange selling for \$4 or better. A few weeks ago we saw it selling for \$3.53, and all those who had entered into contracts for goods when sterling was at the rate of \$4 and who had expected to get dollars at that rate four or five or six months thereafter have all lost, of course, in getting dollars costing the rate of \$3.53, unless they have been fortunate enough to readjust prices in their own country to a point where they can recover that loss.

The readjustment of the international price level does not take place as rapidly as exchange fluctuates at the present time. It is a rather slow and ponderous movement as compared with exchange, which may vary 10 or 15 cents on the pound in a few days, as we have seen recently.

I have referred to what happened in India, due to various causes, when I was there. The rate expressed in sterling at which a merchant could convert rupees into sterling at one time, shortly before I reached India, was such that for one rupee he could get 2 shillings and 10 pence in English currency, and within a period of a few months or a few weeks, almost, rupees declined steadily to a point where he could buy only 1 shilling and 6 pence. And I believe it got below that; I believe at one time it was 1 shilling and 3 pence. Consider the plight of the importer who had purchased goods in England, say cotton cloth in Lancashire, and at the time of his purchase sterling was selling at the rate of 2 shillings 10 pence per rupee; he might have had six months' credit, and turned around and sold all those goods and made a handsome profit, and then when he came to convert the proceeds into sterling he would find that his rupees were only worth 1 shilling and 3 pence. It would cost him twice as much

as at the time he had entered into the contract. That is one of the extreme cases of fluctuating exchange, and of losses that may result, even with credits assured, and with credits perfectly good.

The point, summed up in one word, is that merchants will not take that third and unusual risk.

Now, there are a variety of reasons for these fluctuations. Of course, the principal reason is that in ordinary times, before the war, exchange in its fluctuations rarely got beyond the point where it was profitable for gold to move; that is, beyond the "gold point," as commonly expressed.

The CHAIRMAN. According to my understanding, that represents the cost of the shipment of gold from time to time?

Gov. STRONG. Yes; to illustrate it simply for the purpose of the record, if it is of any value, Mr. Chairman, the exact parity, in round figures, of the gold in a sovereign, expressed in dollars, is \$4.86½. Now, if an American importer before the war incurred a liability for a round sum of money for goods imported for which he was later to make payment, say, three months following the importation of the goods, and then found that sterling had advanced to \$4.90 or \$4.91, in response to various conditions entering into the market, it might be easier and cheaper for him to pay for those goods by going to his bank and getting the gold and shipping it over, rather than buying the exchange. And he can do that when exchange passes the "gold point", even considering the cost of shipping the gold, that is, the packing and shipping charges, insurance, loss of interest, abrasion on shipment, and so on. Therefore, the rates of exchange before the war were more or less automatically limited by the fact that the nations were settling these balances due to and from each other, when they got out of balance, by the actual shipment of gold from one country to the other. Therefore the exporters and importers were insured against heavy loss, because a limit was fixed upon the fluctuation of exchange by the actual shipment of gold itself.

Now, I was referring to the various causes of this fluctuation. The underlying cause, of course, lies in the fact that the world's trade is out of balance, and has been ever since the war started. People have imported more goods in some parts of the world from this country than they are able to pay for easily. Other causes have also added to the difficulty. If it had not been so greatly out of balance—if the amount of international debt incurred in connection with the war had been less, there would have been no occasion for the suspension or control of gold shipment, and exchange adjustments or settlements would have been effected by gold shipments when exchange passed the "gold point," so to speak. I am purposely omitting references to depreciated currencies.

And one of the evidences of the fact that this indebtedness is considerable and is still not settled fully appears from the fact that we are now receiving very large amounts of gold in payment of bills or debts due in this country, and still sterling and other exchanges do not come back to anything like parity; that is, most of them have not. So that, in general, one of the underlying causes lies in the fact that heavy debts must be paid, and the reason that the exchange can not be controlled is that gold or other goods can not be shipped or credits arranged in sufficient quantity to pay those debts.

The CHAIRMAN. I take it that that gold does not come from the countries directly that this money is owing from, because most of them have an embargo on the gold shipments, so it would not have the tendency to establish a parity as if the shipment of gold were unhindered?

Gov. STRONG. The shipment of gold is in some countries restricted, and in the case of gold now being received from time to time, it is the gold that can be spared, including, for instance, the new gold production from the mines of the world; that is, the great bulk of it, under present conditions, must come here, because it can not very well escape the lodestone of a premium on dollars.

I think we possibly are safe in assuming that the parity of exchange—the normal rates of exchange—will not come back to normal until some of these underlying causes of derangement of exchange are removed, and until it becomes possible and safe for nations again to settle the net balance on international transactions by gold shipments. That (and credits) is the balance wheel that holds exchange within control.

But I wanted especially this afternoon to refer to some possible new causes that may arise to add to the possibility of fluctuations in the rates of exchange. I do not think any statement on this matter would be complete without referring to these possible new causes and difficulties, and I do not think any statement in regard to the condition, for instance, of the farmers, and what is to become of the surplus produce of the farm, would be complete without considering what are the difficulties surrounding the exportation of our surplus production of all kinds of things, not only from the farms but of manufactured goods. And it is for that reason that I want to refer to one or two possible causes of further disturbance in foreign exchange.

Now, it has become commonly known, I think, that one reason for a recent sharp advance in the value of dollars and a corresponding decline in other currencies has been the German reparations payments. What seems to have happened there was that for one reason or another, one motive or another—I have no doubt perfectly proper ones—it has seemed desirable, or it did seem desirable for the nations that were to receive those payments from Germany to specify that some part of the payment should be made in dollars. You will recall the treaty of Versailles specifies the currencies in which these payments shall be made. I will not discuss why that was done, because that would necessitate surmising, and I do not want to surmise as to the reasons. But it was done at the conclusion of the arrangement, which seems to have provided for payment to be made by Germany aggregating this year a billion gold marks. That was this year's payment, and certain of the payments were to be made in dollars and were so made. And as was to be expected, the accumulation of this exchange by Germany, or by the bankers who handled it on behalf of the German Government, ran dollars up and depressed the other currencies.

Representative SUMNERS. Governor, why should that adversely affect English, Belgian, or French exchange?

Gov. STRONG. Well, the exchanges, even under the present conditions, with gold not being shipped throughout the world, nevertheless reach a natural parity. It is due to the ability to buy exchange in one market, and there to convert that exchange into the currency

of another country; and in the case you cite Germany may have had control of a certain amount of sterling and converted that sterling into dollars. That was rather a large sum, and when such a payment has to be made as Germany did make, it will naturally result in a disarrangement of the exchange level.

Representative SUMNERS. In other words, Germany had the ability to draw on the gold supply, through international situations, of the other countries, and did so?

Gov. STRONG. Not necessarily to get a gold supply. Germany has been exporting goods, and probably has been borrowing money in other markets abroad, and Germany has doubtless had credit balances, possibly, in London or France or Holland, or different parts of the world, and to the extent that it was necessary to pay reparations in dollars, of course, it was necessary to buy dollars with those currencies, at the same time that dollars may have been purchased with marks in Germany from the bankers and exporters and others. So that the effect was to depress other currencies and other exchanges.

Now, it goes a little further than that, even. If this obligation that Germany has entered into to pay in foreign currencies is beyond the amount of exchange which is produced by the German export trade; that is, beyond the normal production due to exports or to normal credit operations, then, of course, it is necessary for Germany to accumulate this exchange by borrowing money still further and buying exchange wherever it can be had, and with possibly a further pressure upon exchange. I am discussing this rather academically, if you please, without regard to anything specific that Germany may be doing. I do not know what processes may have been adopted in accumulating the dollars or other currencies, but simply in order to bring out in a theoretical way, if you please, what the effect of it is. This effect is to produce further fluctuation in exchange. If that is so, as I think it is, and if there is a shortage in the amount of exchange normally produced by German trade, then of course, if Germany is to meet these obligations—and it does not make any difference how just they may be; I am not commenting upon that feature of it—they may be wholly inadequate to restore the damage that Germany did by the war. So long as the amount of exchange produced by German trade is less than the normal exchange, the struggle to get exchange in addition to what is normally produced, puts considerable pressure upon the exchange market in order that the German Government may have the necessary exchange. And, naturally, there is a certain amount of speculation against the position of anyone who is short of exchange.

All of this is rather academic until we come to consider just to what extent our own policies might have an effect upon that matter. I can very well understand that any foreign government which is receiving reparations payments from Germany and which is in need of goods in this country would naturally say to the Germans, "Pay us in dollars, because we want to buy American goods, and if we get dollars from you we get those goods without the risks of exchange," to which I have referred. Whatever the dollars may cost Germany, they are dollars when the people of England or France or Belgium get them, and consequently exchange fluctuations and risks are largely eliminated. Now, that may not be a bad thing. To the extent that dollars are produced by reparations payments

and are accumulated and turned over to the other nations, and are spent in this country in buying goods, it may be a very excellent thing to help our export trade and eliminate some of the risks of this exchange fluctuation that I have referred to.

But what I am coming to is just what are we going to do with these dollars; just what is going to be done with them. I do not know, and do not assume for a minute to say, and I do not want you to understand that I am assuming to know, what the policy of this Government is going to be in these matters, but I think that should be frankly discussed and understood, because it has a very distinct bearing upon our export trade. And this comes to the question of the payment of the interest on these foreign loans made by our Government to other governments during the war. It is true that, if it seems wise to have the interest paid as soon as possible, it is most natural that the nations that have to pay it should pay it to the extent possible out of these reparations payments. That would be the natural source of supply of dollars, with which to pay the interest on these debts due to the United States. It would be very nice to have the interest promptly paid, because it would reduce taxes in the United States. But we have got to consider whether, in the long run, that is the wise thing, because these dollars that are paid to the United States in interest can not both pay the interest and reduce taxes and at the same time buy American goods. The point that I want especially to make is this: While there are advantages, and advantages of value to this country, in having these payments made to us in dollars, just as there are advantages in having foreign governments borrow money here and spend the proceeds here—it increases our export trade—yet I want you to consider the effect of such a program not only on American exports but on American prices.

Now, if you follow me to this point, eliminate the question of fluctuation of exchange, which is bad enough and difficult enough, and come down to the whole principle of trade. The price of any commodity is fixed low by a comparatively small surplus of production over amounts consumed, just as the price is fixed at a high level if there is a shortage of production under what is demanded for consumption. The question at once arises, if there is a buying power in Europe which is represented by the amount of money which might be remitted to this country in dollars—I say money remitted—I mean credit made available in this country; if there is a buying power represented by the amount which would otherwise be paid to us in interest that could be applied to the purchase of American surpluses of goods and it is not so applied, does it not follow that the surplus on our hands is going to make the value of all these things we produce less, if it is an unsalable surplus? In other words, is not the problem before this country to-day first to insure that to the extent that buying power exists in foreign markets, credits can be obtained in this country for buying cotton and all sorts of things? Is it not greatly to the advantage of the Nation that these dollars should be devoted at first to buying what we now regard as the surplus already on hand and the surplus which may be produced hereafter, rather than to paying the interest on this debt and reducing taxes?

Now, I do not want the commission or anyone to consider that I am making any recommendation as to what the policy of this Gov-

ernment should be, or any recommendation to the Congress. But I don't think that any statement on this subject, the subject of prices and what we are going to do with our surplus product in this country, can be considered complete unless we consider also what effect upon our foreign trade, our export trade, and what effect upon the prices that we get for these things, will result from applying so much of the buying power of Europe just to paying interest on the debt and reducing taxes, rather than buying goods.

Representative TEN Eyck. Well, are the German reparation dollars now being used to buy material in this country? Of course, when we loan a country money we can stipulate that the use of that money must be used to purchase material in this country.

Gov. STRONG. Do we?

Representative TEN Eyck. In some instances we do.

Gov. STRONG. I don't know of any recently, Congressman.

Representative TEN Eyck. Well, I understand that with China we have stipulated that when we have loaned her money that she must buy her materials here, and during the war, when we loaned money, that money did not really go across to the other side; it remained here on credit, as I understand, for those nations, and war material was furnished in the place of it.

Gov. STRONG. But I am speaking of the present time. I know that did prevail in those days.

Representative TEN Eyck. Now, the question along the line that you have argued, or have presented the case, is: Have we suggested to the European nations when we permitted the interest on their loans to lapse, that they use that money to purchase materials in this country?

Gov. STRONG. I know nothing about that. I am just discussing an exchange problem, Congressman.

Representative TEN Eyck. You are just laying before us how those things naturally work out. My question was: Is it working out that way? Is German money to-day being used by the other countries to purchase material in this country?

Gov. STRONG. Well, that I can not say. What is important, I think, before considering policies, is to try and understand, if we can, in a situation as complicated as this is what effects will result from certain courses of action, and I feel rather strongly that it is highly desirable to consider that credits, expressed in dollars that may be gathered in for one purpose or another, can not be both applied to paying interest and buying goods.

Representative TEN Eyck. There is no doubt about that.

Gov. STRONG. And I am going to ask you gentlemen to consider this in connection with considering generally the effect of the cessation of our export trade upon the interests of the farmers of whom you are thinking. We export sixty-odd per cent of our cotton crop every year, among other things, and the most important thing for the southern cotton farmer is a foreign market for that cotton. It is a consideration superior to any other in the value of cotton, in his ability to grow cotton and live, and therefore, with a great deal of diffidence—because I am now touching upon matters of policy in this country, with which I have no connection or concern—I think it is desirable to point out to the commission that what we still need to-day as a country which produces a surplus of goods, is a

foreign market, and to consider how payment may be made for this surplus of ours in the near years in the future.

Representative TEN EYOK. Of course, Germany also was a purchaser of our cotton, to a great extent.

Gov. STRONG. Yes.

Representative TEN EYOK. Now, if these reparation dollars are taken and paid to other countries, and we do not demand it as interest upon our loans, and they use it elsewhere, we may not have any money to loan to Germany to buy the cotton.

Gov. STRONG. Expressed differently, you mean that if all the capacity of Germany to accumulate credits in this country is consumed in paying reparations, and in turn, if paid in dollars, is applied to interest on our debt, then Germany will not be able to buy any cotton?

Representative TEN EYOK. No; then we might, if Germany is credited with that same money to buy cotton. Taking it from the broad standpoint of all the countries, we could build up entire Europe without hurting any one in particular.

Gov. STRONG. Well, do you believe, sir, that one of the elements in affording security to American producers is a market abroad for raw materials?

Representative TEN EYOK. Why, I believe that a market abroad for some of our materials is essential.

Gov. STRONG. Especially cotton.

Representative TEN EYOK. Especially cotton.

Gov. STRONG. Well, so do I. That is the reason why I have referred to this. I do not think it is a subject upon which one can enlarge very much. It seems to me it is rather obvious.

Representative TEN EYOK. I think so.

Representative SUMNERS. Confronting this situation as we do, where I believe it is recognized that we have all the gold on this side that it is good for the international trade of the world, and for us, to have, confronting on the one hand the necessities of marketing our surplus, and that sort of a world situation on the other side, with the nations of Europe, I assume, owing us a great volume of indebtedness, larger than the volume of indebtedness which American citizens owe to Europe, and therefore necessitating a flow of gold here to pay interest, how are we going to get this situation straightened out? A good many people on this side do not want them to ship much stuff over here, because they say it interferes with our own production. Those of us who produce a surplus want to ship the surplus over there, because a surplus interferes with our situation. We can not take their gold, and we do not want to take their goods. We do not want their surplus. We do not want to forgive our debtors. We are trying to collect our interest.

Gov. STRONG. Well, now, Congressman, there is a way out; there is a way out. I am not going to suggest this way out, because I think nature is going to provide it.

Representative SUMNERS. But there is a way out; I do not think there is any doubt about that.

The CHAIRMAN. I do not think, perhaps, it has been made sufficiently clear just what effect the scramble for American dollars to pay interest would have upon export prices.

Gov. STRONG. Well, sir, I can not say, and I do not believe anybody can say; but if it works as I have indicated that it might work,

that is, if the old laws still rule, as I think they do, that it is the existence of an unconsumed and unconsumable surplus that makes the price of the whole commodity—and I certainly think these charts and others that we have submitted indicate that—then the question is to get the surplus productive capacity of this country consumed, is it not?

The CHAIRMAN. Well, if we get France or get Germany or anybody else competing for American dollars, raising the price of American dollars, that would have a reflex in prices, it would have a tendency to increase the prices, and therefore the higher the prices get the more difficult it would be to export. Is not that true?

Gov. STRONG. Well, you have to discuss world prices on one hand and domestic prices on the other. What I am emphasizing first is that the fluctuation in exchange presents a difficulty in itself aside from any question of the application of the money. The fluctuation in exchange has, to some extent—if current reports are to be believed—been caused recently in part, at least, by this accumulation of dollars. Therefore that is one cause of the difficulty.

Using sterling to illustrate it, sterling declined from \$4 to \$3.53 in a very short period. That is a decline of about 10 per cent, or a little more, and a change in foreign price levels of 10 per cent, as rapidly as that, is hardly to be expected, as you know. Besides that, the poor man in England who bought some American goods on the basis of \$3.53 sterling is going to find it difficult when he comes in competition with the man who bought those same goods on the basis of \$4 sterling.

Representative MILLS. Well, isn't it a fact that you have a competition for dollars which would tend to raise the price of dollars, that so far as world market is concerned, it would tend to raise the price of American goods so far as the foreigner is concerned? But in so far as the whole market is concerned it would tend to lower the price of goods, because it would diminish the demand and so increase the surplus available. Is there not a twofold effect?

Gov. STRONG. Yes; I think that is true.

Representative MILLS. So you can not discuss it in terms of any one price?

Gov. STRONG. No, sir. What you can discuss, however, is the difficulty of too rapid a change in price, and in more general terms you can discuss the possible effect of the diversion at the present juncture of a certain amount of buying power to paying interest rather than to buying goods.

I think, Mr. Chairman, with that reference, which is necessarily rather brief, I have about concluded what I endeavored to prepare for the commission; but if you will permit me I would like to say a few words that I had not intended to say originally. I am encouraged to say them by the sympathetic attitude, if I may use that expression, of the commission toward the long talk that I have made. I would like to have the members of this commission understand a little bit generally about the Federal reserve system and its problems, from a more personal standpoint.

In the middle of October, 1914, these 24 men who are responsible for the management of each of the reserve banks, that is, the governors and the Federal reserve agents, were literally handed the

Federal reserve act and told to have these banks open for business on the 6th of November. It was a new kind of banking that had never been practiced in the United States since 1836. There wasn't any man living in this country who had had any experience in that kind of banking. It involved a complete revolution, not only of banking methods, but of the methods of conducting the business of the Treasury of the United States. Not only that, but it was at a time when the world was in the midst of the greatest war ever fought, and after two and one-half years these infants, so to speak, were called upon to conduct the business in the field of the Treasury of the United States, which in turn had to finance our own war efforts and a very large part of that of the allied countries.

Now, I know these men. I have had intimate association with them. They have taken up this work as a matter of public duty. They have not had a great deal of time to organize and get the wrinkles smoothed out, but what they have done is to create an organization of 12,000 people. They have raised more billions for the United States than I can recall. In the bank in New York we have raised \$20,000,000,000 in the long and short time loans. They have conducted all this mass of business throughout the war under conditions of unparalleled difficulty and perplexity and strain, and I want to tell you what it has done for this country, in a few words. It was the machine that financed the war. There never has been a day since the Federal reserve banks were opened until the present day when you could not take any piece of paper money in the United States, present it at the counter of those banks and get gold for it, and if it had not been for that, that black line that represents prices in the United States would have gone up there with the rest of them, somewhere or other, and the difficulties that we have encountered in adjusting to this new period are trifling alongside of what we might have encountered in that one thing, namely, such a thing as suspension of specie payment in the United States, which has not happened. The only limitation that was imposed upon specie payment in the United States was the requirement under the trading with the enemy act that gave the President the right to license exports of gold to those which were regarded as to the best interests of the country in the prosecution of the war, and just as soon as it was possible, that limitation was voluntarily relinquished, although I believe it could be in operation to-day if the law was invoked.

Now, I refer to this very briefly for this purpose. We have been through the period of liquidation. We saw it coming. We have been through the period that has been just the reverse of a period of expansion. When you are expanding, prices are going up, profits are big, everybody is happy. There are no big business failures, nobody is to blame for anything, because nothing goes wrong.

Now, the reverse has happened. Nature brought it on. Prices have declined, we have had losses, failure, distress, suffering; and in reviewing these complaints—I won't dignify them by calling them any more than complaints—about the Federal reserve system, never overlook the major thing, what this system has done for the United States. It is a great thing, greater than anybody realizes who has not sat in the middle of it and studied it, and who knows what it is. It protected this country as no other thing has done during the war

from disturbance and breakdown of the worst kind when the day of reckoning did come, as it has.

I think that is about all I want to say, gentlemen, except to express my very great appreciation for the patience and courtesy and consideration that you have shown me during these long talks that I have very much enjoyed.

The CHAIRMAN. Would you care to say anything now, Gov. Strong, with respect to the growth of the Federal reserve system and the volume of business that it does now compared to prior years?

Gov. STRONG. I think it would be more appropriate, Mr. Chairman, to take that up later as we are expecting to do.

The CHAIRMAN. Very well. If there is nothing further, we are very much obliged to you, Gov. Strong, for your interesting and illuminating statement.

INDEX.

	Page.
A.	
Agricultural credits:	
Agricultural and nonagricultural communities, May 4, 1920-April 28, 1921.	650-663
Agricultural paper brought in last to Federal reserve banks by member banks.....	702
Amount borrowed from Federal reserve banks on farmers' paper not total amount loaned to farmers.....	698-699, 734
Ample credit for crop of 1921.....	631, 777
Available or not.....	178, 354, 374, 376, 438, 443
Branch banking within limited areas suggested.....	786
Closing of foreign markets.....	802
Comparison of deflation in agricultural communities with other communities.....	594-595, 629
Conditions affecting industry.....	183, 443
Effect of deflation upon farmers.....	773-774
Effect of demand for agricultural credit on street loans.....	634
Expansion of bank loans and deposits in agricultural counties.....	595
Farm loan banks.....	694, 695, 789, 791
From Federal reserve banks.....	76, 125, 153, 158, 266, 326, 329, 372
Indication of pressure in agricultural sections.....	702
Interest rates on.....	306, 308, 354
Less credit needed to finance crops when cost is lower.....	631
Loans to farmers.....	698-703
Need for diffusion of credit for seasonal agricultural needs.....	786
Need for foreign market.....	810-811
Need of farmers for long credit.....	693-695
Paper discounted.....	303, 354, 358, 424, 425, 434, 436
Policy of Federal reserve bank toward.....	326, 372
Possible source of further accommodations.....	441
Problem of the farmer.....	694, 774-779, 810
Statement relating to, by Comptroller of Currency, December 6, 1920.....	294
System of credit suggested to take care of long-time agricultural loans.....	790-800
Competition with national banks.....	791, 793, 795
Investment funds, rather than deposit funds, to be used for this purpose.....	792
Paper under this system could go through land banks.....	790-793
Such paper discounted at Federal reserve banks, when nearing maturity.....	790-792, 793, 799
Tables—	
Loans to correspondents located outside second district and loans and investments of daily reporting banks, as of November 15, 1920.....	638
Deposits of correspondents located outside second district and total borrowings from Federal reserve banks, as of November 15, 1920....	639
Telegram from farmers relative to.....	372
Telegrams of Federal Reserve Board relative to.....	372, 373
Unrelated State banks cause of diffusion of credit.....	785
American Cotton Association:	
Organization of.....	393
Report to conference with Federal Reserve Board, September 15, 1920, at Washington.....	411
Statement to conference with Federal Reserve Board, September 15, 1920, at Washington.....	412
Atlanta Federal reserve bank:	
Cotton-crop accommodations.....	347
Earning assets of, table of, 1920-21.....	429
Letter from member bank (cotton).....	414
Letter to member bank (cotton).....	414
Operations of.....	136, 142, 324

	Page.
Atlanta Federal reserve bank—Continued.	
Possible disestablishment of.....	227
Progressive interest rate applied.....	163, 173, 315, 316, 318
Statement of governor (credit conditions as to cotton).....	422
Assets of banks in United States.....	684
Authorities cited or alluded to in Gov. Strong's testimony:	
Aldrich Monetary Commission Report.....	541
Aldrich-Vreeland Act.....	719
American Economic Review.....	454, 478, 479 note, 490
American Statistical Review.....	486 note
Annalist.....	803
Annual Reports, Federal reserve bank of New York.....	500,
506, 522, 528, 554, 559, 560, 561, 563, 592, 725, 760	
Annual Reports, Federal Reserve Board.....	482,
484 note, 485, 496 note, 534, 536, 587, 591, 635, 641, 733-734	
Annual Reports, Treasury Department.....	525
Bank act of 1844 (England).....	533, 623
British White Paper.....	463 note
Commercial and Financial Chronicle.....	483 note, 550, 567, 803
Cunliffe Report.....	489, 490, 622-624
Davis & Co. reports.....	803
Department of Labor index.....	741, 764, 775
Discount Policy of the Federal Reserve Banks, O. M. W. Sprague.....	485 note,
486 note, 487 note, 488 note	
Dun's Review.....	512
Economist.....	483 note, 475 note, 476 note, 559, 561
Federal reserve act.....	483,
503, 520, 522, 523, 528, 529, 532, 543, 582, 672, 697, 789, 800, 813	
Federal Reserve Board's correspondence.....	484 note
Federal Reserve Bulletin.....	462 note, 491, 482, 483,
489, 490, 534, 536, 587, 635, 636, 641, 713, 715, 716, 731-733, 759	
Financial Review.....	561
Harvard Review of Economic Statistics.....	522, 529
Index of Bulletin de la Statistique General.....	764
Index of Divergence, E. A. Goldenweiser.....	486 note
Index of Prof. Bachi.....	764
Lombard Street, Walter Bagehot.....	479 note, 513
Minutes of meetings of directors, Federal reserve bank of New York.....	447, 760-762
Monthly Labor Review.....	498, 499, 764, 765
Monthly Review of Business Conditions (Federal reserve bank of New York).....	612, 712, 724, 725-729
National bank act.....	521, 523, 528, 529, 880, 802
National Industrial Conference Board.....	741, 765
New York Herald.....	676
New York Times.....	546, 550, 561, 566, 567, 673, 676, 677, 678, 803
Our Money and the State, Hartley Withers.....	462 note
President Wilson's Address to Congress, December 2, 1918.....	483
Proceedings of the Academy of Political Science.....	473 note
Reports of Comptroller of the Currency.....	499, 525, 650
Reviving the activities of the War Finance Corporation.....	482
Sauerbeck-Statist Index.....	775
Statist Index.....	764
Trading with the enemy act.....	813
United States circulation statement.....	525
Wall Street Journal.....	541, 546
War-time Financial Problems, Hartley Withers.....	459 note
Weekly Press Statement of Bank of England.....	591
Weekly Press Statements of Federal Reserve Board.....	492 note,
500, 506, 534, 587, 591, 592, 635, 636, 641, 759, 760	

B.

Balances out-of-town correspondents:	
Chart, out-of-town funds with 52 New York City banks.....	644
Tables—	
Balances of out-of-town correspondents and street loans placed for their account, daily reporting banks, New York City, Jan. 3, 1919, to July 20, 1921.....	646

Balances out-of-town correspondents—Continued.

Tables—Continued.	Page.
Deposits, balances of out-of-town correspondents, total loans and investments, and borrowings of 5 large New York City banks on selected dates, January, 1920, to July, 1921	649
Deposits of correspondents located outside of second district and total borrowings from Federal reserve banks, as of Nov. 15, 1920	639
Out-of-town loans and balances of out-of-town correspondents, 5 large New York City banks, Feb. 14, 1921	649

Bankers' bill or acceptance:

Chart—	
Discount rate of Federal reserve bank of New York, and market rate on different types of paper	563
Market rates on principal types of paper at New York	567

Description	539
Rate has bearing on Federal reserve bank rate	539

Bank No. 6	705, 706, 709
Bank No. 16	707, 709
Bank of England, rates in	415
Basic commodities	771

Chart—Prices of 12 basic commodities in the United States	511
---	-----

Basic line:

Discussion	321
Injustice to courageous banks	696
Injustice to occasional borrowers	695
Progressive rates dependent upon basic line	691-696

Tables—

Average percentage of basic discount line borrowed by 5 largest borrowers in each Federal reserve district on October 15, 1919, February 16, June 15, and October 15, 1920, and February 15 and June 15, 1921	762
Borrowings from Federal reserve banks, compared with basic line on April 28, 1921, in agricultural, semiagricultural, and nonagricultural counties	652
Capital and surplus; demand deposits; time deposits; loans and discounts; borrowings from Federal reserve bank including rediscounts, bills payable, and a total; basic lines; and borrowings from correspondents including rediscounts, bills payable, and a total of member banks in agricultural, semiagricultural, and nonagricultural counties (1920-21) in entire country and 12 Federal reserve districts	653-663
Percentage relation of total borrowings from each Federal reserve bank to total basic discount line of all banks in the corresponding district on June 10 and October 9, 1920, and February 10 and June 15, 1921	762

Borrowings:

Borrowings from New York City banks of interior banks	648
Borrowings of 6 large New York City banks	737-740

Tables—

Average percentage of basic discount line borrowed by 5 largest borrowers in each Federal reserve district on October 15, 1919, February 16, June 15, and October 15, 1920, and February 15 and June 15, 1921	762
Comparative figures of banks in New York City and of Federal reserve bank of New York on selected dates in 1920	739
Comparative figures 6 banks in New York City, on September 30, October 22 and 29, 1920	739-740
Comparative figures 6 banks in New York City on October 1, 22, and 29, 1920	739
Percentage relation of total borrowings from each Federal reserve bank to total basic discount line of all banks in the corresponding district on June 10 and October 9, 1920, and February 10 and June 15, 1921	762
Wire transfers, settling figures, September 1-October 22, 1920, of 6 banks in New York City	740

Borrowings—Continued.

	Page.
Borrowings of 6 large New York City banks—Continued.	
Chart—Per cent change between May 4, 1920, and April 28, 1921, in loans and discounts, total deposits, and borrowings of member banks in agricultural, semiagricultural, and nonagricultural counties.....	650
In agricultural and nonagricultural communities May 4, 1920—April 28, 1921.....	650-663
Interviews with large borrowing banks.....	705-707
Tables—	
Borrowings from Federal reserve banks, compared with basic line on April 28, 1921, in agricultural, semiagricultural, and nonagricultural counties.....	652
Capital and surplus; demand deposits; time deposits; loans and discounts; borrowings from Federal reserve bank including rediscounts, bills payable, and a total; basic lines; and borrowings from correspondents including rediscounts, bills payable, and a total of member banks in agricultural, semiagricultural, and nonagricultural counties (1920-21) in entire country and 12 Federal reserve districts.....	653-663
Deposits, balances of out-of-town correspondents, total loans and investments, and borrowings of 5 large New York City banks on selected dates, January, 1920, to July, 1921.....	649
Deposits, loans and investments, and borrowings of reporting member banks in New York City and in the second Federal reserve district (last week of each month, 1919-July 20, 1921)..	643
Deposits of correspondents located outside of second district and total borrowings from Federal reserve banks, as of November 15, 1920.....	639
Increase or decrease in loans and in borrowings from Federal reserve banks by districts, 1920-21, in agricultural, semiagricultural, and nonagricultural counties.....	652
Increase or decrease in loans, borrowings, and deposits of member banks, 1920-21, in agricultural, semiagricultural, and nonagricultural counties.....	651
Out-of-town loans and balances of out-of-town correspondents, 5 large New York City banks, Feb. 14, 1921.....	649
Boston Federal reserve bank:	
Earning assets, table of, 1920-21.....	427
Interest rates.....	316
Branch banking.....	786
Brokers' loans.....	364

C.

Capital and surplus, member banks in agricultural and nonagricultural communities, by districts and in total, May 4, 1920 and April 28, 1921.....	653-663
Central reserve cities, rediscounts, loans and discounts, in banks.....	50, 126
Certificates of indebtedness:	
Address by Ray Morris, July 16, 1918.....	565
Address by R. H. Treman, July 16, 1918.....	566, 575
Charts—	
Discount rate of Federal reserve bank of New York and market rate on different types of paper.....	563
Interest rate of certificates of indebtedness at issuance, and rates of Federal reserve bank of New York on advances secured by certificates of indebtedness.....	559
Market rates on principal types of paper at New York.....	567
Open-market rates for certificates of indebtedness and rates of Federal reserve bank of New York on advances.....	560
County directors.....	565-581
Certificates of indebtedness department of Federal reserve bank of New York.....	571-575
Federal reserve bank of New York: activities and operations in connection with certificates of indebtedness.....	554
Methods of distribution.....	565-581
Necessity for certificates of indebtedness.....	460
Necessity for keeping down rates for call money.....	543

Certificates of indebtedness—Continued.	Page.
Necessity for money committee.....	668
Percentage held by banks.....	802
Rate has bearing upon Federal reserve bank rate.....	539
Sales in second district.....	555-558, 566, 568
Selling at premium: Symptom of recovery.....	509
Tables—	
Certificates of indebtedness.....	557-558
Comparison of interest rates on issues of certificates of indebtedness outstanding, interest rates on offerings of new issues of certificates, and yields in current market prices of issues outstanding, month by month, from May, 1920, when Treasury sanctioned an open market on certificates of indebtedness, to July 29, 1921.....	554
Illustration of overlapped feature when a bank subscribes a quota of \$100,000 certificates of indebtedness every two weeks, with book credit form of payment.....	573
Market on certificates of indebtedness, April, 1917, to July 29, 1921.....	551-553
Money rates at New York.....	564-565
Yields on certificates of indebtedness May, 1920-July, 1921.....	554
Charts. (<i>See separate index.</i>)	
Check collections:	
Chart—Growth of check collection system of the Federal reserve banks....	536
Increased efficiency in collecting checks.....	523, 535-536
Through gold settlement fund.....	582, 583
Chicago Federal reserve bank:	
Earning assets, table of, 1920-21.....	430
Interest rates.....	316
Civil War chart, interest rates on commercial paper after Civil War and after World War.....	566
Clearing facilities of Federal reserve bank.....	523
Clearing house, control of rates on deposit balances.....	595-621, 789
Address of Walter E. Frew.....	610
Amendment to constitution as passed in March, 1918.....	604
Amendment to constitution of clearing house.....	596
Clearing-house procedure in London, when bank rate changes.....	596
Correspondence.....	599-621
Interest rate on deposits should not automatically vary with Federal reserve bank rate.....	616-620
Meeting of representatives of clearing houses in Chicago, January 23, 1920.....	620-621
Meeting of representatives of clearing houses in Washington, January 6, 1920.....	618-620
Method of accomplishing control of rate on deposit balances.....	596
Opinion of Charles E. Rushmore.....	611-612
Proposed amendment to constitution of clearing house.....	601
Rate to be paid in outlying possessions.....	598
Rulings on amendment to constitution.....	597, 622
Schedule of rates.....	597
Tables—	
Interest on time deposits as shown by the inquiry cards sent out by the committee on interest rates.....	606
Interest rates paid on checking accounts as shown by the inquiry cards sent out by the committee on interest rates (1917-18).....	607
Recapitulation of interest rates paid to depositors at the end of 1917 and the beginning of 1918, as shown by the inquiry cards sent out by the committee on interest rates.....	605-606
Cleveland Federal reserve bank:	
Earning assets, table of.....	429
Interest rates.....	316
Operations of.....	127, 136, 142
Commercial paper:	
Announcement of rate of 7 per cent.....	724
Charts—	
Discount rate of Federal reserve bank of New York and market rate on different types of paper.....	563
Discount rates of Federal reserve bank of New York and the market rate on commercial paper.....	561

Commercial papers—Continued.

Charts—Continued.

	Page.
Interest rates on commercial paper after Civil War and after World War	566
Market rates on principal types of paper at New York	567
Minimum discount rate of the Bank of England and market rate on 90-day bills in London, 1900-1920	561
Minimum discount rate of the Bank of England and market rate on 90-day bills in London, 1914-1921	559
England and France have no "commercial paper"	796
Rate has bearing upon Federal reserve bank rate	538
Tables—	
Discount rate of Federal reserve bank of New York on 60 and 90 day commercial paper and market rate on 4 to 6 months' commercial paper in New York	562
Market rate on 90-day bank bills in London and the minimum rate of the Bank of England	562
Money rates at New York	564-565

Comptroller of the Currency:

Copies of report of examination filed	71
Duties of	64, 72, 214, 234, 246, 253, 274
Editorial comment upon, in record, May 5, 1921	253
Examination of banks	66, 213, 220, 227, 245
Extract from report of 1920	261, 294
Form of questionnaire of February 25, 1921	189
Limitation of power of	202, 234, 253
Questionnaire to New York City banks, August, 1920	218
Table from records, showing assets of national banks, 1906 to 1920	384
To make recommendations	19
Williams appointed, John Skelton	4

Control:

Contrast between direct and rate control	766
Direct—	
Bank No. 6	705, 706, 709
Bank No. 16	707, 709
Circulars of Federal reserve bank of New York, exercising direct control	766-769
Control necessary, but financing legitimate business also necessary	708, 761
Direct action substituted for rate action	766
Educational meetings and talks	703-705
Impossible to exercise a minute control	697-698
Interviews with officers of large borrowing banks	705-707
Member bank relations department	703-705
Reasons for speculation in 1919 in spite of control	770-771
Study by directors of reports of banks wishing to borrow	709-710
Urging of creditors to practice moderation	710-711
Visits to member and nonmember banks	704
Impossible to control expansion or deflation by rate	772
Inadvisable to reduce Federal bank rate while market rates were higher	771
Money committee	543, 637-638, 665-682
Progressive rates	691-696
Rate control	453, 502, 514, 516, 531, 543
Rate advances and publications thereon	712-737
Rate increase in 1919 prevented by needs of Treasury	763
Rates paid on deposit balances during war (<i>see also</i> Clearing house)	595-621

Cost of living:

Tables—	
Cost of living figures, May, 1921, for individual items in New York City and the United States	741
Cost of living figures, May, 1921, reported for important centers by the Department of Labor	741

Cotton:

Conditions of industry	380, 389, 390, 399, 420, 776-779, 781, 810
Credit extended to industry	332, 395, 409
Foreign market for	395, 421
In 1921	421
Loan pool organized in November, 1914	390

	Page.
Cotton—Continued.	
Market for crop.....	408, 411, 421
Policy of Federal Reserve Board as to accommodations.....	394, 414
Prices—	
Drop in, before war.....	390
In 1912, 1913, and 1914.....	389
In 1920.....	379, 397, 412
Statement of.....	336
Production—	
Cost of.....	404, 411
Oversupply.....	394
Recommendations by American Cotton Association, September 15, 1920..	412
Ruling of Federal Reserve Board as to bank paper for.....	95, 96
Statement of Federal Reserve Board as to credit for industry.....	346
Yield in 1920.....	393
Credit:	
Ample credit for crop of 1921.....	631, 777
Competition of credit resulting in lower Federal reserve bank rate.....	508
Credit policy as shown by rate advances and publications.....	712-737
Credit released by decrease in street loans taken up by other classes of loans.	635
Curtaiment of.....	324, 340, 360, 366
Economy of credit not possible during war period.....	453
Element of expansion in increased efficiency of credit.....	523, 535-537
Extension of credit necessary during period of falling prices.....	502
Federal reserve system deals with credit, not prices....	622, 714, 734-735, 772, 777
For foreign trade.....	196, 297, 396
For 1919 and 1920.....	86
Frozen credits.....	196
Gold as basis of.....	531
Influence of reserve bank in relieving need for credit.....	518
Judicious increase of rate of Federal reserve bank to insure liquidation of stocks of backed-up goods.....	505
Less credit needed to finance crops when cost is lower.....	631
On paper on farm products owned by farmer and paper on products in hands of merchants and commission men.....	328
Policy as to wool crop.....	341, 386
Policy of Federal reserve system.....	482
Regulation necessary.....	340
Relation between bank rate and credit.....	624
Restricted in cotton States.....	97, 397
Statement of comptroller as to distribution of.....	304
To cotton industry.....	332, 347, 394, 403, 415
To country banks.....	290, 319
To farmers.....	372, 374, 376, 440, 698-703
To member banks.....	136, 142, 250, 276, 290, 319, 329, 366
Unrelated State banks cause poor diffusion of credit.....	785
Cuba. American currency legal tender in.....	526
Cunliffe report.....	489, 490, 622-624
Currency:	
Chart—Stock of gold in the United States, bank deposits, and paper money.	525
Currency policy of Federal Reserve Board.....	481
Currency system in England before the war.....	623
Exports of.....	524, 537
Gold settlement fund obviates shipment of currency.....	583
Imports of.....	524
Shipments of currency almost eliminated by Federal reserve system....	524, 537
D.	
Dallas Federal reserve bank:	
Basic line.....	322
Borrowings by.....	142
Cotton crop accommodations.....	346
Credit to be restricted.....	415
Earnings assets, table of.....	432
Excessive collateral required.....	128, 418
Operations of.....	136, 347, 415

	Page.
Dallas Federal reserve bank—Continued.	
Possible disestablishment of.....	227
Progressive interest rate applied.....	314, 322, 352
Deflation:	
As to wheat.....	333
Causes for deflation.....	773
Effect upon farmers.....	773-774
Impossible to stem it by rate action.....	772
Inevitable.....	718, 772
Period of.....	359
Policies.....	42, 124, 299, 336
Recommendations.....	294
Reply to Senate resolution asking for recommendations as to policy.....	338
Retail prices—	
Tables—	
Cost of living figures, May, 1921, for individual items in New York City and the United States.....	741
Cost of living figures, May, 1921, reported for important centers by the Department of Labor.....	741
Wholesale prices—	
Charts—	
Wholesale commodity prices in four countries.....	764
Wholesale commodity prices in the United States and England, 1790-1920.....	775
Wholesale prices and the cost of living in the United States.....	765
Wholesale prices of certain groups of commodities in the United States.....	498
Wholesale prices of 12 basic commodities in the United States.....	511
Deposits:	
Charts—	
Bank deposits in New York City and outside.....	636
Loans and deposits of New York City reporting banks, and interest rates in New York City.....	550
Loans and deposits of reporting banks in the United States compared with earning assets, note circulation, and member bank reserve deposits of all Federal reserve banks.....	641
Out of town funds with 52 New York City banks.....	644
Per cent change between May 4, 1920, and April 28, 1921, in loans and discounts, total deposits, and borrowings of member banks in agricultural, semiagricultural, and nonagricultural counties.....	650
Stock of gold in the United States, bank deposits, and paper money.....	525
Control of rates on deposit balances during war (<i>see also</i> Clearing house).....	595-621
Decline in deposits, all banks.....	640-649
Deposits of correspondents with New York City banks.....	639-649
Element in expansion, State bank deposits with member banks, and their use of Federal reserve notes as reserve.....	524
Element of time deposits in expansion.....	523, 534-535
Expansion from deposits.....	627
Expansion, 1914-1920.....	524
Gold deposits with member banks find their way to reserve banks.....	521
In agricultural and nonagricultural communities.....	650-663
Note issues of Federal reserve banks, conversion of deposits into.....	627
Ratio of notes to reserve deposits.....	522, 627, 703
Ratio of stock of gold to deposits.....	524, 538
Tables—	
Balances of out-of-town correspondents and street loans placed for their account, daily reporting banks, New York City, Jan. 3, 1919, to July 20, 1921.....	646
Capital and surplus; demand deposits; time deposits; loans and discounts; borrowings from Federal reserve bank, including rediscounts, bills payable, and a total; basic lines; and borrowings from correspondents, including rediscounts, bills payable, and a total of member banks in agricultural, semiagricultural and nonagricultural counties (1920-21) in entire country and 12 Federal reserve districts.....	653-663
Deposits, balances of out-of-town correspondents, total loans and investments, and borrowings of 5 large New York City banks on selected dates, January, 1920, to July, 1921.....	649

Deposits—Continued.

Tables—Continued.

	Page.
Deposits, loans, and investments, and borrowings of reporting member banks in New York City, and in the second Federal reserve district (last week of each month, 1919–July 20, 1921).....	643
Deposits of correspondents located outside of second district and total borrowings from Federal reserve banks, as of Nov. 15, 1920.....	639
Expansion under the national-banking system which could theoretically follow the deposit of gold in a national bank situated in a central reserve city.....	628
Increase or decrease in loans, borrowings, and deposits of member banks, 1920–21, in agricultural, semiagricultural, and nonagricultural counties.....	651
Percentage decline from maximum of loans and deposits of the reporting banks of all districts, and of New York City.....	642
Total deposits, Federal reserve bank of New York, Jan. 3, 1919, to July 20, 1921.....	746–747

E.

Earning assets:

All Federal reserve banks.—

Charts—

Earning assets, note circulation, and member bank reserve deposits, all Federal reserve banks.....	534
Loans and deposits of reporting banks in the United States compared with earning assets, note circulation, and member bank reserve deposits of all Federal reserve banks.....	641

Federal reserve bank of New York—

Charts—

Earning assets and rates of discount of the Federal reserve bank of New York.....	500
Earning assets, note circulation, and reserve deposits, Federal reserve bank of New York.....	506
Loans of Federal reserve bank did not decline with prices.....	500
Peak of loan account.....	505, 714
Table: Total earning assets, Federal reserve bank of New York, Jan. 3, 1919 to July 20, 1921.....	742–744

Earnings of Federal reserve banks no more than tax on note issues.....	719
Editorial from Manufacturers' Record, May 5, 1921.....	255
Educational meetings at Federal reserve bank of New York.....	703–705
Educational process.....	445

England:

Bank act of 1844.....	533
Bank rates.....	748–750
Branches of London Joint City and Midland Bank.....	786*

Charts—

Minimum discount rate of the Bank of England and market rate on 90-day bills in London (1900–1920).....	561
Minimum discount rate of the Bank of England and market rate on 90-day bills in London (1914–1921).....	559
Movement of representative foreign exchanges.....	803
Reserve percentages, Federal reserve banks and the Bank of England.....	591
Wholesale commodity prices in the United States and England (1790–1920).....	775

Clearing house procedure in London, when bank rate changes.....	596
Comparison of English banking system with Federal reserve system.....	532
Comparison of London money market with New York money market.....	516–517, 539, 637
Currency notes, reserve behind.....	433
Currency system before the war.....	623
Discount rate as compared with market rate.....	563–565
Effect of change of discount rate in England.....	623, 625
England has no "commercial paper".....	796
Financial conditions in.....	257, 258

Tables—

Market rate on 90-day bank bills in London and the minimum rate of the Bank of England.....	562
Official discount rates of other foreign state banks, in percentages, 1919–1921.....	750

	Page.
Essential and nonessential loans.....	715, 733, 736
Expansion:	
Agricultural countries.....	595
Certificates of indebtedness as instruments of expansion.....	452, 505
Chart—Reserve percentages Federal reserve banks before inter-bank accommodations.....	593
Deposits, from.....	627
Discount rate so adjusted as to avoid expansion.....	516
Effect of expansion in foreign countries.....	782
Effect of expansion upon Government debt.....	779-781, 784
Effect of expansion upon the different classes.....	783
Effect of raising Federal reserve bank rate upon expansion.....	502
Expansion during post-war period.....	450, 495-497
Expansion during war period.....	451-495
Expansion in other districts.....	515, 517-518
Gathering gold into Federal reserve banks to prevent expansion.....	450
Impossible to arrest expansion.....	772
Increase of circulating medium.....	453, 781-783
Note issues of Federal reserve bank, conversion of deposits into.....	627
Ratio of notes to reserve deposits.....	522, 627, 703
Risk of starting expansion again.....	780
Table—Expansion under the national banking system which could theoretically follow the deposit of gold in a national bank situated in a central reserve city.....	628
Under Federal reserve system and arising out of the war.....	520-538
Export of Federal reserve notes.....	594
Export trade:	
Foreign Government buying.....	809
Increase during prewar period.....	450
Reduction in export trade after armistice.....	495
F.	
Failures—Chart, percentage of firms failing to firms in business—annual rate..	512
Farm loan banks.....	694, 695, 789, 791
Farm loan board, possible source of further credit to agriculture.....	441
Federal foreign banking association.....	395
Federal reserve banks:	
Agricultural and live-stock paper held by. 78, 81, 84, 125, 153, 327, 424, 426, 434, 436	
Basic line for loans (<i>see also</i> Basic line).....	53, 168, 284, 321
Character of paper offered to.....	356, 386
Chart—Growth of check-collection system of Federal reserve banks.....	536
Check collection.....	523, 535-536, 582
Clearing facilities.....	523
Commercial paper held by.....	435
Credit distributed.....	304, 324, 330, 332, 343, 347, 360, 376, 403, 412
Credit to cotton industry.....	403, 404
Discount policy of the Federal reserve banks, O. M. W. Sprague.....	466
Earning assets of (<i>see also</i> Earning assets).....	87, 424, 427, 434
Examination of, by comptroller.....	249, 279, 330, 344, 355, 361, 365
Excessive collateral required.....	128, 157, 417, 418
Holdings in central reserve cities.....	50
Interest rates (<i>see also</i> Rates).....	163, 169, 305, 323, 415
Fixed by each bank.....	278
Letter, Gov. Harding of board to chairman Senate Committee Banking and Currency, December 16, 1920.....	381
Loans and discounts—	
In Federal reserve banks, December 26, 1919.....	57
Rediscounts, table of, 1920.....	304
Table of deposits and loans and discounts, 1906-1920.....	384
To member banks.....	134, 155, 260, 288, 302
Member banks stockholders.....	285
Organization and operations of.....	270, 288, 325
Policies and duties of.....	373, 404, 417

Federal reserve banks—Continued.

	Page.
Rediscounts—	
Peak reached.....	359, 361, 435
Percentages.....	417
Table of, 1920.....	304, 384
Reserve required.....	285, 291
Resources and liabilities, July 9, 1920.....	93
Resources and liabilities, July 6, 1921.....	91
Rulings of—	
On cotton paper (circular).....	95
On wool paper.....	343
Statement of.....	91, 93, 155, 261, 324, 424
Wire transfer operations.....	524, 537, 582
Federal Reserve Board:	
Basic line (<i>see also</i> Basic line).....	53, 168, 318
Definition of.....	284
Collateral not determined by.....	283
Conference with cotton industry representatives, September 15, 1920.....	411
Credit accommodations asked for by cotton interests.....	412
Editorial comment upon <i>Manufacturers' Record</i> , May 5, 1921.....	253
Expansion of jurisdiction should be limited.....	439
Federal reserve policy, A. C. Miller.....	478-494
Credit policy.....	482
Currency policy.....	481
Gold policy.....	479
Interest rates (<i>see also</i> Rates and Money rates).....	132,
140, 228, 285, 307, 311, 318, 363, 383	
Fixed by Federal Reserve Board.....	273
Jurisdiction of.....	24, 39, 69, 253, 271, 367
Organization and powers of.....	270, 271, 276, 280, 282, 343, 363, 388, 417
Policies and duties of.....	46, 74, 113, 130, 233, 270, 271, 299,
326, 333, 341, 344, 362, 365, 369, 373, 377, 382, 394, 397	
Policy of the Federal Reserve Board, R. C. Leffingwell.....	473-477
Reply to Senate resolution, May, 1920, asking for policy as to deflation.....	338
Reserves required.....	285, 291, 345
Statements of—	
Agricultural paper held, 1920-1921.....	425
As to credits to wool industry.....	343
Credit available, October 17, 1920.....	374
Credits to cotton industry.....	346
December 26, 1919.....	57
Earning assets, 1920-21.....	424
Extension of credit to farmers.....	372
For press, July 20, 1921.....	99
Letter from Governor to chairman of the board, Federal reserve bank of New York.....	100
Loans and discounts, November 15, 1920.....	302
Press statement in reply to Senate resolution, May, 1920.....	365
Report of subcommittee answering comptroller's letters of February 21 and 28, 1921.....	219
Telegraphic reply to farmers as to credit.....	373
To press at close of cotton conference.....	413
Telegram from farmers relative to credit conditions.....	372
Federal reserve notes:	
Charts—	
Earning assets, note circulation, and member bank reserve deposits, all Federal reserve banks.....	534
Earning assets, note circulation, and reserve deposits, Federal Re- serve Bank of New York.....	506
Loans and deposits of reporting banks in the United States compared with earning assets, note circulation, and member bank reserve deposits of all Federal reserve banks.....	641
Expansion through conversion of deposits into note issues of Federal reserve bank.....	627
Exports of Federal reserve notes.....	524
Imported gold not exchanged for Federal reserve notes.....	526
Imports of Federal reserve notes.....	524

	Page.
Federal reserve notes—Continued.	
Not reserves in vaults of member banks.....	450
Ratio of notes to reserve deposits.....	522, 627, 703
Reserve necessary against Federal reserve notes in circulation.....	521
State bank reserves, used as.....	524, 537
Table—Total reserves and Federal reserve notes in circulation, Federal reserve Bank of New York, January 3, 1919, to July 20, 1921.....	744-745
Federal reserve system:	
Administration of.....	35, 300, 371, 418, 438
Comparison with English banking system.....	532
Credit assistance.....	371
Editorial comment upon, in <i>Manufacturers' Record</i> , May 5, 1921.....	253
Indorsed by John Skelton Williams.....	5
Interest rates (<i>see also</i> Rates and Money rates).....	315
Jurisdiction of.....	24, 438
Organized by act of Congress.....	270
Periods since organization.....	449-518
1. Prewar period, 1914-April, 1917.....	450
2. War period of expansion, April, 1917-August, 1918.....	450, 451-495
3. Post-war period of expansion, speculation, and extravagance, August, 1918-summer of 1920.....	450, 495-497
4. Period of declining prices and liquidation, summer of 1920-early winter of 1920.....	450, 497-505
5. Period of readjustment and recovery, early winter of 1920... ..	451, 505-518
Reserves required.....	292
Sentiment toward, in South.....	401
Should not be expanded.....	439
Supported the war.....	20
Transactions by.....	62
Financial periods since organization of Federal reserve system (<i>see also</i> Federal reserve system).....	449-518
Financial statements in connection with member bank rediscounts.....	730
Fiscal agency functions:	
Authority for.....	503, 672
Certificates of indebtedness (<i>see also</i> Certificates of indebtedness).....	460,
509, 539, 543, 551-560, 563-581	
Federal Reserve Bank of New York as fiscal agent for United States in con- nection with certificates of indebtedness.....	554-556
Relation with call money market.....	543
Tables—	
Gold settlement fund transactions, January to June, inclusive, 1920..	584
Gold settlement fund transactions, July to December, inclusive, 1920..	585
Gold settlement fund transactions, January 1- July 20, 1921.....	586
Transfer of funds for Government through gold settlement fund.....	583-586
Treasury and Federal reserve bank policies interdependent during war financing period.....	454
Flow of funds:	
Chart—Out of town funds with 52 New York City banks.....	644
Effect of change in bank rate in England upon flow of funds.....	625
Figures furnished by Federal reserve system.....	582
Gold settlement fund.....	582-586
Inter-Federal reserve bank transactions.....	584-595
Loans by New York City banks to correspondents.....	637-649, 663-664
Tables—	
Deposits, balances of out of town correspondents, total loans and in- vestments, and borrowings of 5 large New York City banks on selected dates, January, 1920, to July, 1921.....	649
Deposits of correspondents located outside of second district and total borrowings from Federal reserve bank, as of November 15, 1920... ..	639
Loans to correspondents located outside district of loans and invest- ments of daily reporting banks, as of November 15, 1920.....	638
Out of town loans and balances of out of town correspondents, 5 large New York City banks, February 14, 1921.....	649
Wire transfers—settling figures—September 1-October 22, 1920, of 6 banks in New York City.....	740
Wire transfers 6 large New York City banks.....	740

	Page.
Foreign bank rates.....	747-750
Tables—	
Official discount rates of central banks, in percentages, 1919 to 1921..	748
Official discount rates of other foreign State banks, in percentages, 1919 to 1921.....	750
Foreign exchange:	
Causes of fluctuation.....	806
Chart—Movement of representative foreign exchanges.....	803
Closing of foreign markets.....	802
Causes, transportation.....	803
Difficulty of getting insurance during war.....	803
Violent fluctuations of exchange.....	803
German reparations payments.....	807-811
Gold point of exchange.....	806
Payment of interest on foreign debts instead of buying goods.....	810, 811, 812
Statement of present situation.....	809-810
Foreign trade, credit for.....	197, 295, 396
France, bank rates.....	748-750
Chart—Movement of representative foreign exchanges.....	803
Table—Official discount rates of other foreign State banks, in percentages, 1919 to 1921.....	750
Frew, Walter E., address at meeting of Clearing House Association, March 4, 1918.....	610
Frozen credits.....	196, 368

G.

Germany:	
Bank rates.....	748-750
Chart—Movement of representatives foreign exchanges.....	803
Financial conditions in.....	258
German reparations payments.....	807-811
Inflation in Germany.....	782-783
Money worth.....	292
Table—Official discount rates of other foreign state banks, in percentages, 1919 to 1921.....	750
Gold:	
Basis for credit.....	531
Charts—Reserve percentages of the Federal reserve system, with and without gold accessions.....	759
Reserves of the Federal reserve bank of New York.....	760
Stock of gold in the United States, bank deposits, and paper money..	525
Deposit in Federal reserve banks.....	525-527
Effect of discount rate on movement of gold in England.....	623
Element in expansion.....	521
Expansion from, under national banking system.....	528
Federal reserve system, gold in.....	526
Gathering gold into Federal reserve banks to prevent expansion.....	450
Gold from foreign countries.....	806
Gold point.....	806
Gold policy of Federal reserve system.....	479
Held by central banks of world.....	527
Imports from Europe.....	526
Increase in country, 1914-1920.....	524, 525, 538
Percentage of world's gold held by United States.....	526
Ratio to deposits.....	524, 538
Reserve behind English currency notes.....	533
Table—Total reserves and Federal Reserve notes in circulation, Federal Reserve Bank of New York, January 3, 1919, to July 20, 1921.....	744-745
Gold settlement fund:	
Amount, August, 1921.....	582
Authority for.....	582
Description.....	582
Information given by gold settlement fund transactions.....	582-583
Settlement through.....	582-583

Gold settlement fund—Continued.

Tables—	Page.
Gold settlement fund transactions, January to June, inclusive, 1920..	584
Gold settlement fund transactions, July to December, inclusive, 1920..	585
Gold settlement fund transactions, January 1–July 20, 1921.....	586
Government borrowings.....	293
Government deposits.....	801–802
Government expenditures:	
During war.....	451
Tables—	
Classified disbursements of the United States Government, exclusive of the principal of the public debt, by months, from April 6, 1917, to June 30, 1921, as published in daily Treasury statements.....	690
Classified receipts of the United States Government, exclusive of the principal of the public debt, by months, from April 6, 1917, to June 30, 1921, as published in daily Treasury statements.....	688–689
Preliminary financial statement of the United States Government for the period from April 6, 1917, to June 30, 1921.....	688
Greenbacks, reserve behind.....	583

H.

Harding, W. P. G., governor Federal Reserve Board:

Extract from speech at Cleveland.....	349
Letter to Hon. E. D. Ball, Acting Secretary of Agriculture, July 18, 1920..	397
Letter to chairman, Federal reserve bank of Dallas, April 30, 1920.....	415
Letter to Senator George P. McLean, chairman Senate Committee on Banking and Currency (discount rate), December 16, 1920.....	381
Letter to J. S. Wannamaker (policies of board).....	231
Letter to J. S. Wannamaker (American Cotton Association), June 24, 1920..	395
Letter to J. S. Wannamaker, July 3, 1920.....	395
Letter to J. S. Wannamaker, July 12, 1920.....	396
Letter to J. S. Wannamaker, July 21, 1920.....	397
Letter to J. S. Wannamaker (conference of cotton association), July 30, 1920.....	402
Letter to J. S. Wannamaker, August 4, 1920.....	402
Letter to J. S. Wannamaker, September 10, 1920.....	410
Letter to J. S. Wannamaker, September 10, 1920.....	413
Recommends certain legislation.....	440
Statement of, before commission.....	269–446
Statement of, September 16, 1920.....	294
Telegrams to J. S. Wannamaker, August 24, 1920.....	403
High wages after war cause of speculation and expansion.....	770–771

I.

Individuals, allusions to (Gov. Strong's testimony): Sir Charles Addis, 624; James S. Alexander, 673; Prof. Bachi, 764; Walter Bagehot, 479 note, 513; George F. Baker, 673; Sir John Bradbury, 624; G. C. Cassels, 624; Grover Cleveland, 533; Lord (unliffe, 489 note, 624; R. P. Falkner, 775; Henry Ford, 595; Walter E. Frew, 673; E. A. Goldenweiser, 486 note, W. H. N. Goschen, 624; A. H. Hansen, 775; Herbert Hoover, 791; Lord Inchcape, 624; W. Stanley Jevons, 775; C. H. Juergens, 775; E. W. Kemmerer, 541; Wilford I. King, 451; R. C. Leflingwell, 454, 473; F. R. Macauley, 566; William G. McAdoo, 574, 673; Gates W. McGarrath, 673; Ray Morris, 555, 565, 571, 575–577; W. M. Persons, 522, 529, 530, 701; A. C. Pigou, 624; George E. Roberts, 539; Charles E. Rushmore, 611, 612; Charles H. Sabin, 673; O. M. W. Sprague, 454, 466, 473, 476, 477, 479, 485 note, 486 note, 487 note, 488 note; G. F. Stewart, 624; Frank A. Vanderlip, 673; James W. Wallace, 673; Albert H. Wiggin, 673; Woodrow Wilson, 483 note; Hartley Withers, 459 note, 462.

Import of Federal reserve notes..... 524

Inter-Federal reserve bank transactions:

(Charts—

Accommodation between Federal reserve bank of New York and other Federal reserve banks.....	592
Reserve percentages of Federal reserve bank of New York and of the entire system.....	587

Inter-Federal reserve bank transactions—Continued.

Charts—Continued.	Page.
Reserve percentages of the New York Federal reserve bank before and after interbank borrowing.....	588
Offset to loss of funds.....	586
Rediscounts, Federal reserve bank of New York with other Federal reserve banks.....	584
Reserve percentage of 12 banks for 1920 and 1921.....	594
Sale of bills and acceptances.....	585
Tables—	
Gold settlement fund transactions, January to June, inclusive, 1920..	584
Gold settlement fund transactions, July to December, inclusive, 1920..	585
Gold settlement fund transactions, January 1–July 20, 1921.....	586
Interbank accommodations between Federal reserve bank of New York and other Federal reserve banks, 1919–21.....	589–591
Reserve percentages of Federal reserve banks of New York before and after interbank accommodations and reserve percentages of Federal reserve system, 1919–July, 1921.....	588–589
Interviews with officers of large borrowing banks.....	705–707

J.

Japan:

Bank rates.....	748–749
Deflation in Japan.....	718
Discount rates in Japan.....	257
Financial conditions in Japan.....	257, 295
First signs of break in prices.....	496
Silk market, break in.....	361
Table—Official discount rates of central banks, in percentages, 1919–1921..	748

K.

Kansas City Federal reserve bank:

Assistance to wool industry.....	386
Cotton-crop accommodations.....	347
Earning assets, table of, 1920–21.....	431
Operations of.....	136, 142, 353
Progressive interest rate applied.....	173, 314, 351
Kitson, Arthur, statement of, as to financial conditions in England and Germany.....	257, 259

L.

Leffingwell, R. C.:

Address—The policy of the Federal Reserve Board.....	473–477
Address—The Treasury's war problem—Treasury methods of financing the war in relation to inflation.....	454–465

Liquidation:

First appeared in New York.....	717
In agricultural and nonagricultural communities, May 4, 1920–April 28, 1921.....	650–663
Stocks in liquidating market pass from weak to strong hands.....	630, 631
Street loans.....	629, 632, 635
Live-stock credit, paper held by Federal reserve banks..	153, 266, 303, 328, 424, 426, 434

Loans, discounts, and investments:

Federal reserve bank of New York. (See Earning assets.)

Member banks—

Charts—

Bank loans and prices in the United States.....	499
Loans and deposits of New York City reporting banks, and interest rates in New York City.....	550
Loans and deposits of reporting banks in the United States compared with earning assets, note circulation, and member bank reserve deposits of all Federal reserve banks.....	641
Loans of reporting banks in New York City and the United States..	635
Per cent change between May 4, 1920, and April 28, 1921, in loans and discounts, total deposits, and borrowings of member banks in agricultural, semiagricultural, and nonagricultural counties..	650

Loans, discounts, and investments—Continued.

Member banks—Continued.

	Page.
Charts—Continued.	
Expansion, 1914-1920.....	524, 538
In agricultural and nonagricultural communities May 4, 1920- April 28, 1921.....	650-663
Loans by New York City banks to correspondents.....	637
Peak of loans of reporting banks, October 15, 1920.....	629
Procedure of member bank when it is overloaned.....	519
Rates at which banks make loans has bearing on Federal reserve bank rate.....	547
Relation of loans of a bank to its reserves.....	518
Tables—	
Capital and surplus; demand deposits; time deposits; loans and discounts; borrowings from Federal reserve bank, including redis- counts, bills payable, and a total; basic lines; and borrowings from correspondents, including rediscounts, bills payable, and a total of member banks in agricultural, semiagricultural, and nonagricultural counties (1920-21) in entire country and 12 Federal reserve districts.....	653-663
Deposits, balances of out of town correspondents, total loans and investments, and borrowings of five large New York City banks on selected dates, January, 1920, to July, 1921.....	649
Deposits, loans, and investments, and borrowings of reporting member banks in New York City, and in the second Federal reserve district (last week of each month, 1919-July 20, 1921)..	643
Increase or decrease in loans and in borrowings from Federal re- serve banks by districts, 1920-21, in agricultural, semiagricul- tural, and nonagricultural counties.....	652
Increase or decrease in loans, borrowings, and deposits of member banks, 1920-21, in agricultural, semiagricultural, and non- agricultural counties.....	651
Loans and discounts of member banks in the several Federal reserve districts, 1920-21, by agricultural, semiagricultural and nonagricultural counties.....	653
Out of town loans and balances of out of town correspondents, 5 large New York City banks, February 14, 1921.....	649
Percentage decline from maximum of loans and deposits of the reporting banks of all districts and of New York City.....	642
Loan of \$130,000,000 by Federal reserve bank of New York.....	57, 61, 705-709

M.

Manufacturers' Record, editorial from, May 5, 1921.....	255
McKenna, Reginald, of England, statement of, as to financial conditions in England.....	258
Meetings at Federal reserve bank of New York.....	703-705
Member Bank Relations Department:	
Educational meetings and talks.....	703-705
Visits to member and nonmember banks.....	704
Member banks:	
Charts—	
Bank deposits in New York City and outside.....	636
Earning assets, note circulation, and member bank reserve deposits, all Federal reserve banks.....	534
Earning assets, note circulation, and reserve deposits, Federal reserve bank of New York.....	506
Loans and deposits of reporting banks in the United States compared with earning assets, note circulation, and member bank reserve deposits of all Federal reserve banks.....	641
Comparison of all loans of reporting member banks with street loans....	629, 632
Element in expansion.....	522-523
In agricultural and nonagricultural communities, May 4, 1920 to April 28, 1921.....	650-663
Number.....	537, 663
Percentage of resources of member banks to those of nonmember banks in second district.....	640

	Page.
Member banks—Continued.	
Relation to Federal reserve bank.....	518-519
Reserves all with Federal reserve banks.....	527
Tables—	
Deposits, loans and investments, and borrowings of reporting member banks in New York City, and in the second Federal reserve district (last week of each month, 1919-July 20, 1921).....	643
Percentage decline from maximum of loans and deposits of the reporting banks of all districts, and of New York City.....	642
Miller, A. C., address, Federal reserve policy.....	478-494
Minneapolis Federal reserve bank:	
Earning assets, table of, 1920-21.....	431
Interest rate.....	315
Operations of.....	136, 142
Money committee:	
Amount of fund for use in stock exchange.....	666-670, 673
Attitude of committee.....	682
Attitude of public toward money committee.....	667, 672, 681
Beginnings of speculation, August, 1918.....	668, 669, 674
Change of policy of money committee, August, 1918.....	668, 669, 674, 681
Control of stock exchange loans.....	497, 543
Correspondence—	
Letter to President Noble of stock exchange, September 5, 1918.....	675
Letter from President Noble, November 30, 1918.....	678
Letter to President Noble, December 4, 1918.....	678
Daily reports of loans to money committee.....	667, 673, 675, 676
Date of commencing exercise of control.....	668, 669
Dates of money committee, middle of September, 1917-latter part of January, 1919.....	673-681
Efforts to curb speculation.....	676, 677
End of control of money committee.....	678-682
Establishment of fund for use in stock exchange.....	666
History.....	665-682
Increase of margin to keep down volume of stock exchange loans.....	676-678
Maturity of dates of borrowings shortened.....	673, 674
Members of money committee.....	673, 675
Money committee banks still cooperating with Federal Reserve Bank of New York.....	637-638
Necessity for existence of a security market.....	668-671
Needs of Treasury.....	666, 668, 670-673
Officers of stock exchange advised action.....	666
Policies of committee.....	666, 668, 669, 674, 681, 688
Reasons for coming to relief of stock exchange.....	668-671
Statements to press.....	673, 674, 676, 678, 679, 680
Money market at New York:	
Commercial paper.....	538
Compared with London market.....	516-517, 539, 637
Influence of call money market on attraction of funds to New York.....	595
Money committee.....	543, 637-638, 665-682
New York money market center for country.....	684
Morris, Ray, address; certificates of indebtedness, July 16, 1918.....	571

N.

Napoleonic wars: Chart—Wholesale commodity prices in the United States and England, 1790 to 1920.....	775
National banking system: Table—Expansion under the National banking system which could theoretically follow the deposit of gold in a national bank situated in a central reserve city.....	628
National banks:	
Failures of.....	11
Loans and discounts.....	16
Money loaned by all banks in New York City to borrowers outside Eastern States, Jan. 31, 1920.....	191
Resources of.....	14
Table of deposits, loans and discounts, rediscounts and bills payable, 1906 to 1920.....	384

	Page.
New York Federal reserve bank:	
Bills discounted and acceptances sold to other reserve banks, 1920-21,	
by weeks.....	210, 241
Credit to particular bank.....	200, 242
Earning assets, table of.....	427
Examination of, by comptroller.....	215, 227
Funds in, during 1920.....	194, 241
Interest rates (<i>see also Rates</i>).....	20, 23, 103, 111, 206, 312, 316
Letter from comptroller to Gov. Harding of Fed. Reserve Board, relative	
to, February 19, 1921.....	183
Loans and discounts.....	57, 62, 184, 142
Operations of.....	62, 75, 136, 206, 214, 235
Relation to conditions in other New York banks.....	218, 242
New York money market. (<i>See Money market at New York.</i>)	
Nonmember banks:	
Normal rate of increase of banks.....	538
Benefits of Federal reserve system.....	697, 702-703
Deposits of State banks with member banks.....	524
Federal reserve notes as reserves.....	537, 627
Number.....	537
Percentage of resources of member to those of nonmember banks in sec-	
ond district.....	640
Percentage of total banking resources.....	537
Unrelated banks cause poor diffusion of credit.....	785
P.	
Philadelphia Federal Reserve Bank:	
Earning assets, table of, 1920-21.....	428
Interest rates.....	316
President of the United States, statement of, as to cause for depression, July 12,	
1921.....	337
Prices:	
Break in.....	361
Charts—	
Bank loans and prices in the United States.....	499
Prices of 12 basic commodities in the United States.....	511
Wholesale commodity prices in the United States and England, 1790	
to 1920.....	775
Cycle of declining prices.....	774-775
Discount rate and high-price levels.....	494
First signs of break, in Japan.....	496
Increase of circulating medium.....	453
No direct concern of Federal reserve system.....	622, 714, 734-735, 772, 776
Of cotton.....	379
Peak, May, 1920.....	501
Policy of Federal reserve bank during speculation and rising prices.....	497
Readjustment of prices in present period.....	505
Relation of bank rate to prices in England.....	623-624
Trend of.....	364, 378
World collapse.....	364
R.	
Rates:	
Advance of rates in 1919.....	712
Call rate.....	117, 312, 336
Call rates:	
Article, George E. Roberts.....	540
Article, Wall Street Journal.....	541
Central banks.....	747-750
Charts—	
Call and time loan rates in New York City.....	567
Discount rate of Federal reserve bank of New York, and market rate	
on different types of paper.....	563
Discount rates of Federal reserve bank of New York, and the market	
rate on commercial paper.....	561

Rates—Continued.

Charts—Continued.

	Page.
Earning assets and rates of discount of the Federal reserve bank of New York.....	500
Interest rate of certificates of indebtedness at issuance, and rates of Federal reserve bank of New York on advances secured by certificates of indebtedness.....	559
Interest rates on commercial paper after Civil War and after World War.....	566
Loans and deposits of New York City reporting banks and interest rates in New York City.....	550
Market rates on principal types of paper at New York.....	567
Minimum discount rate of Bank of England and market rate on 90-day bills in London, 1900-1920.....	561
Minimum discount rate of Bank of England and market rate on 90-day bills in London, 1914-1921.....	559
Open-market rates for certificates of indebtedness and rates of Federal reserve bank of New York on advances.....	560
Street loans of New York City banks and the call loan rate.....	545
Street loans of New York City banks for their own account and for the account of correspondents, and the call loan rate.....	546
Clearing-house procedure in London when bank rate changes.....	596
Control by rate. (<i>See</i> Control.)	
Control of call-money rate necessary to market certificates of indebtedness..	543
Control of rates on deposit balances during war (<i>see also</i> Clearing house).....	595-
	621, 789
Discount rate as compared with market rate.....	563
Discount rates and high price levels.....	494
Discount rate so adjusted as to avoid expansion and speculation.....	514-516
Easier rates for money symptom of recovery.....	509
Effect of change of discount rate in England.....	623, 625
Effect of Federal reserve rate above legal rate.....	720-722
Effect of high rates in time of strain.....	513
Effect of high rates on attracting money to New York.....	542
Effect of rate on borrowings of member banks.....	506
Effect of reserve ratio on.....	415
Foreign bank rates.....	747-750
Impossible to control expansion or deflation by rate action.....	772
In all banks.....	28, 30, 39, 207, 228, 314, 366
Influence of discount rates upon flow of credit between nations.....	752
In leading countries.....	366
In New York City.....	20, 23, 103, 111, 113, 117, 121, 186, 312
In various States.....	382
Judicious increase of rate of Federal reserve bank to insure liquidation of stocks of backed-up goods.....	506
Market rates and discount rate.....	507
New York money market. (<i>See</i> Money market at New York.)	
Peak.....	506
Policy to be followed by Federal reserve bank in establishing rate.....	581, 622
Preferential rates.....	691, 696
Progressive rates:	
Application of.....	24, 38, 163, 168, 285, 311, 316, 318, 323, 351
Arguments against.....	691, 695-696
Attitude of Federal reserve bank of New York toward.....	691, 695
Effect on farmer if term determined rate.....	692
Long time required by farmer.....	693-695
Provided by amendment to Federal reserve act.....	274
Term of a loan should determine rate.....	692
Urged by comptroller to suspend.....	132, 163, 175
Raising of rates justified to curb speculation.....	502
Rate increase in 1919 prevented by needs of Treasury.....	763
Rate not kept up to make profit.....	719, 721
Rate of Federal reserve bank of New York could not be lowered in 1920, as loan account was rising and reserves low.....	714-715, 716
Rate of return on securities governed by natural laws.....	504, 670
Rate policy not dependent on prices.....	714
Rates of banks to customers higher than rate of reserve banks.....	625

Rates—Continued.

	Page.
Rates of interest on collateral call loans: Senate document.....	628, 629, 636
Rates on Liberty and Victory loans.....	503-504, 670, 671
Rediscount rates, application of.....	301, 305, 307, 315, 383
Reduction of rates not justified.....	718-719
Relation of bank rate to prices in England.....	623-624
Relation of call-money rate to volume of stock-exchange loans.....	545
Reserve-bank rates reflection rather than cause of what is transpiring.....	622
Tables—	
Average rates of interest, call-loan renewal rate, and time loans mixed collateral, New York City.....	540
Comparison of interest rates on issues of certificates of indebtedness outstanding, interest rates on offerings of new issues of certificates, and yields in current market prices of issues outstanding, month by month, from May, 1920, when Treasury sanctioned an open market on certificates of indebtedness, to July 29, 1921.....	554
Discount rate of Federal reserve bank of New York on 60 and 90 day commercial paper and market rate on 4 to 6 months' commercial paper in New York.....	562
Market rate on 90-day bank bills in London and the minimum rate of the Bank of England.....	562
Money rates at New York.....	564-565
Official discount rates of central banks, in percentages, 1919-21.....	748
Official discount rates of other foreign state banks, in percentages, 1919-21.....	750
Rates of discount effective at the Federal reserve bank of New York in 1919, 1920, and 1921.....	751
Report of discount and interest rates as shown by actual transactions of 5 banks of New York City; 30-day periods ending Aug. 15, 1918, Oct. 15, 1919, Oct. 15, 1920, Jan. 15, 1921, and June 15, 1921.....	548, 549
To Federal reserve member banks.....	22, 301, 347, 381
Ratio—Bearing of reserve ratio on interest rates.....	415
Redemption fund, 5 per cent:.....	583
Tables—	
Gold settlement fund transactions, January to June, inclusive, 1920..	584
Gold settlement fund transactions, July to December, inclusive, 1920..	585
Gold settlement fund transactions, January 1-July 20, 1921.....	586
Reserve percentages:	
Charts—	
Reserve percentages, Federal reserve banks and the Bank of England..	591
Reserve percentages Federal reserve banks before interbank accommodations.....	593
Reserve percentages of Federal reserve bank of New York and the entire system.....	587
Reserve percentages of the Federal reserve system, with and without gold accessions.....	759
Reserve percentages of the New York Federal reserve bank before and after interbank borrowing.....	588
Tables—	
Interbank accommodations between Federal reserve bank of New York and other Federal reserve banks.....	589-591
Reserve percentages of Federal Reserve Bank of New York before and after interbank accommodations and reserve percentages of Federal reserve system.....	588-589
Twelve Federal Reserve Banks for 1920 and 1921.....	594
Reserves:	
Borrowing of member bank to make good deficit reserve.....	506, 698, 699
Charts—	
Loans and deposits of reporting member banks in the United States compared with earning assets, note circulation, and member bank reserve deposits of all Federal Reserve Banks.....	641
Reserves of the Federal Reserve Bank of New York.....	760
Element in expansion of modified reserve requirements.....	521-522
Member banks' reserves all with Federal Reserve Banks.....	527
Penalty for member bank impairing reserves.....	519
Pyramided reserves.....	522, 529
Relation of loans of a bank to its reserves.....	518

Reserves—Continued.

Tables—	Page.
Expansion under the national banking system which could theoretically follow the deposit of gold in a national bank situated in a central reserve city.....	628
Total reserves and Federal reserve notes in circulation, Federal Reserve Bank of New York, January 3, 1919, to July 20, 1921....	744-745
Under amendment to Federal reserve act, June 21, 1917.....	522, 528
Under national-bank act.....	521, 528
Under original Federal reserve act, November 16, 1914.....	522, 528
Resolution regarding agricultural inquiry adopted by the directors of the Federal Reserve Bank of New York, August 3, 1921.....	447
Retail establishments reporting to Federal Reserve Bank of New York.....	510
Retail prices, tables:	
Cost of living figures, May, 1921, for individual items in New York City and the United States.....	741
Cost of living figures, May, 1921, reported for important centers by the Department of Labor.....	741
Richmond Federal Reserve Bank:	
Circular announcement.....	96
Cotton-crop accommodations.....	347, 422
Earning assets, table of.....	429
Interest rates.....	316
Letter of governor to governor of Federal Reserve Board (policy as to cotton).....	406
Monthly letter, extract from, August, 1920.....	409
Operations of.....	136, 142, 210, 324, 325
Possibility of removal from Richmond.....	227
Ruling on financing cotton crop, 1921.....	95
Statement of.....	98
Statement of deputy governor of.....	331
Roberts, George E., article on call rates.....	540
Rushmore, Charles E., opinion on amendment to constitution of clearing house.....	611
S.	
St. Louis Federal Reserve Bank:	
Cotton-crop accommodations.....	347
Earning assets, table of, 1920-21.....	431
Interest rates.....	315
Operations of.....	136, 142
San Francisco Federal Reserve Bank:	
Earning assets, table of, 1920-21.....	433
Interest rates.....	316
Operations of.....	325
Saving power of people of United States.....	451
Scope of agricultural inquiry, quotation from resolution appointing commission.....	447
Seay, Gov. George J. (Richmond Federal Reserve Bank), letter to Gov. Harding (Federal Reserve Board), September 4, 1920.....	406
Secretary of the Treasury:	
Letter to Senator Weller of Maryland (discount rates) July 30, 1921.....	383
Statement (agricultural credit), September 27, 1920.....	376
Senate document, rates of interest on collateral call loans.....	628, 629, 636
Silk shirts and bubbles, address of John Skelton Williams.....	36
Speculation:	
Adjustment of rates to prevent speculation.....	516
During life of money committee.....	667, 674
Effect of money committee was to curb speculation.....	668
Impossible to stop rage of speculation after war.....	502
Money committee.....	543, 637-638, 665-682
Postwar period one of speculation.....	450, 495-497
Reasons for wave of speculation after war.....	769-771
Speculation of various kinds follows recovery.....	514
Sprague, O. M. W., address, The discount policy of the Federal reserve banks..	466
State banks. (See Nonmember banks.)	

Stock exchange loans:

	Page.
Charts—	
Call and time loan rates in New York City.....	567
Loans of reporting banks in New York City and the United States...	635
Loans of reporting banks in the United States and street loans of New York City banks.....	626
Market rates on principal types of paper at New York.....	567
Out of town funds with 52 New York City banks.....	644
Street loans of 52 New York City banks.....	545
Street loans of New York City banks and the call loan rate.....	545
Street loans of New York City banks for their own account and for the account of correspondents, and the call loan rate.....	546
Comparison of stock exchange loans with all loans.....	629, 632, 635
Effect of high rates on attracting money to New York.....	542, 630, 644
Effect on country of curtailment of loans in call money market.....	547
Importance of New York stock exchange.....	684-687
Improvement in stock exchange methods.....	637
Influence of call money market on attraction of funds to New York.....	585
Loans for correspondents by New York City banks.....	644-649, 664
Money committees.....	543, 637-638, 665-682
Not eligible for rediscount at Federal reserve bank.....	542, 637
Peak, November 3, 1919.....	545, 546, 629, 633, 664
Rate control necessary in order to market certificates of indebtedness..	543, 666
Rate has bearing on Federal reserve bank rate.....	539
Relation of call money rate to volume of loans.....	545, 644
Relation of Federal reserve bank of New York to call money market.	546, 547, 637
Relation with fiscal agency function.....	543
Reports from borrowers and lenders.....	544
Roberts, George E., article on call rates.....	540
Senate document: Rates of interest on collateral call loans.....	628, 629, 636
Stocks in liquidating market pass from weak to strong hands.....	630, 631
Tables—	
Average rates of interest, call loan renewal rate, and time loans mixed collateral, New York City.....	540
Balances of out of town correspondents and street loans placed for their account, daily reporting banks, New York City, January 3, 1919, to July 20, 1921.....	646
Money rates at New York.....	564-565
Street loans, New York City daily reporting banks, January 3, 1919, to July 20, 1921.....	647
Volume.....	546, 632, 684
Wall Street Journal, article from.....	541
Street loans. (<i>See</i> Stock exchange loans and rates.)	
Strong, Benjamin, governor Federal reserve bank of New York:	
Letter to Gov. Harding, March 16, 1921.....	237
Statement of, before commission.....	447-814
Suggestions of Gov. Strong:	
Branch banking within limited areas.....	786
Entry of State banks into system facilitated.....	787
System of credit to take care of long-time agricultural loans.....	790-800
Competition with national banks.....	791, 793, 795
Investment funds, rather than deposit funds, to be used for this pur- pose.....	792
Paper under this system could go through land banks.....	790-793
Such paper discounted at Federal reserve banks when nearing matur- ity.....	790, 792, 793, 799
Symptoms of recovery:	
Activity increasing in various industries.....	509
Easier rates for money.....	509
Further phases to follow.....	514
Rise of security values.....	509
Wholesale consumption and production increasing.....	512
Wholesale prices tend to stabilization.....	511

T.

Tables. (See separate index.)

Treasury policies:	Page.
Borrowing of Treasury to meet war expenditures.....	451
Federal reserve banks fiscal agents of the Treasury.....	503
Rates on Liberty and Victory loans.....	503-504, 670-671
Treasury and Federal reserve bank policies interdependent.....	454
Treasury needs controlled during war.....	454-465, 495, 543
Treasury's war problem—methods of financing the war in relation to in- flation: Address by Hon. R. C. Leffingwell.....	454-465
Treman, R. H., address, certificates of indebtedness, July 16, 1918.....	566, 575

U.

Unemployment and employment:	
Department of Labor reports on employment, May and June, 1921.....	510
Unemployment feared from returning soldiers to civil life.....	495

W.

Wall Street Journal:	
Article; call rates.....	541
Quotation from.....	364
Wannamaker, J. S.:	
Letter to Federal reserve bank of Richmond, August 30, 1920.....	407
Letter to Gov. Harding (cotton), June 28, 1920.....	395
Letter to Gov. Harding (cotton), July 9, 1920.....	396
Letter to Gov. Harding (cotton), July 25, 1920.....	400
Letter to Gov. Harding (cotton), July 28, 1920.....	401
Letter to Gov. Harding, August, 1920.....	402
Letter to Gov. Harding, August 27, 1920.....	405
Letter to Gov. Harding (Washington conference), September 8, 1920.....	409
Letter to Gov. Harding (Washington conference), September 11, 1920.....	410
Letter to Gov. Harding (War finance corporation).....	413
Report to Washington conference, September 15, 1920.....	411, 412
Telegram to Gov. Harding, August 24, 1920.....	403
Telegram to Gov. Harding (Montgomery conference), August 31, 1920....	405
War Finance Corporation:	
Bill passed to resume operations.....	440
Resumes operations, urged by cotton interests.....	413
Wholesale prices:	
Charts—	
Bank loans and prices in the United States.....	499
Prices of 12 basic commodities in the United States.....	511
Wholesale commodity prices in four countries.....	764
Wholesale commodity prices in the United States and England, 1790 to 1920.....	775
Wholesale prices and the cost of living in the United States.....	765
Wholesale prices of certain groups of commodities in the United States.	498
Williams, John Skelton:	
Address at Augusta, Ga., July 14, 1921.....	36
Address at Bangor, Me., June 26, 1920.....	10
Address at Washington, D. C., April 15, 1921.....	18
Appointed Comptroller of the Currency.....	4
Attendance at Federal Reserve Board meetings.....	172
Charges of—	
Position of Federal Reserve Bank of New York in regard to.....	448
Reasons for answering charges.....	448
Editorial comment in Manufacturers' Record, May 5, 1921.....	255
Extract from report of (Japan), December 6, 1920.....	294, 334
Federal reserve banks, duty of.....	249
Letter from Gov. Harding to (methods of presenting views to board), January 7, 1921.....	138
Letter from Gov. Harding to (policies), January 13, 1921.....	139
Letter from Gov. Harding to (policies), April 4, 1921.....	231
Letter to chairman, Federal Reserve Bank of New York, August 6, 1920..	102
Letter to Federal Reserve Board, January 28, 1920.....	51
Letter to Federal Reserve Board, January 12, 1921.....	74

	Page.
Williams, John Skelton—Continued.	
Letter to Gov. Harding of Federal Reserve Board, August 4, 1920.....	101
Letter to Gov. Harding, August 9, 1920.....	103
Letter to Gov. Harding (policies of Federal Reserve Board), December 28, 1920.....	130
Letter to Gov. Harding, January 6, 1921.....	138
Letter to Gov. Harding (policies), January 17, 1921.....	144
Letter to Gov. Harding (progressive interest rates), February 4, 1921.....	162
Letter to Gov. Harding (progressive interest rates), February 7, 1921.....	175
Letter to Gov. Harding (actions of board), February 14, 1921.....	180
Letter to Gov. Harding (actions of board), March 1, 1921.....	181
Letter to Gov. Harding (New York Federal Reserve Bank operations), February 19, 1921.....	183
Letter to Gov. Harding (policies), February 26, 1921.....	208
Letter to Gov. Harding (Minneapolis Federal Reserve Bank), January 13, 1921.....	223
Letter to Gov. Harding (policies), March 26, 1921.....	223
Letter to Secretary of the Treasury (revival of War Finance Corporation), October 21, 1920.....	122
Memorandum for Federal Reserve Board, August 26, 1920.....	111
Memorandums to.....	138
Opposed policy of board.....	161
Opposed to progressive rate.....	162, 171, 262
Recommendation of change in credit policy.....	252, 264
Statement as to deflation, October, 1920.....	124
Statement of, before commission.....	1-268
Statement to press, July 31, 1920.....	100
Statement to press (interest rates in New York), September 11, 1920.....	111
Statement to press (interest rates in New York), October 18, 1920.....	113
Statement to press, October 22, 1920.....	120
Wire transfers.....	524, 537, 582, 583
Table—Wire transfers, settling figures, September 1–October 22, 1920, of 6 banks in New York City.....	740
Wool:	
Break in market.....	361
Credit policies as to industry.....	341, 386
World War Chart—Interest rates on commercial paper after Civil War, and after World War.....	566

INDEX OF CHARTS.

	Page.
Wholesale prices of certain groups of commodities in the United States.....	498
Bank loans and prices in the United States.....	499
Earning assets and rates of discount of the Federal Reserve Bank of New York.	500
Earning assets, note circulation, and reserve deposits, Federal Reserve Bank of New York.....	506
Prices of 12 basic commodities in the United States.....	511
Percentage of firms failing to firms in business, annual rate.....	512
Stock of gold in the United States, bank deposits, and paper money.....	525
Earning assets, note circulation, and member bank reserve deposits, all Federal reserve banks.....	534
Growth of check collection system of the Federal reserve banks.....	536
Street loans of New York City banks and the call loan rate.....	545
Street loans of New York City banks for their own account and for the account of correspondents, and the call loan rate.....	546
Loans and deposits of New York City reporting banks and interest rates in New York City.....	550
Interest rate of certificates of indebtedness at issuance, and rates of Federal Reserve Bank of New York on advances secured by certificates of indebtedness.	559
Minimum discount rate of the Bank of England and the market rate on 90-day bills in London, 1914-1921.....	559
Open-market rates for certificates of indebtedness and rates of Federal Reserve Bank of New York on advances.....	560
Discount rates of Federal Reserve Bank of New York and the market rate on commercial paper.....	561
Minimum discount rate of the Bank of England and market rate on 90-day bills in London, 1900-1920.....	561
Discount rate of Federal reserve bank of New York and market rate on different types of paper.....	563
Interest rates on commercial paper after Civil War and after World War.....	566
Market rates on principal types of paper at New York.....	567
Call and time loan rates in New York City.....	567
Reserve percentages of Federal reserve bank of New York, and of the entire Federal reserve system.....	587
Reserve percentages of the New York Federal reserve bank before and after interbank borrowing.....	588
Reserve percentages, Federal reserve banks and the Bank of England.....	591
Accommodation between Federal reserve bank of New York and other Federal reserve banks.....	592
Reserve percentages Federal reserve banks before interbank accommodations..	593
Loans of reporting banks in the United States and street loans of New York City banks.....	626
Loans of reporting banks in New York City and the United States.....	635
Bank deposits in New York City and outside.....	636
Loans and deposits of reporting banks in the United States compared with earning assets, note circulation, and member bank reserve deposits of all Federal reserve banks.....	641
Out-of-town funds with 52 New York City banks.....	644
Street loans of 52 New York City banks.....	645
Per cent change between May 4, 1920, and April 28, 1921, in loans and discounts, total deposits, and borrowings of member banks in agricultural, semiagricultural, and nonagricultural counties.....	650
Reserve percentages of the Federal reserve system, with and without gold acccessions.....	759
Reserves of the Federal reserve bank of New York.....	760
Wholesale commodity prices in four countries.....	764
Wholesale prices and the cost of living in the United States.....	765
Wholesale commodity prices in the United States and England, 1790 to 1920.	775
Movement of representative foreign exchanges.....	803

INDEX OF TABLES.

	Page.
Gold position of Federal reserve system.....	480
Liabilities and reserves 12 Federal reserve banks and Federal reserve bank of New York (footnote).....	491
Transfer of \$200,000,000 from deposit reserve to note reserve (footnote).....	493
Country's stock of gold.....	521
Reserves under national-bank act.....	521
Reserves under Federal reserve act.....	522
Expansion under Federal reserve system.....	522
Percentage relation of time deposits to individual demand deposits.....	523
Clearing operations Federal reserve bank of New York.....	523
Wire transfer operations Federal reserve bank of New York.....	524
Imports and exports of Federal reserve notes during 1920.....	524
Loans and discounts and deposits of all banks, stock of monetary gold in country and ratio of stock of gold to deposits, June 30, 1914, June 30, 1919, and June 30, 1920.....	524
Average rates of interest, call loan renewal rate, and time loans mixed collateral, New York City.....	540
Report of discount and interest rates as shown by actual transactions of five banks of New York City; 30-day periods ending August 15, 1918, October 15, 1919, October 15, 1920, January 15, 1921, and June 15, 1921.....	548, 549
Market on certificates of indebtedness, April, 1917, to July 29, 1921.....	551-553
Comparison of interest rates on issues of certificates of indebtedness outstanding, interest rates on offerings of new issues of certificates, and yields in current market prices of issues outstanding, month by month, from May, 1920, when Treasury sanctioned an open market on certificates of indebtedness, to July 29, 1921.....	554
Certificates of indebtedness.....	557-558
Discount rate of Federal Reserve Bank of New York on 60 and 90 day commercial paper and market rate on 4 to 6 months' commercial paper in New York..	562
Market rate on 90-day bank bills in London and the minimum rate of the Bank of England.....	562
Money rates at New York.....	564-565
Amount of subscriptions and average number of subscribers' certificates of indebtedness issued in anticipation of First, Second, and Third Liberty loans and subscriptions to tax issues.....	568
Illustration of overlapped feature when a bank subscribes a quota of \$100,000 certificates of indebtedness every two weeks, with book credit form of payment.....	573
Gold settlement fund transactions, January to June, inclusive, 1920.....	584
Gold settlement fund transactions, July to December, inclusive, 1920.....	585
Gold settlement fund transactions, January 1-July 20, 1921.....	586
Reserve percentages of Federal Reserve Bank of New York before and after interbank accommodations and reserve percentages of Federal Reserve System.....	588-589
Interbank accommodations between Federal Reserve Bank of New York and other Federal reserve banks.....	589-591
Schedule of maximum interest rates under Article XI, section 1, of clearing-house constitution.....	597
Schedule of maximum interest rates under the amendment submitted to the Clearing House Association March 11, 1918.....	601
Recapitulation of interest rates paid to depositors at the end of 1917 and the beginning of 1918, as shown by the inquiry cards sent out by the committee on interest rates.....	605-606
Interest on time deposits as shown by the inquiry cards sent out by the committee on interest rates (1917-18).....	606

	Page.
Interest rates paid on checking accounts as shown by the inquiry cards sent out by the committee on interest rates (1917-18).....	607
Expansion under the national banking system which could theoretically follow the deposit of gold in a national bank situated in a central reserve city.....	628
Loans to correspondents located outside second district and loans and investments of daily reporting banks, as of November 15, 1920.....	638
Deposits of correspondents located outside of second district and total borrowings from Federal reserve bank, as of November 15, 1920.....	639
Percentage decline from maximum loans and deposits of the reporting banks of all districts, and of New York City.....	642
Deposits, loans and investments, and borrowings of reporting member banks in New York City and in the second Federal reserve district (last week of each month, 1919-July 20, 1921).....	643
Balances of out of town correspondents and street loans placed for their account, daily reporting banks, New York City; January 3, 1919, to July 20, 1921....	646
Street loans, New York City, daily reporting banks, January 3, 1919, to July 20, 1921.....	647
Out of town loans and balances of out of town correspondents, five large New York City banks, February 14, 1921.....	649
Deposits, balances of out of town correspondents, total loans and investments, and borrowings of five large New York City banks on selected dates, January, 1920 to July, 1921.....	649
Increase or decrease in loans, borrowings, and deposits of member banks, 1920-21 in agricultural, semiagricultural, and nonagricultural counties.....	651
Increase or decrease in loans and in borrowings from Federal reserve banks by districts, 1920-21, in agricultural, semiagricultural, and nonagricultural counties.....	652
Borrowings from Federal reserve banks, compared with basic line on April 28, 1921, in agricultural, semiagricultural, and nonagricultural counties.....	652
Loans and discounts of member banks in the several Federal reserve districts, 1920-21, by agricultural, semiagricultural, and nonagricultural counties.....	653
Capital and surplus; demand deposits; time deposits; loans and discounts; borrowings from Federal reserve bank, including rediscounts, bills payable, and a total; basic lines; and borrowing from correspondents, including rediscounts, bills payable, and a total of member banks in agricultural, semiagricultural, and nonagricultural counties (1920-21) in—	
Entire country.....	653-654
Federal reserve district No. 1, Boston.....	654-655
Federal reserve district No. 2, New York.....	655
Federal reserve district No. 3, Philadelphia.....	656
Federal reserve district No. 4, Cleveland.....	656-657
Federal reserve district No. 5, Richmond.....	657-658
Federal reserve district No. 6, Atlanta.....	658
Federal reserve district No. 7, Chicago.....	659
Federal reserve district No. 8, St. Louis.....	659-660
Federal reserve district No. 9, Minneapolis.....	660-661
Federal reserve district No. 10, Kansas City.....	661
Federal reserve district No. 11, Dallas.....	662
Federal reserve district No. 12, San Francisco.....	662-663
Preliminary financial statement of the United States Government for the period from April 6, 1917, to June 30, 1921.....	688
Classified receipts of the United States Government, exclusive of the principal of the public debt, by months, from April 6, 1917, to June 30, 1921, as published in Daily Treasury Statements.....	688-689
Classified disbursements of the United States Government, exclusive of the principal of the public debt, by months, from April 6, 1917, to June 30, 1921, as published in Daily Treasury Statements.....	690
Comparative figures of banks in New York City and of Federal Reserve Bank of New York on selected dates in 1920.....	739
Comparative figures, six banks in New York City, on October 1, 22, and 29, 1920.....	739
Comparative figures, six banks in New York City, on September 30, October 22 and 29, 1920.....	739-740
Wire transfers, settling figures, September 1-October 22, 1920, of six banks in New York City.....	740

	Page.
Cost of living figures, May, 1921, reported for important centers by the Department of Labor.....	741
Cost of living figures, May, 1921, for individual items in New York City and the United States.....	741
Total earning assets, Federal Reserve Bank of New York, January 3, 1919, to July 20, 1921.....	742-744
Total reserves and Federal reserve notes in circulation, Federal Reserve Bank of New York, January 3, 1919, to July 20, 1921.....	744-745
Total deposits, Federal Reserve Bank of New York, January 3, 1919, to July 20, 1921.....	746-747
Official discount rates of central banks, in percentages, 1919 to 1921.....	748
Official discount rates of other foreign State banks, in percentages, 1919 to 1921..	750
Rates of discount effective at the Federal Reserve Bank of New York in 1919, 1920, and 1921.....	751
Percentage relation of total borrowings from each Federal reserve bank to total basic discount line of all banks in the corresponding district on June 10 and October 9, 1920, and February 10 and June 15, 1921.....	762
Average percentage of basic discount line borrowed by five largest borrowers in each Federal reserve district on October 15, 1919, February 16, June 15, and October 15, 1920, and February 15 and June 15, 1921.....	762

