

STABILIZATION OF COMMODITY PRICES

HEARINGS BEFORE THE SUBCOMMITTEE OF THE COMMITTEE ON BANKING AND CURRENCY HOUSE OF REPRESENTATIVES

SEVENTY-SECOND CONGRESS

FIRST SESSION

ON

H. R. 10517

FOR INCREASING AND STABILIZING THE PRICE LEVEL
OF COMMODITIES, AND FOR OTHER PURPOSES

MARCH 16, 17, 18, 21, 22, 28, 29, 1932

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STABILIZATION OF COMMODITY PRICES

WEDNESDAY, MARCH 16, 1932

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON BANKING AND CURRENCY,
Washington, D. C.

The subcommittee met, pursuant to call, at 10.30 o'clock a. m., in the committee room, Capitol Building, Hon. T. Alan Goldsborough, presiding.

Present: Messrs. Goldsborough (chairman), Busby, Prall, Strong, and Beedy.

The CHAIRMAN. The committee will please come to order. The order of business is H. R. 10517, and I have asked the clerk to distribute copies of the bill to anybody present.

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

[H. R. 10517, Seventy-second Congress, first session]

A BILL For increasing and stabilizing the price level of commodities, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Federal reserve act is amended by adding at the end thereof a new section to read as follows:

"SEC. 31. The Federal Reserve Board and the Federal reserve banks are hereby authorized and directed to take all available steps to raise the present deflated wholesale commodity level of prices as speedily as possible to the level existing before the present deflation, and afterwards to use all available means to maintain such wholesale commodity level of prices."

SEC. 2. If, in carrying out the purposes of the preceding section, the Federal Reserve Board and/or the Federal reserve banks, in selling securities, should exhaust the supply, the Federal Reserve Board is authorized and directed to issue new debentures.

SEC. 3. If, in carrying out the purposes of section 1, the gold reserve is deemed by the Federal Reserve Board to be too near to the prescribed minimum, the board is authorized to raise the official price of gold if the other methods already authorized appear inadequate; if, on the other hand, the gold-reserve ratio is deemed to be too high the Federal Reserve Board is authorized to lower the official price of gold if the other methods already authorized appear inadequate.

The CHAIRMAN. Now, the subcommittee made an agreement, some weeks ago, to hear the representatives of the farm organizations to-day and to-morrow; but, of course, if it is necessary, because of delay, to go along longer, it will be possible to do it; but we would like to get through with those men to-day and to-morrow, and on Friday to hear the members of Congress. Will the farmers' organizations indicate how they would like to proceed and present their witnesses?

Mr. O'NEAL. Mr. Chairman, an agreement was reached that the American Farm Bureau, and the Grange, and the Farmers Union, in that order, would present their statements.

Mr. GOLDSBOROUGH. Well, that is entirely satisfactory, I am sure. I am going to suggest to the members of the subcommittee that these witnesses be allowed to proceed until they finish, and then we may ask questions, if that is desired.

Will you give your full name and designation, and whom you represent?

STATEMENT OF EDWARD A. O'NEAL, PRESIDENT AMERICAN FARM BUREAU FEDERATION

Mr. O'NEAL. My name is Edward A. O'Neal, president of the American Farm Bureau Federation, with headquarters at Chicago, Ill.; and with Washington offices in the Munsey Building. Mr. Chester H. Gray is our representative here.

Mr. GOLDSBOROUGH. Will you proceed, in your own way, now, please?

Mr. O'NEAL. Mr. Chairman, I would like to ask, if you please, the indulgence of the subcommittee. I am a farmer and have not done anything else all of my life, and I have a statement that I would like to make; a very brief statement.

Mr. GOLDSBOROUGH. The subcommittee will be glad to hear you.

Mr. O'NEAL. The position of the American Farm Bureau Federation in the matter of stabilizing our unit of value, of providing our people with an honest dollar, is clearly established. First, in a report made by the American Farm Bureau Federation committee on the stabilization of the unit of value; second, in resolutions adopted at the thirteenth annual meeting of the American Farm Bureau Federation in Chicago, on December 9, 1931, and finally, in the joint resolution stating the position of the three major general farm organizations—the National Grange, the Farmers Union, and the American Farm Bureau Federation.

The policy of the American Farm Bureau Federation, as outlined in the resolution adopted by the annual meeting in 1931, seeks two main objectives; first, the restoration of the price level, and second, the stabilization of the purchasing power of money.

It is very gratifying to me to appear to-day before this committee on behalf of the organization which I represent and to submit to you the information and the facts which have led to the adoption of these statements of policy and, further, to discuss with you bills now before this committee for consideration which embody some or all of the suggestions outlined in these statements of the policy of organized agriculture.

So far this Congress has dealt energetically with various phases of the problem of the depression. People of this Nation are proud of the nonpartisan attitude that has been evidenced in meeting this problem. You have passed various legislative measures to give relief. The various devices which you have set up are now in operation. It is believed that they will help. But you have not yet struck at the base and root of this matter. Temporary extension of credit will help, but the extending of credit to a people

already submerged in debt is not the final solution of this problem. It has become clearly evident that a major contributing cause to our grave economic illness is due to a failure of our monetary system to properly function as a medium of exchange.

Here we are in the United States, a country of almost unlimited natural resources—coal, oil, iron, timber, and raw materials of every kind. Here is a country of fertile farms and capable, efficient farm people who can produce food, cotton, and wool in such abundance that everyone can have plenty to eat and wear.

We have increased our power of mass production beyond any other nation in the world. We have plenty of skilled labor and competent management.

In face of these basic facts, why are millions of people, who are capable and willing to work, now hungry and cold and homeless?

We are in the midst of a great abundance—food, raw materials, skilled workmen, factories, stores, transportation—everything that should go to prosperity, and yet we are faced with hunger, starvation, unemployment, bankruptcy. Our monetary system has broken down. Our money, instead of being the servant of agriculture, commerce, and industry, facilitating the free exchange of goods and services, has become the oppressor, and through its inability to properly function has brought the distressing conditions of to-day.

There are two phases to this monetary problem. One has to do with the base of our money system itself; the other with the control and administration of that system.

Organized agriculture does not believe that the present monetary system is adequate to properly meet our present needs. To-day there are approximately fifty billion dollars in bank deposits in the United States and there is only five and a half billion in currency to serve the interests of these fifty-billion-dollar deposits. This is not enough. The failure is too evident to need exposition. Since 1923 more than 8,000 banks have closed, and we now have our banks on the verge of hysteria and hoarding every available dollar in a vain effort to protect themselves from increased depositor demand. Deflation brought about despair and cold fear resulted in pessimism.

The bills pending on the general subject of money stabilization before this committee classify under two or three general heads. H. R. 10280 by Congressman Strong, H. R. 128 by Congressman Ramseyer, and H. R. 8246 by Congressman Keller seek to maintain a parity between commodity and monetary values by the method of instructing and ordering the Federal Reserve Board, through its discounting, rediscounting, and eligibility activities, to keep as much as possible a straight line of relationship between commodities and money. These bills, however, go further than the recently enacted Glass-Steagall measure, in that they are permanent in nature instead of temporary and contain definite provisions for maintaining a price on commodities comparable to that of 1928.

A second type of bill before the committee attacks the problem by the method of changing the weight of the dollar, or stated differently, by altering the number of grains of gold which constitute the dollar, so that the value of the dollar may be kept in line with the value of commodities. H. R. 20 by Congressman Burtness and H. R. 7800 by Congressman Goldsborough are bills of this type.

A third type of proposed legislation of monetary character is pending before the committee in H. R. 6712 by Congressman Evans, which seeks to assist monetary conditions in our Nation by reestablishing a bimetallic system of currency.

Within the past few weeks we have heard a national effort to dislodge the hoarded dollars of the individual who has hidden his money in safety deposit boxes and elsewhere. That is a good thing, but the real hoarder to-day is the bank. The hoarding is not done by the masses of the people but by those of considerable means, as is shown by a recent statement of Treasury officials that over one-half of the value of the hoarded money is in bills of \$100 or over. In the world to-day there are \$12,000,000,000 of monetary gold to meet the obligations in excess of \$500,000,000,000, which press so heavily on the people. According to Professor Warren, of Cornell University, the approximate total of private indebtedness in the United States in 1931 was in excess of \$172,000,000,000.

The base of our monetary system must be broadened if we are to have a monetary system adequate to our present-day needs.

Our present gold standard is based upon the gold standard of 1875, which provided that gold should be the basic money and all other currency, Government paper, national-bank notes, and the silver dollar should either be redeemable in gold or maintained at a parity therewith.

When the Federal reserve bank was established in 1913 it was provided that the Federal reserve note should be redeemed in gold on demand, and for this purpose a gold reserve of 40 per cent against all such notes in circulation should be maintained, together with a gold reserve of 35 per cent against the depositor liabilities of the Federal reserve banks.

Our supply of credit is limited by the quantity of gold available for monetary use.

Our gold, through our monetary system, instead of becoming just a symbol to express the relative value between various commodities and services, takes upon itself a commodity value and finds itself with the power to dictate the value of all other things.

This condition is in a great measure responsible for the present situation in this country. Our commodities are valued in terms of their exchange value for a given quantity of gold. We have a supply of money inadequate to finance the business of the country. The value of money has increased, which means the price of all other things has come down. Our general price level has been forced down and down. The dollar, instead of being a fixed measure of value, has failed to function. A dollar, which represented one-half bushel of wheat in 1919, represented a bushel in 1929, and in the early summer of 1931 is represented 3 bushels. Yet each person in this country needed his 4 bushels of wheat just as much one year as another. In other words, the value of wheat as a human food did not change from year to year. Even its value in its relation to supply and demand does not vary in any such ratio as the price changes of the past 12 years would indicate. Wheat in itself is more value than gold. Yet the dollar that would bring exactly the same amount of gold in 1932 as in 1919 would buy six times as much wheat. The dollar fails to measure the value of wheat. It has become a dishonest dollar.

A bushel basket which would hold 4 pecks one year and 24 another would never be called an honest measure.

The failure of our monetary system has created our present low-price level which is the cause for so much of our distress and the inability of our economic life to continue and progress.

The total indebtedness of agriculture to-day is some \$14,000,000,000. Agriculture can never pay off that indebtedness in dollars that have suddenly taken on gigantic proportions in relation to the commodities of the farm.

A farmer who a few years ago borrowed \$5,000 on a mortgage on his farm when wheat was around \$1.50 a bushel, borrowed in effect 3,333 bushels. To-day, in order to pay off his debt, he would have to give the holder of his mortgage from 8,000 to 10,000 bushels of wheat. His debt has literally trebled.

Agriculture is not the only industry suffering. Every commercial and industrial institution is facing the same situation. But agriculture represents our largest industry; the hardest-hit industry; 27,000,000 people live out directly on the farms; 24.8 to 22½ per cent of our total population. The farms and rural towns represent 53,820,223. The collapse of the purchasing power of these farm and rural people is the thing that has closed factories and paralyzed our transportation system. Restore the buying power of agriculture and unemployment will vanish: Factories will open. Prosperity will return to the land.

The buying power of agriculture can be restored in just one way—first, raise the general price level and, second, improve the ratio between the farm price level in relation to the general price level.

The farm price level is 60 per cent of pre-war prices and the price level of commodities bought by farmers is 120 per cent of pre-war prices.

If the purchasing power of agriculture is not restored, then all other industry and commerce must get down on the level with agriculture and we would then witness even greater disaster than we see to-day. If deflation runs its course, if all others are brought down on a level with agriculture, a recent economic survey has shown it will mean that the cost of transporting, processing, and distributing goods will have to come down another 40 per cent. Freight rates will have to come down about 33 per cent; passenger fares over 60 per cent; doctors and nurses will get from 25 to 50 per cent less than they are now receiving.

The dollar capitalization of industrial companies will have to be scaled down sharply and governmental expenditure will return to a pre-war basis, a cut of some 60 to 65 per cent. Pay of mail carriers and police and firemen will drop sharply. School teachers' salaries will be down one-third. State university appropriations will be drastically reduced. Professors' salaries slashed from 25 to 40 per cent. Wages of union labor will have to be cut in half.

That is part of the picture of what will happen if the rest of this country is brought down to a level with agriculture. It is much more important that agriculture be brought up and the general level raised. It is imperative that this price level be restored and the only way it can be restored is through providing an adequate monetary

system that will fully meet the needs of trade and commerce. We farm groups are seeking, not for a rise in the price level of 10 per cent, but for an increase of 40 per cent, an increase that will put the price level back on the 1921-1929 average.

In asking that Congress give us an honest dollar, we are not asking that we abandon our standard. We want gold to be back of the dollar but we want it to be back of an honest dollar. We are merely asking that Congress exercise the power vested in it by the Constitution which says that, "Congress shall have the power to coin money, regulate the value thereof, and of foreign coin, and fix the value of weights and measures." Congress is not now and never has fulfilled its obligation under the Constitution.

We ask that you regulate the value of our money, so that money itself will not distort the exchange value of commodities but will serve as an accurate medium of exchange, expressing the true exchange values of two commodities or two services. Our honest dollar does not seek to fix prices. It seeks only to restore our general commodity price level to a basis comparable to the price level at which our enormous debts were contracted and to stabilize its value at that level.

Further, we are asking that our monetary system be freed from banker control. Money—the medium of exchange—is for the use of the people, but under our present Federal reserve system we have a banker-managed currency. The original Federal reserve act included a provision instructing the Federal Reserve Board to use its power to stabilize the price level. That provision was struck out.

Thomas Jefferson had a clear vision when he said, "I sincerely believe that banking institutions are more dangerous to liberty than standing armies"; and it was President Garfield who said, "Whoever controls the volume of money in any country is absolute master of all industry and commerce."

We now seek to nationalize the national banking system and put into the laws a legal mandate to the Federal Reserve Board, first, to bring upward our general price level up to the 1926 level and, second, to use its powers to stabilize the price level at that point.

A monetary system, adequate to serve the industrial, commercial, and agricultural needs of 1875, a banking system of pre-war cut, is not sufficient for to-day. We have applied science to the improvement and development of our industrial and agricultural productive practices, to sales and distribution, to transportation, to communication. Science should be applied to bring up to date our monetary system and our methods for the control and direction of that system.

American agriculture wants an honest dollar, a dollar that represents a fixed standard of measurement, a dollar that is not flexible, with its value determined either by the commodity price of gold or by banker manipulation. Our monetary system to-day is banker-controlled and the entire system, I am informed, is practically under the complete domination of five banks, three in the East and two in the West. These five great banking institutions completely control the flow of currency and our currency determines the value of the products of our farms and factories. This situation must be changed. We want to eliminate the gambling banker control of the Federal reserve system. The real outstanding leaders of agri-

culture, industry, and commerce should serve on that board and on the board of the Federal reserve banks. We want the United States Federal reserve system to be as free from shortsighted, selfish banker-control as is the Bank of England. This is the most important and vital question of the Nation to-day.

If Congress does not fulfill its constitutional obligation to the 125,000,000 of this country, we are going before the Nation on this great issue.

Mr. Chairman, in closing I want to read to you a part of the message of Andrew Jackson, President of the United States, to Congress, when he retired after eight years of service:

You have no longer any cause to fear danger from abroad; your strength and power are well known throughout the civilized world, as well as the high and gallant faith of your sons; it is only from within, among yourselves, from stupidity, from corruption, from disappointment of ambition, and an inordinate thirst for power that factions will be formed and liberty endangered.

Mr. Chairman, I would like to include in the record the resolutions of my national organization on this question; also the unified program in the three national organizations on this question.

Mr. GOLDSBOROUGH. Without objection, it will be so ordered.

(The matter above referred to is here printed in full as follows:)

RESOLUTION ADOPTED AT THE THIRTEENTH ANNUAL MEETING OF THE AMERICAN FARM BUREAU FEDERATION, DECEMBER, 1931

NO. 3—THE MONETARY PROBLEM

The present period of depression and the falling price level has increased the burden of taxes, interest, debts, and other fixed costs on all producers to an intolerable degree. It now requires 45 per cent more of all commodities, and 70 per cent more of farm commodities, to pay these costs than it did a few years ago. The long-continued deflation is crushing farmers, merchants, transportation agencies, and all manufacturers except a few most favorably situated, and has caused a declining price of property to such an extent that it has largely eliminated equities and is affecting basic securities to such an extent as to seriously impair the stability of our banking and insurance institutions, thereby endangering the welfare of the general public. It is causing a lowering of all wages and salaries, a process which has only started, and which must of necessity lower the standard of living if continued.

The principal cause of this deflation of values is monetary. When the price of any one commodity falls many causes may be responsible. When the average price level of all commodities fall with the rapidity of the last few years, the principal cause is a shortage of money and credit in actual use. Commodity prices are expressed in this country in terms of dollars. Every purchase and sale is the exchange of commodities for dollars. When dollars are scarce it takes a larger amount of commodities to get them. In other words, money is at one end of the balance, commodities at the other. Add to the effective supply of money and prices go up. Reduce the effective supply and prices come down. The above statements are justified and supported by the incontrovertible evidence coming from the experience of all former depressions.

The problem divides itself into two parts: First, the restoration of the price level; and second, the stabilization of the purchasing power of money.

I.—RESTORATION OF PRICE LEVEL

Two alternatives face farmers and other business interests at this time; the first is wholesale bankruptcy for farmers, industrialists, transportation agencies, and mercantile establishments and the further deflation of wages and salaries; the second is a rapid rise in the average wholesale commodity price level to a point near that at the beginning of the present deflation, thereby restoring confidence and making it possible for individuals, corporations, and governments to discharge their obligations and to proceed with their undertakings.

All the powers of the Federal reserve system and the executive officials of the Federal Government should be used to bring about the restoration of the price level near the average level at which the present long-time indebtedness was incurred. The most important of these powers are:

1. Open market purchases of eligible securities.
2. Lowering of rediscount rates.
3. Liberal interpretation of rediscount eligibility rules.

In order to relieve the Federal reserve authorities and other agencies connected therewith from discretionary authority, we recommend and insist that the Federal reserve law be amended so as to make mandatory the exercise of these powers so far as possible and to the extent necessary to restore the average wholesale commodity price level to the point indicated.

II.—STABILIZATION OF MONEY

Permanent prosperity in this country demands that the dollar be made an accurate measure of value—that its purchasing power be always constant. This means stability of the average wholesale commodity price level instead of alternate periods of inflation and deflation which are the principal causes of business uncertainty and depression. Fluctuation in the purchasing power of the dollar causes serious losses to debtors in periods of deflation and to creditors in periods of inflation, and benefits only the speculator.

We recommend the following action by Congress to stabilize the purchasing power of money:

1. Direct the Federal reserve system to use all its powers, following restoration of price level, to stabilize the purchasing power of money in so far as possible, using for that purpose all its monetary and credit powers, including currency and credit control, open market operation, and changes in rediscount rates and in rediscount eligibility rules.
2. Empower and direct the Federal Reserve Board to raise or lower reserve requirements of the Federal reserve banks and to raise or lower the price of gold.
3. Broaden the rediscount eligibility provision of the Federal reserve act.

UNIFIED PROGRAM—MONEY STABILIZATION

Believing that the general contraction of credit and the deflation of prices of commodities and property have gone to disastrous lengths;

Believing further that the United States does not have to wait on Europe for a solution of its problems;

Believing further that the United States' recovery can take place by recourse only to the soundest monetary plans;

Believing further that the United States' depression will not cure itself but that deliberate action must be taken by its leaders;

We request of the President, the Federal reserve system, and of Congress:

That the Federal reserve system stop credit contraction and deflation and inaugurate credit expansion to affect the price level favorably by such liberal open-market operations as will bring about this result. This is demanded so that credit contraction, bank failures, hoarding and the other disastrous results of deflation may be halted and that the whole trend of economic affairs may be turned. Such action, in the opinion of the soundest economists is necessary and will be effective in stopping the fall of prices, hoarding, in restoring normal values and bringing the return of normal business and employment. Unless such action is initiated we believe that even such measures as the Reconstruction Corporation are doomed to failure, for with continued contraction of credit on the part of the banking system they can not be successful.

A stable price level is paramount to prosperity. We can not exist with rubber money and iron debts. Therefore, we demand the adoption of effective measures to stabilize the purchasing power of money.

That in addition to these demands for immediate action, consideration be given to the readjustment of the entire banking and fiscal policies and structures of the United States, to the end that they may function in accord with present-day knowledge and needs and the Constitution of the United States.

Mr. O'NEAL. In addition to that, I wish to insert the action of our board of directors last week in the city of Chicago.

LAST ACTION OF BOARD OF DIRECTORS, AMERICAN FARM BUREAU FEDERATION, MARCH
12, 1932

We have succeeded in getting introduced into Congress various measures designed to correct the inadequacies of our monetary system. The House Committee on Finance and Currency holds hearings on this on March 16; every energy and effort, not only of the American but of every State federation, should be thrown back of the effort to make Congress realize that this is the vital, necessary thing; that they must meet this situation.

We must have an honest dollar if we are to have a return of prosperity and if agriculture is going to remain a free and independent industry. Agriculture can not pay off its present indebtedness. They say our indebtedness is \$12,000,000,000, but in terms of our commodities American agriculture owes to-day 30,000,000,000 dishonest dollars. Unless we can have an honest dollar to pay our debts, American agriculture must go bankrupt. And when agriculture goes bankrupt our Nation will be bankrupt.

Now, in addition to that, I have here a little pamphlet that was prepared by the leaders in my organization, a special committee to study this question, called "Honest money," and if that might be included—

Mr. GOLDSBOROUGH. Without objection, it is so ordered. I think it should be included myself.

(The pamphlet above referred to is here printed in full as follows:)

HONEST MONEY

AN EXPLANATION OF THE RELATION OF MONEY, PRICES, AND PROSPERITY

[Published by the American Farm Bureau Federation, Chicago, Ill., Jan. 7, 1932]

FOREWORD

This booklet, prepared by the committee of the American Farm Bureau Federation on stabilization of the unit of value, is intended to give to our members and others a clear, simple explanation of the money question, and the effect of monetary policies on agriculture, business, and labor. The policy of the American Farm Bureau Federation on this question is expressed in the resolution adopted at our last annual meeting, and reprinted herewith.

It is our opinion that the money question is of fundamental importance, not only to agriculture, but to all classes of our population. We do not assume that stabilizing the purchasing power of money will automatically solve all our other problems. There will still remain many such questions as taxation, transportation, tariffs, marketing and surplus control, which must be settled before agriculture can live and trade on terms of equality with other industries. The position of the American Farm Bureau Federation on these questions is well known, and we shall continue to demand a fair solution of all of them.

We do believe, however, that the money question is of such fundamental importance that its proper settlement will make a solution of all other problems much easier, and that without such a settlement we shall still be subject to the hardships that hit farmers hardest of all during alternate periods of inflation and deflation, no matter how happily we may settle our other problems.

It is with the hope of assisting American farmers to study this question and put themselves in position to use their influence intelligently to secure action by Congress to solve it that this booklet is being distributed.

EDWARD O'NEAL,
President American Farm Bureau Federation.

HONEST MONEY

The United States of America is a country of almost unlimited natural resources—coal, oil, iron, timber; in fact, almost every raw material needed to make goods to supply human wants.

It is a country of fertile farms and capable farmers. They can easily produce food and cotton and wool in such abundance that everyone can have plenty to eat and wear.

It is a country of factories and power, of mass production, with plenty of skilled labor and competent management.

For centuries the world was hungry because it could not produce enough food. In fact, until recent times the world never had enough of anything, for everything had to be produced by hard hand labor.

The United States has solved the problem of producing food and clothing and manufactured goods. It can easily produce enough of everything so that everyone could live like a king.

Then why are millions of people who are capable and willing to work, hungry and cold and homeless?

Why are factories closed when so many people need goods? Why are people out of work when so many others need the things that they might be producing? Why are so many people hungry when the farms are glutted with surpluses? Why are hard-working, thrifty people being sold out under the hammer, the savings of a lifetime lost?

Why all this misery and poverty and despair in a land of plenty?

Millions of people are asking these questions. The future of the Nation depends on finding the right answer.

All through the ages mankind has struggled with two problems:

1. To produce enough.
2. To divide up what is produced.

We have solved the first. We have failed to solve the second. We do not dare to produce too plentifully, for we do not know how to divide up what we produce so that we can all use and enjoy it.

We know that the more we produce the more we all ought to have. But somehow it does not seem to work out that way. We produce until the warehouses are full, and then shut down factories and try to shut down farms, throw men out of work, shiver and grow thin, and wonder what the trouble is.

MONEY MAKES CIVILIZATION POSSIBLE

What is the trouble?

To answer that question we shall have to go back a few thousand years.

In primitive times there was no money. The man with a herd of cows traded with a man with a field of wheat, so that both could have bread and butter. All exchange of goods was on a trade or barter basis. There were no hard times except as the result of some natural calamity or of failure to work.

Barter was a clumsy and inconvenient way of doing business. We could not possibly carry on the complicated business of to-day on a barter basis.

So money was invented—shells or beads or pieces of metal or paper—any article or token that would be generally accepted in exchange for goods because of its own value or promises back of it. We exchange our labor or the products which we produce for money, and exchange that money in turn for the goods or services of others. Money is the oil without which the complicated machinery of modern civilization could not run.

While many different materials might be used for money and have been so used, it was found that two metals were best for that purpose—gold and silver. Both were scarce enough and valuable enough in themselves to be generally accepted, regardless of confidence in governments or banks.

For a time the leading commercial nations used both metals as their basic money, with a definite ratio of value between the two. In this country the ratio was 16 to 1. Gradually the nations dropped silver as part of their basic money, and began to use gold alone. To-day China is the only large nation using the silver standard. All other important nations are at least nominally on the gold standard, or were until recently.

But as business grew in volume and complexity, it soon became apparent that there was not enough gold. For that reason, and for reasons of convenience, governments began to issue paper notes for use as money instead of gold. The value of paper currency is maintained by making it legal tender in payment of debts, customs and taxes, by confidence in the government, by limiting its quantity, or by government promise to redeem it in gold on demand. A nation whose paper currency is payable in gold on demand is said to be on the gold standard. Since governments may or may not keep their promises to redeem, it is evident that the value of paper money depends wholly on confidence in the government. Whenever confidence in government wanes, paper

money depreciates in value. In a nation with a stable government in which its citizens have confidence, however, the value of paper money depends upon its quantity in relation to the need for it more than upon promises to redeem it in gold.

NOT ENOUGH GOLD

The only way a government can be sure of its ability to redeem its paper money at all times is to keep a dollar's worth of gold in its treasury for each dollar of currency outstanding. No nation does this, for the simple reason that there is not enough gold to finance the business of the world.

The United States has in circulation \$927,930,129 in gold certificates, backed by an equal amount of gold in the Treasury; \$386,701,217 in silver certificates, redeemable in silver dollars and legal tender in payment of all public obligations, such as taxes and customs; \$654,868,412 in national bank notes backed by United States bonds; \$294,447,138 in United States notes, backed by \$156,000,000 in gold; \$1,232,250 in Treasury notes of 1890, redeemable in gold; and \$2,463,281,989 in Federal reserve notes, redeemable in gold and backed by at least 40 per cent of their value in gold in the vaults of the Federal reserve banks. The actual gold reserve is usually considerably greater than this legal minimum. All these various kinds of paper money circulate at par because of confidence in the Federal Government, and the public hardly knows one kind from another.

But even this amount of paper money is entirely inadequate to finance the business of the country. It is supplemented by "bank money"—checks against bank deposits. Something like 90 per cent of the business of the country is done with checks instead of cash. For all practical purposes bank deposits subject to check are just as much a part of the money supply of the country as currency or gold.

There are about \$51,000,000,000 of bank deposits subject to check in the United States. Most of this great volume of bank credit was not created by the deposit of money. The majority of credits are created by borrowing. When William Jones borrows a thousand dollars from his bank, the bank simply gives him credit for \$1,000 on its books. The outstanding credits of that bank are \$1,000 larger than before, and \$1,000 has been added to the money supply (considering bank credit as money) of the country.

When business is transacted by check, little actual cash is used. It is largely a matter of bookkeeping in the bank and between banks. For that reason banks can lend money (create credit) up to something like ten times their actual reserves. In order to meet the needs of business we have built up a great monetary pyramid (paper money and bank credit) on a small gold base. The required gold reserves provide only \$1.60 in gold to meet each \$100 in promises to pay gold. Actually the gold reserves are somewhat larger than this.

Our whole monetary structure depends on confidence rather than on gold, however. If there were any concerted attempt to convert currency and bank credit into gold, gold payments would have to be stopped. The gold standard is theoretical rather than actual, and must be so unless vast new supplies of gold are discovered.

WE MEASURE VALUES WITH MONEY

The common notion about money is that it is a medium of exchange. That is a correct but not a complete definition.

Money has another very important function. It is a measure of value. The unit of value in this country is the dollar. We measure all values in terms of dollars.

We ordinarily think of the dollar as being an accurate measure of value, as the yard is an accurate measure of length and the pound an accurate measure of weight.

That is not true. It is because the dollar is such an uncertain measure of value that the whole economic machine gets into trouble every now and then. The fundamental reason for hard times is not overproduction nor underconsumption nor any of the other reasons so frequently given. The real reason is that the dollar, by which we measure all values, is such an inaccurate measuring stick.

The dollar is a fixed measure of value only in one respect—it will always buy 23.22 grains of gold. But what does that amount to? We can not eat gold nor wear gold, nor will gold keep us warm.

When it comes to measuring the value of the things we do want, the dollar is far from being a fixed unit of measurement.

Wheat is our most important article of food. We eat about four bushels apiece every year and could not very well get along without it. We measure wheat in bushels. A bushel of wheat is always the same amount.

We value wheat in dollars, but a dollar's worth of wheat varies greatly. A dollar would buy less than half a bushel of wheat in 1919, a bushel in 1929, and 3 bushels in the early summer of 1931. Yet each of us needed his 4 bushels of wheat just as badly one year as another. It is plain that the value of wheat as human food does not change from year to year. Even its value in relation to its supply and demand does not vary in any such ratio as the price changes of the past 12 years would indicate.

Certainly wheat in itself is more valuable than gold. Yet the dollar that would buy exactly the same amount of gold in 1931 as in 1919 will buy six times as much wheat. It is plain that as a measure of the value of wheat the dollar falls far short.

A bushel basket that would hold 4 pecks one year and 24 pecks another could not be called an honest bushel. Neither can a dollar whose purchasing power changes in that proportion be called an honest dollar.

In the Middle Ages the yard was the distance around the King's middle. It was then the same kind of a measure as the dollar is now. You can imagine the difficulty of doing business with a yard that would go around Taft in 1913, shrinking to the circumference of Coolidge in 1928.

We have been wise enough to make the yard a standard, unvarying measure of length. Some day we shall be wise enough to make the dollar a standard measure of value.

MEASURING THE DOLLAR'S BUYING POWER

We have a method of measuring changes in the purchasing power of the dollar by what is known as the wholesale commodity price level. This price level is determined each month by the United States Bureau of Labor Statistics by taking the average of the wholesale prices of some 500 commodities, each figured according to its importance.

This wholesale commodity price level is expressed by a percentage figure called an index number. The year 1926 is taken as a base. The price level of that year is expressed by 100. For several years following 1926 the price level was fairly stable. Those were prosperous years for everyone except farmers, and farm prices were steadily coming into better relationship with other prices. In the fall of 1929 the price level was 97, only three points below 1926. During the two years since then it dropped to 68. (November, 1931.)

1.45 DOLLARS

We say that goods are that much cheaper. But what has really happened is that dollars are worth more. A dollar would buy 45 per cent more goods in November, 1931, on the average, than in 1926. The 1931 dollar, in terms of what it will buy (and that is all that dollars are good for) is worth \$1.45. That means that if we borrowed a dollar in 1926, we must pay back (in terms of goods) \$1.45 at the price level of November, 1931. Every dollar in taxes, interest, and other fixed expenses has become \$1.45.

The farmer is even worse off, for his prices have dropped more than the average. The farm price index has dropped to 58, and the farmer's dollar of debt and taxes has become \$1.70.

When we borrow money we expect to pay it back, but we do not expect to pay \$1.45 for each dollar we borrow. Most of us can not do so. The debts of this country and of the world, public and private, can not be paid back in \$1.45 dollars.

The effect of the deflation since 1929 has been to increase public and private debts in this country (in terms of commodities) by \$80,000,000,000. On the present price level, when we have paid off our debts on the basis of what those debts were worth in terms of commodities in 1926, we shall still have \$80,000,000,000 more to pay. Even the most avaricious loan shark never dreamed of legalized robbery in such terms as that.

Worst of all, it is the most able and most ambitious part of the population which is in debt. This country has been built up by people who were willing to work and borrow and take a chance. The Nation can not afford to crucify this most virile and valuable portion of its population.

SUPPLY AND DEMAND

The value of every product depends on supply and demand. That is just as true of money as it is of wheat and hogs. When the price of hogs goes down while other prices are stationary, the reason is that there are too many hogs in proportion to the demand for pork.

But when the average level of all prices goes down, as from 97 to 68 in two years, that is not due to the supply and demand of goods. It is hardly possible that there could be such a sudden increase in the production of all goods in two years, or such a sudden lessening of the desire of people for goods.

The cause in such a case is a change in the supply of money and credit. The price of money can not change, for it is fixed by law. So when the supply changes, the effect can only be shown by a change in the price of goods. Commodity prices not only must change to compensate for changes in their own supply and demand, but also to compensate for changes in the supply of money and demand for it.

Suppose we think of all the money and bank credit of the country as being on one end of a pair of balances and all the goods on the other end. Take off part of the goods, and that end of the balance goes up. That is, goods are scarce and prices rise. We are all familiar with that result in the case of individual commodities.

We are not so familiar with the fact that a change in the supply of money on the other end of the scale will have exactly the same effect. If we take off some of the money, the money end will go up and the goods end will go down. That is exactly what has happened during the past two years. The goods end of the scale has gone down—the average wholesale price level has dropped 29 per cent—not because we put too many goods on that end of the scale but because there was not enough money on the other end.

As a matter of fact, the amount of goods on the scale never varies much. The total production of goods in the world is about the same one year with another, excepting only times of world war and severe world depression. Even then the change—remember we are speaking of the total production of all commodities—is not so very great. Over a long term of years the annual production of goods in the world has increased steadily at the rate of a little more than 3 per cent a year, with little change from that amount. The rate of production increase in the United States is about 4 per cent annually.

The changes are chiefly on the other end of the balance. The volume of money and bank credit, and hence its value in terms of goods, varies greatly. That variation in the buying power of money is the cause of most of our business troubles.

BALANCE THE SCALE

It is quite apparent that we should all be better off if the scale were kept in balance—if the average wholesale commodity price level were kept just about the same from month to month and year to year. All business could then plan for the future with much greater confidence, and we could all go ahead producing to somewhere near the full capacity of our farms and factories. That would mean real prosperity. Because we should produce more of everything, everyone could have more.

We can only go on producing when the goods produced are moved steadily into consumption. That means solving the problem of dividing up what we produce. We can only do that when prices are in such relation to one another, that we can trade among ourselves on a fair basis.

While such things as tariffs, wage and price-fixing agreements, etc., sometimes work against a fair price relationship, the tendency is always for prices to adjust themselves in a fair relationship to one another so that commodities can be exchanged freely when the average price level is stable.

But when the average price level changes greatly all these relationships are thrown out of joint. There are other causes than the supply of money and credit that tend to disturb price relationships. But these causes are of minor importance compared to the monetary factor. That is more important than all the others together—important enough so that, properly handled, it can largely offset the effect of all the others.

We can keep money constant in purchasing power—keep the average commodity price level stable—by maintaining just the right amount of money on

the money end of the scale; in other words, by providing business at all times with just the amount of money it needs to keep going in a normal way.

That means fitting the volume of money and credit to the volume of business instead of having to close down factories and farms and throw men out of work every now and then in order to fit the volume of business to an arbitrary volume of money.

IDLE MONEY DOESN'T COUNT

When we consider keeping the volume of money and credit in proper relation to the need for it, there is another factor that needs to be taken into consideration. That is the amount of work that each dollar does—what economists call the velocity of circulation.

The amount of work done by a crew of men depends on how hard they work. If some of them sit in the shade, and others work only half-heartedly, they will not accomplish as much as if they all worked steadily.

It is the same with money. The dollars that are idle, perhaps hidden away under the mattress or in safety-deposit boxes, are not working. Neither is the credit which in times like these bankers are afraid to loan in a normal way.

We have already seen that by far the largest amount of "money" is not money at all, but bank deposits created by borrowing. When the future is uncertain because no one knows what further changes may occur in the average price level, both borrowers and bankers are timid.

The rate of turnover of demand deposits in 141 cities in August, 1929, was five and eighty-three one-hundredths times per month. In August, 1931, the rate of turnover in the same cities was only two and forty-four one-hundredths times per month. A given amount of deposits in 1931 would finance only 40 per cent as much business as in 1929. When we talk about "frozen assets" we mean that the velocity of circulation of money is low. In other words, that confidence, on which our whole credit structure is built, is at a low ebb.

So when we are talking about the necessary amount of money and credit, we must consider velocity as well as quantity. We have the right amount of money and credit when business is proceeding normally without any appreciable change in the average price level. When prices are going up and speculation is increasing, we have too much. When prices are going down, factories closing, and men being thrown out of work, there is not enough. Enough money at one time may be too much or not enough at another. The measure is its purchasing power—the average wholesale commodity price level.

The problem, then, is to expand and contract currency and credit, not in accordance with the amount of gold we may happen to have, but in accordance with the needs of business.

The monetary system of the United States is largely under the control of the Federal reserve banks and the Federal Reserve Board, together known as the Federal reserve system. The Federal reserve system can expand or contract currency and bank credit at will in normal times, subject only to the limitations of the Federal reserve act relating to gold reserves, member bank reserves, and rediscount eligibility rules. In abnormal times, lack of confidence may weaken the effectiveness of measures adopted by the Federal reserve system.

When the Federal reserve act was adopted by the House of Representatives in 1913, it contained a provision directing the Federal reserve system to use its powers to stabilize the purchasing power of money. That provision was eliminated in the Senate. The system has at various times used its influence to maintain stability. At other times it has not. Its ability to maintain stability under normal conditions can hardly be questioned. Additional powers may be needed to enable it to maintain stability under abnormal conditions.

PRICE LEVEL MUST BE RAISED

Two things are necessary at this time:

1. Restore the wholesale commodity price level to a point somewhere near that at the beginning of the present deflation.
2. Stabilize the price level at that point.

The first is necessary in fairness to debtors, and in order to prevent further wholesale defaults and bankruptcies. A large part of the outstanding indebtedness, both public and private, can not be paid on the present price level.

An increase of 30 to 40 per cent in the price level would restore confidence, put men to work, stimulate business activity, and definitely put an end to the present depression. It would cause farm prices to increase faster and further than others, just as deflation caused them to fall further and faster.

To start that process at a time like this is difficult. The chief inflationary powers now possessed by the Federal reserve system are as follows:

1. *Open market operations.*—When the Federal reserve banks purchase Government securities in the open market the effect is to turn those securities into cash. And because of the pyramiding of credit, an open-market purchase of \$100 in Government securities makes available approximately \$1,000 in bank credit.

Early in 1931 the Federal reserve system bought large quantities of Government securities in the open market until it had accumulated more than \$700,000,000 worth of such securities and about the same amount of bankers acceptances. Such purchases were insufficient to start the price level upward and the attempt has apparently been abandoned.

2. *Rediscount rate.*—One of the functions of the Federal reserve banks is to make loans to member banks by accepting securities of various kinds from them and issuing Federal reserve notes in exchange. The rate charged on such loans to member banks is known as the rediscount rate. When that rate is low it is profitable for banks to borrow from the Federal reserve and reloan to customers. Low rediscount rates tend to expand credit. High rediscount rates tend to contract credit.

During the summer of 1931, however, reducing rediscount rates to 1½ per cent failed to have any appreciable inflationary effect because bankers lacked confidence to loan in a normal way. Rediscount rates have since been raised to around 3½ per cent, which is still low compared with normal times.

3. *Rediscount eligibility rules.*—Under the law the Federal reserve banks can rediscount for member banks only certain kinds of securities and commercial paper. By their own rules the Federal reserve banks can still further restrict the kinds of paper eligible to the rediscount privilege. Liberal rediscount rules tend to make money "easy" and to expand credit. Strict rediscount rules tend to restrict credit.

At the close of 1931 the reserve banks were following a "tight money" policy as far as rediscount eligibility was concerned. They were reluctant to accept anything but Government securities for rediscount.

It is apparent that the Federal reserve system could use its present powers, especially (1) and (3) above, more effectively in an effort to expand credit and start the price level upward. But even if used to the limit, they might not be effective with public confidence at the present low level.

Certain additional powers would help, particularly broadening the rediscount eligibility requirements. A large proportion of property owners, particularly owners of real estate, are now practically without credit. If high class, sound real estate securities could be made eligible to rediscount temporarily, a marked expansion of credit would be almost sure to result. Admitting debentures of the intermediate credit banks to rediscount would aid those banks in providing farm credit, which would also aid in credit expansion.

President Hoover has proposed a system of emergency credit agencies, which to the extent it becomes effective will help to expand credit and raise prices.

The National Credit Corporation is already in operation and has had a marked effect in checking the number of bank failures. His others—the home loan discount banks, the reconstruction finance corporation, and a Government subscription to stock in the Federal land banks—will all help to start the necessary inflation.

Once started, inflation, like deflation, will move rapidly of its own momentum. That is why some people are so afraid of any inflationary move, even though they know that it is necessary to get business off dead center. They fear that, once started, inflation will go too far before it is stopped. Those fears are unnecessary. The Federal reserve system has ample power to stop inflation, and has learned how to do so. By selling Government securities in the open market, and by making rediscount rates abnormally high, it can contract credit so rapidly as to quickly put a stop to inflation once it has restored price levels to the desired point.

OTHER INFLATIONARY MEASURES

Some of the other inflationary measures that have been suggested are as follows:

1. *Devaluing the dollar.*—If the price of gold were raised from \$20.67 to \$30 an ounce, which would mean that a dollar would be worth about 15.5 grains of gold instead of 23.22 as at present, the price level would be restored very quickly. The chief disadvantage of this plan is the fact that so many debts, public and private, are payable in gold dollars of the present weight. Devaluing the dollar would not help this class of debtors.

2. *Paper money.*—A large issue (perhaps two or three billion dollars) of greenbacks (paper money not redeemable in gold), to be put directly into the hands of consumers by using them to pay Government salaries and other expenses and for unemployment relief. This is perhaps the most effective remedy that has been proposed, although it is probably politically impossible because of the popular prejudice against irredeemable paper money.

3. *Silver.*—Restoration of free coinage of silver on a definite ratio with gold would be an effective plan of inflation but would be impractical except by international agreement with the other leading commercial nations.

4. *Symmettalism.*—Under this plan both gold and silver would be basic money. Currency would be redeemable, not in either one alone, but in a definite amount of each. This plan, too, requires international agreement.

5. *Granting the national bank note privilege to the one and one-half billions of Government bonds issued in the spring of 1931.* That is, such bonds would be made the basis of a national bank note issue when deposited with the Treasury by national banks. The disadvantage of national-bank notes is that they lack the elasticity of Federal reserve notes and can not be retired readily when they are no longer needed.

When a patient is sick the chief consideration is to make him well. Any medicine that will accomplish that purpose is good medicine, and even certain unfavorable after effects can be tolerated if the medicine brings about a speedy cure.

The present situation demands a speedy cure. Inflationary measures should be applied promptly and until results are secured.

Deflation has reached the point where capital has been impaired so seriously as to threaten the whole financial structure of the country. Continued deflation may easily bring disaster, the wreckage of which can not be repaired in a generation. The results already have been bad enough. Two years more of falling price levels might easily bring financial, political, and social consequences that would wreck our civilization.

This is not a time to be afraid of radical remedies. No remedy can be as radical as the disease.

STABILIZE BUYING POWER OF MONEY

After inflation has started prices upward and stimulated business activity, the price level should be stabilized at a fair level, preferably near that of the fall of 1929. This stability of the price level and of the purchasing power of money is necessary in order to avoid a recurrence of the speculative boom of 1923 and 1929 and the deflation and hard times of 1930 and 1931.

The principal stabilization measures that have been proposed are as follows:

1. Amend the Federal reserve law directing the Federal reserve system to use all its monetary and credit powers to maintain a stable price level. We have already explained what these powers are. To make its efforts more effective the reserve system should be directed to take the public into its confidence, so that instead of its moves being shrouded in mystery as is often the case now, the public will understand just what it is trying to do and why.

2. Amend the Federal reserve act to grant the following additional powers:

(a) To issue Federal reserve notes of its own volition against Government bonds in times of emergency.

(b) To broaden the rediscount eligibility rules.

(c) To raise or lower the reserve requirements of member banks.

(d) To raise or lower the gold reserve requirements of the Federal reserve banks.

(e) To raise or lower the price of gold.

3. Amend the Federal reserve act to direct the Federal reserve system to expand credit steadily at the rate of 4 per cent a year in order to keep pace with the expansion of business.

4. Hold an international conference to devise and put into operation plans to maintain world monetary stability.

Of these the first is the most important. Once we have adopted a definite national policy of stabilizing the purchasing power of money, international action will follow as a matter of course. It will be some time before the stabilizing efforts of the Federal reserve system will be endangered by lack of gold, and before that time we may reasonably hope for international action to conserve gold and use it mainly for the settlement of international balances, or to adopt some practical substitute for the gold standard. The recent abandonment of the gold standard by England, Japan, and 13 other nations shows how rapidly events are moving to force the world to find a solution of its monetary problems.

It is highly important that the principles of (1) above be enacted into law at the present session of Congress. It would be very desirable if part or all of the recommendations in (2) could also be written into the law.

Humanity has been enslaved long enough by an unstable measure of value, resulting in misery and distress second only to that of war. Once we apply to our monetary system the same intelligence that has solved our production problems, another depression like the present one will have become impossible.

QUESTIONS AND ANSWERS

Q. Why is business always bad when prices are falling?—A. No sane person will buy except for immediate necessities when the price is likely to be lower next week. Merchants and manufacturers buy as little as possible when they face the prospect of having to resell at a loss.

Q. What happens when money and credit expand faster than production?—A. Speculation, increasing prices, complaints about the high cost of living, and a tendency to unbalanced production, with overexpansion of production facilities and temporary overproduction of some commodities.

Q. What happens when the expansion of money and credit fails to keep pace with production?—A. Production slows up, prices fall, men are thrown out of work, and business enterprise and relationships are thrown out of balance.

Q. What happens when the volume of money and credit is maintained in proper proportion to production?—A. Producers and merchandisers can plan for the future with confidence. From 1907 to 1915 the volume of credit expanded at almost exactly the same rate as the growth in production. Prices were stable and business was good.

Q. Does not stabilizing the price level mean price fixing, and has not Government price fixing always been a failure?—A. Stabilizing the average wholesale commodity price level does not mean price fixing. The price of each individual commodity would be free to fluctuate up and down in accordance with the supply of that commodity and the demand for it. When the average price level is stable, if the price of any one commodity falls because of oversupply or falling demand, capital and labor will promptly shift to some other field sufficiently to restore the balance. But when prices of all commodities are falling, capital and labor have nowhere to go. So capital goes into hiding and labor goes into the bread line, and a long period of hard times ensues. Such a state of affairs is due to insufficient money and credit, and can be prevented by keeping the supply of money and credit in proper relation to the needs of business.

Q. Is there not more money in circulation now than in 1929?—A. In November, 1931, total money in circulation was \$44.46 per capita, as compared with \$37.72 per capita the same month in 1929.

Q. Then, how can you say that our present troubles are due to a shortage of money?—A. "Money in circulation" is an uncertain phrase. It means money outstanding, but money behind the clock and in safety-deposit boxes is not in circulation. The amount of our money held abroad also varies greatly. Bank deposits subject to check are the same as money for all practical purposes, and are about ten times greater in volume. When we speak of the volume of money we mean the total volume of money and bank deposits subject to check. From 80 to 90 per cent of bank deposits are created by credit extended by banks, which always shrinks when confidence declines.

It is the effective supply of money and credit that counts, and money is effective only in proportion as it works. The actual circulation of money and credit is only 40 per cent as rapid now as two years ago, and it is therefore only 40 per cent as effective in creating purchasing power.

Q. How much monetary gold is there in the world?—A. About \$11,625,000,000 worth. This gold was held as follows June 30, 1931:

| | Amount | Per cent of total |
|-------------------------|-----------------|-------------------|
| United States..... | \$4,956,000,000 | 42.7 |
| France..... | 2,212,000,000 | 19.0 |
| England..... | 793,000,000 | 6.8 |
| Germany..... | 339,000,000 | 2.9 |
| Russia..... | 262,000,000 | 2.3 |
| 40 other countries..... | 3,063,000,000 | 26.3 |

Q. How rapidly is the world's supply of monetary gold increasing?—A. Less than 2 per cent a year. The increase in monetary gold falls more than 50 per cent short of keeping pace with the growth of production. That means that we must do one of the following things:

1. Submit to a steadily declining price level for a long period of years.
2. Build up a still larger credit structure on the gold base.
3. Abandon the gold standard.

Q. Are new gold discoveries probable?—A. Not large ones. The world has been thoroughly explored for gold. Some chemist may at any time discover a practical method of transmuting other elements into gold. Such a discovery would force the world to abandon the gold standard. Once gold could be manufactured, it would become unsuitable for money because there would be no limit to its quantity.

Q. What is meant by the gold standard?—A. A country which is fully on the gold standard buys and sells gold on demand through its treasury or its central bank, it redeems its currency in gold on demand, and sells foreign exchange freely on demand, payable in gold abroad.

Q. What is the gold bullion standard?—A. A country which is on the gold bullion standard does not mint and circulate gold coins. It keeps its gold in bullion form, which it buys and sells freely, and with which it will redeem its currency on demand. It also sells foreign exchange on demand.

Q. What is meant by the gold exchange standard?—A. A country which is on the gold exchange standard does not redeem its currency with gold, nor does it buy and sell gold on demand. It sells foreign exchange, payable in gold abroad, freely in exchange for currency or bank checks.

Q. What is the reason for the gold standard?—A. It is an automatic regulator of finance. It imposes a limit on the quantity of money and credit. When a nation continues to spend more than its revenue, balancing its budget by borrowing, or when it lives beyond its means by importing more than it exports, gold moves from it to other countries. This loss of gold serves both as a warning and as a means of forcing deflation and economy. Without more confidence among nations than at present, gold is the only satisfactory method of settling international trade balances.

Q. What has caused so large a part of the world's gold to move to France and the United States?—A. (1) Lack of confidence in other nations. People and nations feel that their money is safer in France or the United States. (2) "Management" of the gold supply. Since the war no nation has allowed the gold standard to operate freely. It has been managed in all sorts of ways, until some economists contend that we no longer have a gold standard at all, but a "bankers' standard."

At times during the past year the United States has had more gold than the total amount of outstanding currency. If this gold had been permitted to make its influence felt normally, it would have caused such a marked expansion of currency and credit as to have raised prices to twice the present level. Prices would not actually have gone that high, because as soon as they reached a certain point, the greater buying power of gold abroad would have caused us to lose part of our supply.

When gold is allowed to work automatically it seeks its own level, distributing itself among the gold standard nations and keeping world prices in such

adjustment among the nations that world commerce can proceed on a normal basis.

The managed gold standard or the "bankers' standard" interferes with this, causing excessive accumulation of gold in some countries and a serious shortage in others, and seriously disrupting world trade.

Q. Why did England abandon the gold standard?—A. To keep from losing all its gold. All European countries abandoned the gold standard during the World War. When France went back on the gold standard in 1925, it devalued the franc. The gold value of the franc before the war, in terms of our money, was 19.3 cents. In going back on the gold standard in 1925, France valued its franc at 3.93 cents in gold. The effect of that was to reduce the burden of its war indebtedness, incurred on an inflated price level, by 80 per cent. Relieved of this excessive debt burden, France was able to balance its budget, and by avoiding excessive taxation, its business became prosperous and its foreign trade balances were maintained.

When England went back on the gold standard after the war, it disregarded the advice of its economists to follow the example of France (and all other European nations). Instead of devaluing the pound sterling and thus ridding itself of some of its excessive indebtedness, it placed the pound on the pre-war basis of \$4.86 in our money.

The resulting burden of interest, debt payments, and taxes was greater than it could bear. Business was stagnant, unemployment and the dole added to its difficulties, and maintenance of the pound on a \$4.86 basis caused a continued drain on its gold supply.

To stop from losing all its gold it had to abandon the gold standard and allow supply and demand to fix the value of the pound. If and when England goes back on the gold standard, it will probably be with a pound that has been devalued to something like \$3.50.

Q. What happened to prices in England following the recent abandonment of the gold standard?—A. They advanced. Lard at Liverpool went up from 42 shillings in September to 53 shillings in late December. During the same period lard at Chicago went down from \$7.30 to \$5.65.

Q. Since no nation can possibly have enough gold to redeem its promises to pay gold, what is the advantage of having any gold backing for its currency?—A. To act as a check against inflation. With no gold cover for its currency, the value of that currency is determined by its quantity. Experience in countries like Germany and Austria, which issued currency after the war in such excessive quantities that it became valueless, has created public fear of currency inflation.

Q. Is there any other method that could be used to help maintain the value of irredeemable paper money?—A. Yes, by making it full legal tender in payment of taxes, customs and other legal obligations. The best method, however, is to limit its quantity. A rising price level indicates that the quantity is becoming too great.

Q. How much money is outstanding in the united States.—A. At the end of November, 1931, \$5,446,142,677 as follows:

| | |
|---------------------------------|--------------------|
| Federal reserve notes..... | \$2, 463, 281, 989 |
| United States notes..... | 294, 447, 138 |
| Federal reserve bank notes..... | 2, 851, 951 |
| Treasury notes of 1890..... | 1, 232, 250 |
| National bank notes..... | 654, 868, 412 |
| Gold certificates..... | 927, 930, 129 |
| Silver certificates..... | 386, 701, 217 |
| Gold coin..... | 382, 841, 032 |
| Silver dollars..... | 33, 226, 523 |
| Other silver coins..... | 271, 718, 795 |
| Minor coins..... | 117, 043, 241 |

Q. Can we not hope to have a more substantial basis for prosperity after prices have been deflated down to the pre-war level or lower?—A. No. We can be just as prosperous on a high level as on a low price level, or vice versa. It is stability of the price level that makes prosperity possible, and changes in the price level that throw business out of adjustment and cause hard times. The only possible reason for lowering the price level is to bring demands for money and credit more nearly in line with a limited supply of gold.

It is unnecessary and a form of economic insanity, however, to endure the suffering that would be necessary to cut down the world's business to fit a

limited gold supply. It is much better to solve the problem by rearing a larger credit structure on the gold base, adopting a combination gold and silver standard, or abandoning the gold standard altogether except for settling international balances.

Q. Did not the American people definitely go on record against bimetallism (combination gold and silver standard) in 1896?—A. No. Both major parties favored bimetallism in 1896. The Republicans favored it only as a result of international agreement. The Democrats favored it for the United States regardless of international action. The Republicans won, but England blocked their attempt to secure bimetallism by international agreement. Discovery of vast gold fields in the Klondike and South Africa soon afterward relieved the gold shortage for a generation. We are again facing the results of a gold shortage similar to that of 1896.

Q. What is meant by "symmetallism?" What advantages are claimed for it over bimetallism?—A. Under bimetallism a dollar in currency is redeemable in a given weight of gold or a given weight of silver. Under symmetallism the paper dollar is redeemable in a given weight of gold and a given weight of silver. Under bimetallism there is always danger of one metal driving out the other. That is impossible under symmetallism, for both metals are always used together for redemption, never one separately.

Q. During the period of 1923-1929, was there any abnormal overproduction of goods as a whole, or any abnormal falling off in the demand for goods?—A. No. World production increased at about the normal rate of 3 per cent a year, and there is no evidence to show that demand was other than normal.

Q. Did the supply of gold keep pace with this normal increase in production?—A. No. Increase in gold output during this period was only about 2 per cent a year.

Q. What was the effect of the adoption of the gold standard by India in 1927?—A. To put a further strain on the world's gold supply. India drew \$85,000,000 worth of gold out of the world's gold supply in 1928. It threw a large amount of silver on the market and this, combined with the sale of 50,000,000 ounces of silver by Great Britain as a result of debasing its silver currency, and the adoption of a partial gold standard by the French East Indies, demoralized the silver market, reduced the price from 65 to 30 cents an ounce, and paralyzed the purchasing power of China, the only large country to remain on the silver standard.

Q. If gold production has been insufficient from 1924 on, why did prices not drop sooner?—A. A marked credit expansion in the United States, together with large American loans abroad, compensated for this shortage until the latter part of 1929.

Q. Is not lack of confidence a more serious cause of the depression than lack of money and credit?—A. Lack of confidence is a result rather than a cause. There was plenty of confidence in 1929.

Q. Would monetary stability help the mass of people?—A. Yes; monetary stability is necessary to business stability. Stable business, proceeding year after year at a normal rate, permits a wide distribution of national wealth and income, accompanied by a high standard of living for everyone who is able and willing to work. Unstable business and widely fluctuating prices permit strong and unscrupulous individuals to accumulate an undue proportion of the national wealth and income. They take advantage of unstable prices and credit stringency to add to their possessions until we approach the undesirable condition of great wealth for the few and poverty for the many. That is not a sound foundation on which to build the Nation's future.

Q. What is meant by inflation and deflation?—A. Inflation means expansion of money and credit. It is usually used to mean expansion of money and credit beyond the needs of business. The result is a rising price level and encouragement of speculation. Inflation reduces the buying power of money, making money less valuable. Debts, taxes, interest, and other fixed expenses can be paid more easily because commodity prices are higher. People with fixed incomes begin to complain about the high cost of living, because their money will buy less, and there are demands for wage and salary increases. Rising prices stimulate business, increase profits, and there is little unemployment during such a period. Producers, especially producers of raw materials, find a ready market at good prices. Inflation generates confidence which soon may become overconfidence. If inflation continues long enough, speculation reaches the point where people forget production and thrift in their desire for speculative profits.

Ordinarily inflation is bad, though not as bad as deflation. The worst thing that can be said about it is that if carried too far, it is almost sure to lead to deflation. In a time like this, when a moderate degree of inflation would only restore the price level of two years ago, the results would be highly beneficial. Practically all medicine has some undesirable after effects, but that is no reason for letting the patient continue to suffer from the disease. There is no other way except moderate inflation to end the depression except by a wearing-out process that will take years and wear out a lot of the best people of the country.

Deflation is the reverse of inflation. The supply of money and credit is reduced or fails to expand to match the growth of business. Prices go down and profits vanish. Business has to be cut down to fit the supply of money and credit, and unemployment results. This reduces purchasing power still more, and causes a further shrinkage of business and more unemployment. Farmers are hit hardest of all, because of the falling demand for their products and because they are least able to restrict production, control marketing and resist falling prices.

The future value of goods and property of every kind becomes uncertain. Money is more valuable than anything else, because it is increasing in value while everything else is decreasing. Everyone wants to turn property into cash and hoard that cash. Money in a safety deposit box involves no risk, and when its buying power is increasing, because of falling prices, faster than interest would accumulate, there is no incentive to put it to use.

Credit shrinks alarmingly. Bankers seek to collect all or part of their outstanding loans, because the property on which those loans are based is shrinking in value. New loans are made reluctantly. This hoarding of money and shrinkage of credit cause still further deflation. It is a process which, once well started, is hard to stop. It can not be stopped by individual action, but only by action of the Government and the central banking system.

Deflation benefits the creditor, because his interest and payments on loans are made in dollars that have greater buying power. When deflation goes so far as to impair or wipe out the security, however, as in the present instance, many creditors join the class of sufferers from deflation.

The ideal condition is neither inflation nor deflation, but a steady price level and an unchanging purchasing power of money—an honest dollar.

Q. What is meant by liquidity?—A. That is a word often heard in times of deflation. Liquid assets are those which can be turned into cash quickly. They include listed stock and bonds, and grain and other commodities for which there is an open market. Basic property such as homes and farms is not liquid because it can not be turned into cash readily in hard times. While liquid securities may depreciate in value faster than real estate, the banker always knows their cash price, and if the margin of security becomes too small, he can force the borrower to sell them and pay his loan.

When that happens, however, the price is forced down still further, throwing more loans into distress, forcing more sales, and so on. As a matter of fact, all prices are based on confidence, and only a small part of the property of the country can be turned into money. If lack of confidence should extend to the Government, only gold would be really liquid, and gold payments would be stopped as soon as any large number of people began to ask for them.

The demand for liquidity is just another name for fear—a selfish fear that causes a person or an institution to grab for what he can get regardless of the effect on the general welfare.

Q. What is meant by the commodity dollar?—A. That is the term sometimes used to mean a dollar whose purchasing power is always the same in terms of average commodity prices.

Q. What is meant by a compensated dollar?—A. One plan that has been advanced to stabilize the commodity price level is to change the weight of gold in which a dollar is redeemable as often and to the degree necessary to keep the commodity price level constant in terms of dollars. A dollar redeemable in varying amounts of gold according to the commodity price level is sometimes called a compensated dollar.

Q. What is meant by managed currency?—A. Currency the quantity of which does not bear any fixed relation to the amount of gold or silver in the country, but the purchasing power of which is kept constant by regulating its amount in accordance with the commodity price level.

Q. What is the Federal reserve system?—A. Twelve independent regional Federal reserve banks and the Federal Reserve Board at Washington. There are 8 members of the Federal Reserve Board—the Secretary of the Treasury, the Comptroller of the Currency, and 6 members appointed by the President of the United States for 10-year terms. One of the six is designated as governor and one as vice governor. The present governor is Eugene Meyer, jr.

Q. Who owns the Federal reserve banks, and how are they controlled?—A. They are owned by the member banks. All national banks must be members, and state banks are permitted to become members. Each regional Federal reserve bank is governed by nine directors. Three of these are chosen by the Federal Reserve Board and six are elected by the member banks.

Each member bank is required to carry its reserve funds against deposits with the Federal reserve bank of its district. These reserves are 3 per cent of its time deposits and from 7 to 10 per cent of its demand deposits. The reserve banks must keep a 35 per cent gold reserve against these member bank reserves.

Reserve banks may loan to member banks on notes secured by collateral or on self-liquidating paper, and may make such loans in the form of Federal reserve notes—new money. Reserve banks must keep a gold reserve of at least 40 per cent of outstanding Federal reserve notes. Such loans are called rediscounts. Reserve banks may further restrict the paper eligible to rediscount when they desire to do so.

Q. What is self-liquidating paper?—A. Evidence of debt based on a definite commercial or industrial operation which will automatically produce the money to pay the debt.

Q. What is meant by the “banker standard”?—A. That is a term used by Prof. Lionel D. Edie, economist, to designate the money system as managed by the Federal reserve system and other central banks.

Professor Edie points out that the supply of gold is relatively constant, increasing at a fairly even rate year by year. “The ultimate outcome of a properly working gold standard is to protect the community from * * * soaring or collapsing price levels.”

But he adds that “something has happened to the gold standard which has destroyed its fundamental supply-function. The link which unites credit growth to gold has been cut.” Central banks “have sanctioned that excessive variability of credit volume which it was the very heart and soul of the gold standard to prevent.”

It is this new condition that Professor Edie calls the “banker standard,” which term, he says, “emphasizes the responsibility which the central bankers have usurped for themselves. They have arrogated to themselves the right and power to say during boom times that credit shall be allowed to expand two or three times as rapidly as the long-term rate of growth either of gold stocks or of industrial production. And equally they have arrogated to themselves the right and power to say during slump times that the reserve base of member bank credit shall be allowed to shrink as fast as the mob psychology of a frightened community of private bankers dictates.

“This banker standard has given the world the most unstable peace-time monetary structure and price level that the world has had in the past century.

“It is useless to pretend that the gold standard can endure under these circumstances. The banker standard is killing it.”

Q. What is meant by the “production standard”?—A. That term is used by Professor Edie to describe a system which he recommends of expanding credit steadily year after year in the same ratio as the increase in production—just about 4 per cent a year. In boom times credit is now expanded much more rapidly than that, and in times of depression much less rapidly or is actually contracted. A steady expansion of credit at the rate of 4 per cent a year would do much to prevent booms and depressions, in the opinion of Professor Edie and a number of other leading economists.

In 1920, for instance, Federal reserve rediscounts reached a total of \$2,780,000,000 and then shrunk to \$396,000,000 during the depression which followed. The peak of rediscounts in 1929 was \$1,096,000,000, followed by a shrinkage to \$149,000,000. With credit volume as unstable as that, it is no wonder that price levels fluctuate so greatly, with consequent disaster to business.

Q. Would a bill directing the Federal reserve system to use all of its powers to restore prices to the 1926 level result in corn prices going to where they were at that time?—A. No money bill can affect the price of any individual

product, except in so far as it affects all products. It is conceivable, for instance, that the general price level might be restored to the 1926 level and corn prices remain at 40 cents a bushel in case we have some exceedingly large corn crops. On the other hand, corn prices might be relatively better than they were in 1926. Nothing can be done through the money system to cause agricultural prices to advance relative to other prices. This part of the agricultural program must be tackled through cooperative endeavor, systematic control of acreage, the equalization fee or some other scheme, which will effectively control production, storage, and selling.

SOME COMMENTS

Carl Snyder, statistician, New York Federal Reserve Bank: "It seems a blind fatuity to trust the smooth working of this vast and magnificent engine of modern industry to the chance forces of production or maldistribution either of credit or of gold. Surely we can not permit the fortunes of the nations, their happiness and welfare, to be left to the caprice of finding new gold fields in South Africa or California, or conversely, to their inevitable exhaustion. We may look forward, I hope, to the time when the scientific organization of currency and credit will be deemed as essential as the scientific organization of industry itself.

"Let us hasten the day; for the world-wide disorganization which is now so vividly before us seems evidence enough that, as in the long ages, gold, not science, is still the arbiter of economic destiny."

John R. Commons, University of Wisconsin: "Our own huge war debt has been reduced about one-third, but if we consider the fall in prices since 1920, the burden of the remaining two-thirds on taxpayers is greater than was the whole burden at the prices of 1920."

George F. Warren, Cornell University: "Extended studies of the gold question by the League of Nations show that over a long period of time, when monetary stocks of gold in the world have increased at the rate of 3.1 per cent per year compounded, commodity prices have been stable. For over a century prices have fallen when monetary gold has increased less rapidly than 3.1 per cent, and prices have risen whenever gold stocks have risen more rapidly."

Herbert Hoover (1921): "There is no economic failure so terrible in its import as that of a country possessing a surplus of every necessity of life in which numbers, willing and anxious to work, are deprived of those necessities. It simply can not be if our moral and economic system is to survive. * * *

"What our people wish is the opportunity to earn their daily bread, and surely in a country with its warehouses bursting with surpluses of food, of clothing, and with its mines capable of indefinite production of fuel, with sufficient housing for comfort and health, we possess the intelligence to find the solution. Without it our whole system is open to serious charges of failure."

Daniel Willard, president Baltimore & Ohio Railway: "The mere existence of the (unemployment) problem presents a serious challenge to our economic system." After discussing our natural and human resources, our productive capacity, and our surpluses, he added:

"And with all this surplus of wealth and resources, we have millions, so it is said, in dire need of food and clothing—in short, more of everything to eat and wear than we can possible use and at the same time millions of human beings hungry and cold. That is another problem, although closely related to the first, and the two problems together—unemployment and the distribution of resources—bring into question the very foundations of our political and economic system."

Sir Josiah Stamp, British economist: "A stable price level is the most bitterly practical of all questions."

Lord D'Abernon, British financier: "The fall in prices which has occurred is nothing more or less than a rise in the price of currency, or means of payment. If the means of payment had been available in adequate quantity with adequate dispersion, the general fall in prices would not have occurred."

T. B. Macaulay, president Sun Life Assurance Co. of Canada: "That the purchasing power of currency depends on the amount of that currency and currency credits which may be outstanding can no longer be denied."

Claude L. Benner, vice president Continental American Life Insurance Co.: "I am of the opinion that as long as basic commodity prices remain where they are at present, there can be no large increase in business activity."

H. G. Wells: "The world requires (that money) must represent absolutely stable purchasing power."

E. W. Kemmerer, economist: "The world sooner or later must either learn how to stabilize the gold standard or devise some other monetary standard to take its place."

Owen D. Young: "The proper handling of price stability is one of the most important matters facing the capitalistic system. In it will be found the roots of those maladjustments which result in unequal and unfair distribution of wealth, in unemployment, and other serious problems."

Sir Charles Addis, director, Bank of England: "It is simply intolerable that we should continue to sit with folded hands while industry and trade throughout the world are becoming the sport of our ineffectual monetary systems. We must be masters in our own house, the rulers, and not the slaves of money."

Lionel D. Edie, economist: "The bankers have frightened everybody, including themselves, away from doing anything."

T. E. Gregory, London School of Economics: "The efforts of the politicians (to end the depression) must be seconded by the central banks—a concerted effort must be made, primarily through the financing of budgetary deficits through central bank credit, to cause a rise in prices."

George N. Peek, Moline, Ill.: "We should have a measure of controlled inflation that debts may be paid with the same size dollar with which they were incurred, as far as that is possible."

Frank O. Lowden: "All classes now agree that unless there is an improvement in the general price level there can be no substantial relief from the unprecedented depression in which we find ourselves. The question therefore is a vital one. We have boasted in the past of our ability to meet new situations as they arose. To say that nothing can be done in this matter is the counsel of despair."

"Why not give heed to the opinions of the long line of eminent economists who believe that, without any disturbance to our gold standard, we have it within our power to erase some of the drastic deflation from which we are now suffering. And that deflation is the greatest in our history and it seems to be gathering momentum all the time. The decline in bank credit has been more rapid in recent months than at any time since deflation set in. Unless some way can be found to check this contraction of credit, thoughtful students fear that we have by no means yet seen the worst."

AMERICAN FARM BUREAU MONETARY RESOLUTION

The present period of depression and the falling price level has increased the burden of taxes, interest, debts, and other fixed costs on all producers to an intolerable degree. It now requires 45 per cent more of all commodities and 70 per cent more of farm commodities to pay these costs than it did a few years ago. The long-continued deflation is crushing farmers, merchants, transportation agencies and all manufacturers except a few most favorably situated, and has caused a declining price of property to such an extent that it has largely eliminated equities and is affecting basic securities to such an extent as to seriously impair the stability of our banking and insurance institutions, thereby endangering the welfare of the general public. It is causing a lowering of all wages and salaries, and which must of necessity lower the standard of living if continued.

The principal cause of this deflation of values is monetary. When the price of any one commodity falls, many causes may be responsible. When the average price level of all commodities falls with the rapidity of the last few years, the principal cause is a shortage of money and credit in actual use. Commodity prices are expressed in this country in terms of dollars. Every purchase and sale is the exchange of commodities for dollars. When dollars are scarce, it takes a larger amount of commodities to get them. In other words, money is at one end of the balance, commodities at the other. Add to the effective supply of money and prices go up. Reduce the effective supply and prices come down. The above statements are justified and supported by the incontrovertible evidence coming from the experience of all former depressions.

The problem divides itself into two parts: First, the restoration of the price level; second, the stabilization of the purchasing power of money.

Two alternatives face farmers and other business interests at this time; the first is wholesale bankruptcy for farmers, industrialists, transportation agencies, and mercantile establishments and the further deflation of wages and salaries;

the second is a rapid rise in the average wholesale commodity price level to a point near that at the beginning of the present deflation, thereby restoring confidence and making it possible for individuals, corporations, and governments to discharge their obligations and to proceed with their undertakings.

All the powers of the Federal reserve system and the Executive officials of the Federal Government should be used to bring about the restoration of the price level near the average level at which the present long-time indebtedness was incurred. The most important of these powers are:

1. Open market purchases of eligible securities.
2. Lowering of rediscount rates.
3. Liberal interpretation of rediscount eligibility rules.

In order to relieve the Federal reserve authorities and other agencies connected therewith from discretionary authority, we recommend and insist that the Federal reserve law be amended so as to make mandatory the exercise of these powers so far as possible and to the extent necessary to restore the average wholesale commodity price level to the point indicated.

Permanent prosperity in this country demands that the dollar be made an accurate measure of value—that its purchasing power be always constant. This means stability of the average wholesale commodity price level instead of alternate periods of inflation and deflation which are the principal causes of business uncertainty and depression. Fluctuation in the purchasing power of the dollar causes serious losses to debtors in periods of deflation and to creditors in periods of inflation, and benefits only the speculators.

We recommend the following action by Congress to stabilize the purchasing power of money:

1. Direct the Federal reserve system to use all its powers, following restoration of price level, to stabilize the purchasing power of money in so far as possible, using for that purpose all its monetary and credit powers, including currency and credit control, open-market operation, and changes in rediscount rates and in rediscount eligibility rules.
2. Empower and direct the Federal Reserve Board to raise or lower reserve requirements of the Federal reserve banks and to raise or lower the price of gold.
3. Broaden the rediscount eligibility provisions of the Federal reserve act.

NATIONAL GRANGE RESOLUTION

The deflation of the past three years has injured farmers more than any other class of producers in the country. While the average of all wholesale prices has fallen 30 per cent, the average price of farm products has fallen 45 per cent. This means that the burden of debts, most of which were contracted more than three years ago, and of which there is estimated to be \$11,000,000,000 secured by farm mortgages, has increased 80 per cent in terms of the products which farmers sell.

In view of this serious situation, we urge upon the Federal reserve system and the Federal Government to take all steps possible to secure (1) restoration as nearly as may be of the wholesale price average as computed by the United States Bureau of Labor Statistics to the level prevailing in 1926, or the average of 1923-1928, and (2) the stabilization of the price level as nearly as practicable at that point.

Contributing to these ends, the National Grange recommends the following measures:

1. An increased purchase in large volume of securities in the open market by the Federal reserve banks.
2. Reduction of rediscount rates by the Federal reserve banks.
3. Reduction of the legal minimum gold reserve ratios of the Federal reserve banks to points materially below the present 35 and 40 per cent legal ratios, to the end that the surplus gold in the United States may be exported without endangering the gold standard.
4. An international monetary conference for the purpose of (a) stabilizing the gold price of silver, and (b) stabilizing the purchasing power of gold in terms of the average of wholesale prices of commodities.

BOOKS ON THE MONEY QUESTION

The Banks and Prosperity. By Lionel D. Edie, published by Harper & Bros., New York.

- The Money Illusion. By Irving Fisher, Adelphia, N. Y.
 America Weighs Her Gold. By James Harvey Rogers, Yale University Press.
 The MacMillan Report. By British Committee on Finance and Industry.
 His Majesty's Stationery Office, London.
 Money. By Foster and Catchings, Houghton & Mifflin, New York.
 This booklet has been prepared under the direction of the special committee of the American Farm Bureau on stabilization of the unit of value. The members of this committee are as follows:
- Ralph Snyder, chairman, president Kansas Farm Bureau.
 - Charles E. Hearst, president Iowa Farm Bureau.
 - C. R. White, president New York Farm Bureau.
 - H. A. Wallace, editor Wallace's Farmer.
 - C. V. Gregory, editor Prairie Farmer.
 - C. W. Ramseyer, Member of Congress, Bloomfield, Iowa.
 - Andrew Shearer, Frankfort, Kans.
 - Prof. John R. Commons, University of Wisconsin.
 - Charles A. Ewing, president National Livestock Marketing Association.

Mr. O'NEAL. That covers this subject in a very broad way. I would say, Mr. Chairman, that last Saturday evening over the National Broadcasting System I made an appeal to the folks all over the Nation on this subject, including a few of the major projects of our national organization, and I would like to have samples of the replies go into the record; or I would like to read them to this subcommittee, as it will only take a few moments to present the immediate replies received from 28 States of the Nation, you might say, within 36 hours. They were mailed from California, mailed from the far South, and replies have been received from every section on this subject, showing the earnest desire of the people of the Nation in answer to this appeal that we be thinking about this great question; and I would like to have that go in the record. For the Northeastern region, I think this is a very typical sample, this wire from Hartford, Conn.:

Speed the day for honest dollar program. Tell committee America's future warrants this policy. Hold high the torch that rays may light our way.

I have listed the people from whom I have received communications in that section of the country, which shows their vital interest in the program. Here is a letter from Cornelia, Ga.:

I have just been listening to your talk over the radio. I am much impressed with what you said, and am going to try and become a member of your organization. Tell our Georgia Members of Congress to get right when you appear before them on the 18th. That we will check their votes, and if they are not right, that we will soon have an opportunity to get a Member who will back up the farmer. The business men and bankers' program for legislation has fallen down.

Here is one from the mid-West, from Elk City, Okla. I thought that would give you a typical idea of how the folks out there are thinking about it.

Just listened to your address over the radio. I'm in sympathy with the plan suggested therein to restore prosperity to our Nation. It is the only feasible plan yet proposed that will accomplish the results desired.

I hope you will succeed in convincing Congress of the merits of this plan. It seems to me that if our Representatives are sincere in their desire to help restore prosperity to our Nation, they are intelligent enough to see that there can be no permanent prosperity without an adequate supply of money circulating among the people, and that money can not reach the people unless they are paid for their labor and for the products of their labor. They must receive prices that will net them a return above cost of production. That these prices must be fixed by an agency in sympathy with the producer as well as the consumer, and not by a bunch of heartless gamblers.

Our Government is either hopelessly impotent or wholly out of sympathy with the welfare of the masses. If it continues to disregard the appeals of such organizations as you represent, and refuse to pass bills and make laws that will bring relief from our present calamity and prevent the return of like conditions, what are we to expect from it?

We condemn communism, we abhor disloyalty to our Government, we stand aghast at the thought of revolution, but what may we expect if our people continue to starve in this land of plenty—yea, some say overproduction? We may lull our consciousness and dismiss the thought with a jest about such conditions, but it is to be hoped that the seriousness of this matter will dawn upon those in authority before it is too late.

Something will be done. If our Government refuses to act, then the people will. Only a lack of organization, which prevents concerted action, restrains them from rising en masse and asserting their rights now. Let us hope for relief from our trusted representatives and other officials through the channels of our present organized Government. They can meet the emergency of this hour if they will. Will they?

Visualize, if you will, millions of our citizens with their backs against the wall, their wives and children hungry and in rags, their eyes turned toward Washington, their arms outstretched toward Heaven, praying for relief from the most demoralizing, unnecessary depression that ever scourged a people, suffering with a forbearance born only of a sustained hope that something will be done to relieve them. If their prayers are unanswered and no relief comes, despair will supplant hope—then what the consequences will be God only knows.

God speed you on your mission to interview the congressional committee, and may they in their wisdom and delegated authority meet the emergency by giving the relief which your suggestion will bring to the people of America.

From Michigan: I have this communication from Michigan, from the mid-West:

Go before the House committee on March 16 and help them realize that the backbone of the Nation is very weak and needs some sort of brace, which is needed at once.

If my support means anything at all, it is yours.

And from Sedalia, Mo., I have this letter:

"O. K. Montreal." Yours of 12th instant is only justice. The bank credit financial system built up since the Civil War has eliminated money and thrown control of credits into the hands of Morgan, Mellon, et al. The effect, viz: Our old home place of 205 acres entered in 1853-54 is a summit silt loam prairie, one-half virgin soil. Rent for 1931 was less than one-third the average for 24 years. After paying taxes, insurance, and a \$75 repair bill, gave a remainder of \$2.55 for a year's net receipts; many have done worse.

Second effect: We needed \$200 recently to make a trade. In spite of the fact we do not owe a penny, with town and country property, a few nickels besides, my daughter and I could not get it in two good Missouri counties without further endangering the credit of the banks, because of Morgan-Mellon banking laws.

Mr. HOOPER. Mr. Chairman, I am in sympathy, and feel that we are all in sympathy with the people who have written in here, but this is not going to help us in the record as to the particular question, it seems to me. Ought the record to be encumbered with these messages, or how far is it going?

Mr. GOLDSBOROUGH. My thought was that probably Mr. O'Neal was nearly through with the letters.

Mr. O'NEAL. Mr. Congressman, I have just two more.

Mr. HOOPER. I am in sympathy with what you are saying, Mr. O'Neal.

Mr. O'NEAL. I think Mr. Congressman, that these expressions—

Mr. HOOPER. I will not object.

Mr. GOLDSBOROUGH. Of course, Mr. O'Neal, you realize that the Members of Congress are getting hundreds of letters, heart-rending letters, and—

Mr. STRONG. I think he ought to put those in.

Mr. HOOPER. I will not object.

Mr. STRONG. Mr. Hooper does not object. I think they ought to go in.

Mr. DISNEY. I am pretty sure that is my attitude.

Mr. GOLDSBOROUGH. There is no objection to putting them in.

Mr. O'NEAL. There are only two more, and if the Congressman objects, I will not read any more.

Mr. STRONG. He does not object, Mr. O'Neal.

Mr. O'NEAL. I was just saying, Mr. Congressman, that one of our greatest Presidents once said: "Public sentiment is everything," and my thought was, in giving you this, I would give you an expression of what the folks all over this great Nation are feeling and thinking. I know how busy you are, but they come from every section of the Nation.

Mr. GOLDSBOROUGH. I am certain that the Members of Congress, and certainly every member of this subcommittee, sympathizes with everything you have said, and everything you have read from those letters.

Mr. HOOPER. No question about that.

Mr. O'NEAL. I have another one, from Centerville, Iowa, as follows:

Countrywide meeting Appanoose County Farm Bureau overwhelmingly for monetary reforms along lines outlined by farm organizations of America. Wholesale repudiation inevitable without immediate readjustments. Present conditions are sacrificing the farmer, the backbone of democratic structure, to a short sighted wholly unfair system. We are behind your efforts 100 per cent. If administration does not heed dire consequences may follow.

And I also have this last one, from Nebraska City, Nebr.:

I heard your talk over the radio this noon. I have a farm of 120 acres. My taxes are \$287.70, with corn 25 cents per bushel, hogs 3½ cents per pound, eggs 7 cents per dozen. The farmer is so flat on his back he can't fight back.

I have seen more than 70 years in Nebraska. I went through the grasshopper invasion of 1874-75 and 1876, and some droughts which occurred here, but they were not to be compared with this man-made depression. Some one made this depression to gouge the people.

Now, Mr. Chairman, I would like to have these papers inserted in the record, these letters that I have read. Others are being received daily.

Mr. GOLDSBOROUGH. Without objection, they will be included. (The papers referred to are here printed in full as follows:)

NORTHEASTERN REGION

HARTFORD, CONN., March 13, 1932.

EDWARD A. O'NEAL,

President American Farm Bureau Federation,

Washington, D. C.:

Speed the day for honest-dollar program. Tell committee America's future warrants this policy. Hold high the torch that rays may light our way.

Mrs. T. C. WATERS.

RHODE ISLAND

Cornelius F. Riley, R. F. D. No. 1, Westerly.

MASSACHUSETTS

James A. Gile, P. O. box 211, Haverhill.

NEW YORK

Robert E. Moody, Rushville.
 Alfred Hsley, Castile.
 Harry Bailey, 207 West Sixty-sixth Street, New York City.
 Herbert M. Van Voorhis, 264 Van Ness Street, Newburgh.
 William V. Stewart, Canister.
 Mrs. Catharine M. Stewart, Canister.
 Miss Marjorie E. Stewart, Canister.
 A. W. Hamm, Lakewood.
 S. J. Carson, secretary Cayuga County Farm Bureau, King Ferry.
 G. B. Fassett, Albion.
 N. A. Fassett, Albion.
 A. D. Fassett, Albion.
 Lewis E. Child, Philadelphia.
 Marion F. Ostiom, 162 West Main Street, Middletown.
 Charles L. Noble, Clyde.
 James McGuire, chairman Genesee County Farm Bureau, South Byron.
 A. J. Benning, Lyons.
 John W. Totterdale, Stafford.
 Samilla Love Jameson, Princes Bay, Staten Island.
 Glenn T. Carter, Marathon.

DELAWARE

H. A. Shock, master Seneca County Pomona Grange.
 H. C. Richardson, Wyoming.

NEW JERSEY

George W. O'Neill, 157 Quitman Street, Newark.
 Mr. and Mrs. Milton C. Creamer, route 6, Bridgeton.
 John W. Vohman, Jamesburg.
 H. J. Hambrook, Toms River.
 Edmund Shimp, Hancocks Bridge.

PENNSYLVANIA

William Roulston, 6218 Dickens Avenue, Philadelphia.
 Walter E. Seely, Nescopeck.
 Peter A. Graver, route 2, Bath.
 Lee Francis Lybarger, 510 Chestnut Street, Mifflinburg.
 Edw. S. Casey, Audubon.
 F. B. Eshleman, Landisville.
 Dell R. Lemmon, North Girard.
 G. H. McCarthy, route 5, Lancaster.
 Mrs. G. W. McCarthy, route 5, Lancaster.

MARYLAND

Eugene Sponseller, Frederick.
 Dr. S. B. Hendrickson, Lutherville.
 H. C. Tunis, St. Michael.
 William E. Sanger, Cordova.
 E. Thomas Massey, president Kent County Farm Bureau, Chestertown.
 J. Wilson Lard, president Howard County Farm Bureau, Ellicott City.
 Wm. G. S. Rosin, Worton.

DISTRICT OF COLUMBIA

Violet Thonvaith, Washington.

NORTH CAROLINA

Clarence Poe, president and editor Progressive Farmer, Raleigh.
M. Malloy, Asheville.

CONNECTICUT

Mr. and Mrs. George W. Wilcke, 173 Remington Street, Bridgeport.
Joseph Watson, Hazardville.
Sophia C. Watson, Hazardville.
Robert J. Hawthorne, Hazardville.
Leland R. Hawthorne, Hazardville.
Clara E. Hawthorne, Hazardville.
Mildred B. Hawthorne, Hazardville.

NEW HAMPSHIRE

Howard T. Moulton, Hampton Falls.
M. W. Moulton, Hampton Falls.

SOUTHERN REGION

CORNELLIA, GA., *March 12, 1932.*

President EDWARD A. O'NEAL,
American Farm Bureau Federation, Chicago, Ill.

DEAR SIR: I have just been listening to your talk over the radio. I am much impressed with what you said and am going to try and become a member of your organization.

Tell our Georgia Members of Congress to get right when you appear before them on the 16th; that we will check their votes and, if they are not right, that we will soon have an opportunity to get a Member who will back up the farmer. The business men and bankers' program for legislation has fallen down.

Sincerely yours,

R. H. BLACK.

GEORGIA

W. C. Moore, Oak Hill, Decatur.

FLORIDA

E. T. Smith, 2121 Perry Street, Jacksonville.
G. A. Brauer, 1826 25th Street, South, St. Petersburg.
M. White, Jacksonville.
J. J. L. Phillips, Homestead.
A. C. Belmont, box 95, Station A, St. Petersburg.
Burr Gunsaulus, 3521 Iris Street, St. Petersburg.
Mrs. Edith C. Worley, Orange Park.

ALABAMA

O. B. Myrick, Cullman.
J. D. and Mrs. Giles, Selma, route 2.
W. D. Prier, 4023 Fourth Avenue South, Birmingham.
J. E. Orman, Russellville.
C. J. Higgins, Cullman.
C. L. Phillips, Phil Campbell
S. A. Burns, Montgomery.

MISSISSIPPI

T. S. Johnston, Nesbitt.

TENNESSEE

George M. Brasfield, Trenton.

KENTUCKY

T. S. Wright, West Point.
 Eva Carrigan, Irvington.
 James S. White and family, Campbellsville.
 F. B. Haskell, Erlanger.

LOUISIANA

B. L. Orvis, Welsh.

ELK CITY, OKLA., *March 12, 1932.*

E. A. O'NEAL,

*President American Farm Bureau Federation,
 Chicago, Ill.*

DEAR SIR: Just listened to your address over the radio. I'm in sympathy with the plan suggested therein to restore prosperity to our nation. It is the only feasible plan yet proposed that will accomplish the results desired.

I hope you will succeed in convincing Congress of the merits of this plan. It seems to me that if our Representatives are sincere in their desire to help restore prosperity to our nation, they are intelligent enough to see that there can be no permanent prosperity without an adequate supply of money circulating among the people, and that money can not reach the people unless they are paid for their labor and for the products of their labor. They must receive prices that will net them a return above cost of production. That these prices must be fixed by an agency in sympathy with the producer as well as the consumer, and not by a bunch of heartless gamblers.

Our Government is either hopelessly impotent, or wholly out of sympathy with the welfare of the masses. If it continues to disregard the appeals of such organizations as you represent, and refuse to pass bills and make laws that will bring relief from our present calamity and prevent the return of like conditions, what are we to expect from it?

We condemn communism, we abhor disloyalty to our Government, we stand aghast at the thought of revolution, but what may we expect if our people continue to starve in this land of plenty—yea, some say overproduction. We may lull our consciousness and dismiss the thought with a jest about such conditions, but it is to be hoped that the seriousness of this matter will dawn upon those in authority before it is too late.

Something will be done. If our Government refuses to act, then the people will. Only a lack of organization, which prevents concerted action restrains them from rising en masse and asserting their rights now. Let us hope for relief from our trusted Representatives and other officials, through the channels of our present organized Government. They can meet the emergency of this hour if they will. Will they?

Visualize, if you will, millions of our citizens, with their backs against the wall, their wives and children hungry and in rags, their eyes turned toward Washington, their arms outstretched toward heaven, praying for relief from the most demoralizing unnecessary depression that ever scourged a people, suffering with a forbearance born only of a sustained hope that something will be done to relieve them. If their prayers are unanswered, and no relief comes, despair will supplant hope—then what the consequences will be God only knows.

God speed you on your mission to interview the congressional committee and may they, in their wisdom and delegated authority, meet the emergency by giving the relief which your suggestion will bring to the people of America.

Yours truly,

J. C. WEAVER.

OKLAHOMA

Mrs. P. H. Rutherford, Cordell.
 Mrs. Bettie H. Cox, box 701, Duncan.
 Leo Barnett, Oklahoma City, 607 West Fifth Street.
 Claud Reese, Fairview.
 W. M. Stunkard, R. F. D. No. 2, Tulsa.
 J. H. Carney, Cashion.
 Mrs. Winnie W. Carney, Cashion.
 Miss Orvilla F. Walton, Cashion.
 H. C. Reagan, Nicoma Park.
 Thad Slaght, Hitchcock.

ARKANSAS

J. E. Singleton, Bigelow.
 L. E. Morlan, Hot Springs.
 R. W. Boucher, Springdale.

TEXAS

William Knykendall, Cotulla.
 H. A. Willson, Cotulla.
 Mrs. J. H. Long, 510 North Tancahua, Corpus Christi.
 H. C. Harrington, Chillicothe.
 W. V. Robinson, box 499, Temple.
 Peter Harton, Danevang.
 Charles P. Luck, 911 West Eleventh Street, Austin.
 J. C. Wilson, 308 Payne Avenue, Houston.
 George A. Mawman, 1418 Seventeenth Street, Wichita Falls.
 Mrs. Bertha D. Johnson, 415 Park Place, Austin.
 Mrs. Wm. R. Nash, East Columbia.
 Mrs. Browning Grace, East Columbia.
 H. D. Thode, Clegg.

MIDWESTERN REGION

FERNDALE, MICH., *March 12, 1932.*

PRESIDENT AMERICAN FARM BUREAU FEDERATION,
Chicago, Ill.

DEAR SIR: Go before the House committee on March 16 and help them realize that the backbone of the Nation is very weak and needs some sort of brace, which is needed at once.

If my support means anything at all, it is yours.

Sincerely yours,

ROBERT E. BELL.

P. S.—There are five other backers of you in my family.

MICHIGAN

Mrs. Josephine Quinet, 8125 Carlin Avenue, Detroit.
 Harry Rogers, Dundee.
 Alfred Vincent, Durand.
 Mrs. William J. Tilby, 8197 Alpine, Detroit.
 H. J. Clabuesch, manager Cooperative Elevator Co., Pigeon.
 James C. Price, 417 North Fayette Street, Saginaw.
 Joseph Skoda, Brighton.
 Harry M. Thorne, 4168 Helen Avenue, Detroit.
 Mrs. Grace S. Godfrey, Lansing.
 D. V. Mitchell, route 2, Farmington.
 Evelyn Mitchell, route 2, Farmington.
 Mr. and Mrs. S. Strobridge, Boyne City.
 N. J. Biddle, 5951 Fischer Avenue, Detroit.
 John Engle, route 2, Imlay City.
 Warren E. Hobson, Batavia.
 F. H. Teerance, Temperance.
 J. M. Conlin, Temperance.
 Gilbert Scott, Hastings.
 Art Heath, Milan.
 Don C. Lane, 1915 East Ganson, Jackson.
 Ralph H. Bach, president Hillsdale County Farm Bureau, Hillsdale.
 R. V. Beardslee, Owosso.
 Fern L. Beardslee, Owosso.
 B. L. Bird, Holly.
 R. R. Lyon, 2639 Liddlesdale Avenue, Detroit.
 E. W. Irwin, route 2, Saginaw.
 Jesse A. Collier, R. F. D. No. 2, Snover.
 C. B. Cook, Owosso.
 Charles A. Scott, Hastings.

Mr. and Mrs. Charles Kernkamp, St. Paul Park.
 A. O. Garley, 426 North Pierce Street, St. Paul.
 J. E. Martin, 506 Phoenix Building, Minneapolis.
 Mr. and Mrs. S. R. Brown, 320 South Seventy-first Avenue, West Duluth.
 Mr. and Mrs. F. Brass, 3836, Twenty-third Avenue South, Minneapolis.
 Robin A. Moore, Moorewood Farm, Carlton.
 Mrs. Maude H. Moore, Moorewood Farm, Carlton.
 R. H. Radke, Hastings.
 Oscar Schebloom, 1070 Seventeenth Avenue SE., Minneapolis.
 Clarence Tollifson, Ashby.
 J. S. Jones, secretary Minnesota Farm Bureau, 312 Old Capitol Building,
 St. Paul.
 Montgomery E. Drake, 2636 Fifth Avenue South, Minneapolis.
 W. C. Blandatt, Angus Hotel, St. Paul.

WISCONSIN

H. O. Bigelow, 1215 Williamson Street, Madison.
 Henry Stillman, route 3, box 18, Ladysmith.

SOUTH DAKOTA

George B. Kennard, secretary South Dakota Farm Bureau Federation, Huron.
 J. T. Lothrop, Mitchell.

SEDALIA, MO., *February 12, 1932.*

PRESIDENT AMERICAN FARM BUREAU FEDERATION,
Chicago, Ill.

DEAR SIR: O. K. Montreal. Yours of 12th instant is only justice. The bank credit financial system built up since the Civil War has eliminated money and thrown control of credits into the hands of Morgan-Mellon et al. The effect, viz, our old home place of 205 acres entered in 1853-54 is a Summit silt loam prairie, one-half virgin soil. Rent for 1931 was less than one-third the average for 24 years. After paying taxes, insurance, and a \$75 repair bill, gave a remainder of \$2.55 for a year's net receipts; many have done worse.

Second effect: We needed \$200 recently to make a trade. In spite of the fact we do not owe a penny, with town and country property, a few nickels besides, my daughter and I could not get it in two good Missouri counties without further endangering the credit of the banks. Because of Morgan-Mellon banking laws.

Very truly,

JAMES M. WARD.

MISSOURI

H. G. Geyer, Neosho.
 T. P. Mannel, Moberly.
 H. J. Heter, 2925 Baltimore Avenue, Kansas City.
 R. H. Wotyen, 6444 South West, St. Louis.
 L. R. Lawrence, Harrisonville.
 George A. Colin, Belton.
 C. J. Rothermich, St. Charles.
 Mr. and Mrs. A. G. Adams, R. F. D. No. 1, Revere.

OHIO

H. D. Hopkins, Tiffin.
 F. Clair Boothby, 202 East O'Connor Avenue, Lima
 R. R. Adams, route 5, Fostoria.
 H. H. Leshner, Columbiana.
 Paul F. Frank, Crestline.
 Oby. D. Garn, Gibsonburg.
 Fred A. Schulz, Piqua.
 E. D. McLaughlin, route 1, Forest.
 George W. Taylor, Cincinnati.
 Mr. and Mrs. Everett J. Starbuck, Wilmington.
 Albert J. Livezey, Barnesville.
 A. E. Osborne, 8 Findley Avenue, Zanesville.

E. G. Brueckner, 6843 East Britton Avenue, Cincinnati.
 E. W. Roush, secretary Sandusky County Farm Bureau, Lindsey.
 G. W. Meyer, route 4, Clyde.
 Mr. and Mrs. H. L. McPherson, rural route 8, Dayton.
 Mr. and Mrs. Irvin Coy, rural route 8, Dayton.
 Clarence Mowry, R. F. D. No. 7, Mansfield.
 Arthur H. Deeks, West Dover.
 Marie R. Buescher, rural route No. 5, Batavia.
 Arthur J. Stone, Harrison.
 Clarence J. Burchfield, R. F. D. 2, Maumee.
 Mr. and Mrs. A. Verne Joslin, 1217 Yarmouth Avenue, Cincinnati.
 F. E. Stoeckl, 4279 Webster, Deer Park.
 T. Stoeckl, 4279 Webster, Deer Park.
 Charles Stoeckl, 4279 Webster, Deer Park.
 John Rosenzweig, rural route No. 5, Batavia.
 J. W. Anderson, 548 East High Avenue, Bellefontaine.
 D. W. Dailey, Maumee.
 Mrs. Sara Smithman, 250 North Miami, West Milton.
 Bernard Desch, Chickasaw.
 Mrs. Leah B. Fawcett, Novelty.
 John W. Fawcett, Novelty.
 C. J. Windon, Pandora.

INDIANA

Edw. E. Hiatt, route 3, Greentown.
 H. Barnard, president Union County Farm Bureau Cooperative Association,
 Liberty.
 H. R. Atcheson, Scottsburg.
 Mabel G. Spencer, Idaville.
 Mr. and Mrs. Edw. Stahl, Newburg.
 F. N. Wilson, route 1, Pleasant Lake.
 Robert Blank, rural route 31, Corydon.
 A. A. Higdon, Scottsburg.
 John S. Mitchell, Windfall.
 R. A. Baker, manager Steuben County Farm Bureau Cooperative Association
 (Inc.), Angola.
 Mathias Ritter, rural route No. 2, Jeffersonville.
 L. C. Frinck, route 2, Ossian.
 Harry Bell, secretary Steuben County Farm Bureau, Angola.
 Bayard Taylor, route 2, Lawrenceburg.
 Mrs. Bert DeLong, Plainfield.
 L. S. Ratliff, Spiceland.
 Henry F. Meyer, chairman Lawrenceburg Township, Dearborn County, Farm
 Bureau, Aurora.
 F. A. Addison, rural route No. 3, Carthage.
 H. A. Addison, rural route No. 3, Carthage.
 G. D. Addison, rural route No. 3, Carthage.
 Byron Shupp, treasurer Steuben County Farm Bureau, Angola.
 F. L. Spencer, Idaville.
 A. N. York, Marion.

ILLINOIS

H. T. Lauterback, Itasca.
 Mrs. Henry J. Mies, president Illinois Home Bureau Federation, 220 West
 Henry Street, Pontiac.
 Emory C. Maxwell, 210 West Eleventh Street, Mount Carmel.
 W. J. Swayer, president Lake County Farm Bureau, Grayslake.
 G. M. Diehl, Mount Morris.
 Eldon Diehl, Mount Morris.
 Mr. and Mrs. J. C. Shores, Atlanta.
 Stanley W. Porter, Elgin.

KANSAS

A. T. Holsbury, Willsville.
 Dora B. McLaggart, Independence.
 John J. Freeley, 135 North Yale, Wichita.
 Fred Arnett, Arkansas City.

Mr. and Mrs. Sylvester Baringer, Westphalia.
 Wilbur M. Jones, Lenexa.
 Cyrus Lincoln Bennett, sr., Johnson.
 John Lortscher, Fairview.
 H. A. Kunkle, Ellsworth.
 Mrs. C. J. Allen, route 2, Liberty.
 Newton H. McKinnie, route 4, Beloit.
 J. R. Seneff, route 4, Ottawa.

CENTERVILLE, IOWA, March 14, 1932.

EDWARD A. O'NEAL,
President American Farm Bureau Federation,
Munsey Building, Washington, D. C.

County-wide meeting Appanoose County Farm Bureau overwhelmingly for monetary reforms along lines outlined by farm organizations of America. Wholesale repudiation inevitable without immediate readjustments. Present conditions are sacrificing the farmer, the backbone of democratic structure, to a short-sighted, wholly unfair system. We are behind your efforts 100 per cent. If administration does not heed, dire consequences may follow.

PAUL B. STRICKLER,
President Appanoose County Farm Bureau.

IOWA

Fred Otto, president Muscatine County Farm Bureau, Muscatine.
 Edward Dohrmann, Chapin.
 G. T. Schlenker, president Polk County Farm Bureau, route 4, Des Moines.
 C. G. Heidman, secretary Polk County Farm Bureau, Granger.
 C. W. Clark, president cooperative extension work in agriculture and home economics, Fairfield.
 F. C. Duffield, president Davis County Farm Bureau, Bloomfield.
 Lester Hoffa, Grundy County Farm Bureau, Grundy Center.
 Mrs. Louis White, Marion.
 O. E. Erickson, president Pocahontas County Farm Bureau, Pocahontas.
 C. H. Thompson, County agent cooperative extension work, Le Mars.
 R. L. Weidauer, director Plymouth County Farm Bureau, Le Mars.
 Albert Lundgren, director Plymouth County Farm Bureau, Le Mars.
 C. H. Mamman, director Plymouth County Farm Bureau, Le Mars.
 R. P. Krause, director Plymouth County Farm Bureau, Hinton.
 Bernard Lucken, director Plymouth County Farm Bureau, Akron.
 Herbert A. Johnson, director Plymouth County Farm Bureau, Akron.
 Andrew Bogh, director Plymouth County Farm Bureau, Le Mars.
 William F. Foley, director Plymouth County Farm Bureau, Le Mars.
 N. H. Majires, director Plymouth County Farm Bureau, Le Mars.
 George Sitzmann, director Plymouth County Farm Bureau, Kingsley.
 W. G. Anderson, director Plymouth County Farm Bureau, Remsen.
 Leo J. Sitzmann, director Plymouth County Farm Bureau, Kingsley.
 Will Berger, director Plymouth County Farm Bureau, Hinton.
 Dewey Bender, director Plymouth County Farm Bureau, Hinton.
 George V. Parlik, director Plymouth County Farm Bureau, Le Mars.
 W. E. Vogel, president Adams County Farm Bureau, Corning.
 Reuben N. Bergquist, Council Bluffs.
 Arno R. Vanhurann, Council Bluffs.
 Gus Swenson, director Fairfield Township Farm Bureau of Buena Vista County, Albert City.
 Fay Galbraith, secretary Fairfield Township Farm Bureau of Buena Vista County, Albert City.
 Clay County Farm Bureau, Spencer.
 C. W. Brobeil, president Sac County Farm Bureau, Sac City.
 Erlin Lomen, president Winneshiek County Farm Bureau, Decorah.
 H. F. Pitstick, president Buena Vista County Farm Bureau, Storm Lake.
 A. B. Kline, president Benton County Farm Bureau, Vinton.
 Mrs. Raymond Sayre, county chairman Farm Women of Warren County, Indianola.

William H. Mast, route 3, Davenport.
 G. E. Sauerbry, president Fayette County Farm Bureau, Fayette.
 Mr. and Mrs. R. C. Wood, Traer.
 R. B. Blinks, president Linn County Farm Bureau, Marion.
 Lillian Rogers, Council Bluffs.
 Idelia Bakke, Council Bluffs.
 Ben Niewendorp, Sanborn.
 S. Hootman, Woodburn.
 E. H. Adams, Quimby.
 O. J. De Vault, R. F. D. No. 2, Earlham.
 A. P. Llewellyn, Waukeo.
 Mr. and Mrs. Joe Lawton, Lewis.
 Mr. and Mrs. S. H. Schroeder, Holstein.
 Carroll G. Carson, president Winnebago County Farm Bureau, Forest City.
 Mr. and Mrs. I. S. Pearson, Springville.
 E. Shotwell, Mount Vernon.
 Mr. and Mrs. Elmer Rosa, Ossian.
 R. A. Grove, Rockwell City.
 Iowa Farm Bureau Federation, 805 National Valley Bank Building, Des Moines.

Roy F. O. O'Donnell, Des Moines.
 Frank A. Youngberg, Eddyville.
 Paul B. Strickler, Centerville.
 William M. Smith, 2835 Army Post Road, Des Moines.
 Mrs. Brownlie Graham, Brooklyn.
 M. Gullickson, president Worth County Farm Bureau, Northwood.
 J. J. Akre, Decorah.
 J. P. Hansen, Otranto.
 R. L. Blackwood, Newton.
 M. G. Thornburg, secretary of Agriculture, Des Moines.
 R. B. Blinks, president Linn County Farm Bureau, Cedar Rapids.
 A. T. Bennett, president Ringgold County Farm Bureau, Mount Ayr.
 Paul M. Burson, Nevada.
 W. W. Latta, Logan.
 Kermith S. Huehn, Manchester.
 L. D. Dickey, Lohrville.
 W. H. McCrae, Lohrville.
 F. H. Bliss, member Keokuk County Farm Bureau Board, Sigourney.
 John White, member Keokuk County Farm Bureau Board, Sigourney.
 J. E. Zepp, member Keokuk County Farm Bureau Board, Sigourney.
 G. F. Stoner, member Keokuk County Farm Bureau Board, Sigourney.
 S. T. Yates, member Keokuk County Farm Bureau Board, Sigourney.
 S. T. Wheeler, member Keokuk County Farm Bureau Board, Sigourney.
 D. W. Bruns, member Keokuk County Farm Bureau Board, Sigourney.
 Peter Wehr, member Keokuk County Farm Bureau Board, Sigourney.
 Glen Sorden, member Keokuk County Farm Bureau Board, Sigourney.
 Oscar Dawson, member Keokuk County Farm Bureau Board, Sigourney.
 O. W. Gode, Marengo.
 Fred H. Barnes, Cedar Falls.
 Mrs. Amy Chamberlin, Ankeny.
 Ed Doolittle, president Hamilton County Farm Bureau, Webster City.
 H. J. Teachont, president Fremont County Farm Bureau, Sidney.
 Mrs. S. Homesley, Woodward.
 Clarence E. Carlson, Ogden.
 M. C. Harmsen, Sabula.
 Verne M. Smith, Dayton.
 M. C. Harmsen, secretary Jackson County Farm Bureau, Maquoketa.
 N. P. Nissen, president Jackson County Farm Bureau, Monmouth.
 L. R. Teeple, Baldwin.
 H. J. Cleverley, president Story County Farm Bureau, Maxwell.
 C. E. Poffenbergen, Marshalltown.
 L. S. Gillette, president Dickinson County Farm Bureau, Spirit Lake.
 F. L. Wallace, president Iowa County Farm Bureau, Marengo.
 F. H. Bliss, president Keokuk County Farm Bureau, South English.
 Louis Taber, Springville.
 C. W. Files, Mason City.
 Nellie Gilbertson, St. Ansgar.

William Claussen, box 204, Paullina, Iowa.
Miss Florence J. Young, Earlville.
Mr. and Mrs. C. P. Moore, Rippey.
E. J. Hollander, Logan.
C. I. Redfern, Winterset.
Al Haches, 301 East Fifteenth Street, Davenport.
Blanche W. Barclay, West Liberty.
Helen Hoffman, rural route No. 1, Murray.
C. H. Trueblood, Indianaola.
P. E. Williams, Indianaola.
Walt Murray, Indianaola.
Mr. and Mrs. A. H. Beebee, Logan.
W. Mighell, Quinsby.
E. H. Dull, Cherokee.
Mr. and Mrs. A. R. Kuhl, route No. 1, Eldridge.
D. E. Hollingsworth, Winterset.
W. W. Latta, president Harrison County Farm Bureau, Logan.
Mrs. Harry C. Henriksen, route No. 2, Harlan.
F. Schwendemann, Washington.
E. C. Hovey, Webster County Farm Bureau, Fort Dodge.
R. H. Reed, Webster County Farm Bureau, Fort Dodge.
H. I. Jones, Duncombe.
E. T. Davidson, Duncombe.
O. M. Olson, Duncombe.
G. D. Belken, Duncombe.
Mrs. G. D. Belken, Duncombe.
Agnes Simonson, Duncombe.
Esther Housken, Duncombe.
Alvina Housken, Duncombe.
W. Storey, Duncombe.
L. O. Lande, Duncombe.
J. J. Claesen, Duncombe.
Clarence W. Jacobson, Duncombe.
Mervin Ruscher, Duncombe.
J. H. Suer, Duncombe.
F. W. Teleschaw, Vincent.
J. B. Thorsners, Vincent.
Wm. Courtney, Vincent.
Connie Beisser, Vincent.
Arthur Adson, Vincent.
D. J. Kelly, Eagle Grove.
Walter Wagner, Vincent.
F. A. Ouishots, Vincent.
John Dencklan, Vincent.
Mrs. Eugene L. Rusher, Duncombe.
Eugene L. Rusher, Duncombe.
Emil Hansch, Duncombe.
Velma Hansch, Duncombe.
Trist Hansch, Duncombe.
Albert Rossow, Duncombe.
Laura Rossow, Duncombe.
Walter Telschaw, Vincent.
Edward Dencklman, Duncombe.
Clara Rosmann, Duncombe.
M. L. Champlin, Vincent.
A. O. Swasand, Vincent.
D. D. Workey, Vincent.
Mike Mellinger, Duncombe.
R. H. Reed, Fort Dodge.
Mrs. M. T. Mallinger, Duncombe.
Glenn C. Beck, Duncombe.
James J. Hogan, Duncombe.
John F. Hogan, Fort Dodge.
Henry Scharf, Fort Dodge.
Arthur W. Scharf, Fort Dodge.
Carl H. Scharf, Fort Dodge.
F. G. Lunblad, Fort Dodge.

F. Melvin Stanek, Fort Dodge.
W. A. Berrer, Vincent.
James McMannus, Vincent.
Sam Maybill, Fort Dodge.
Kent L. Pellett, Lehigh.
W. J. Guild, Fort Dodge.
Elizabeth Peterson, Fort Dodge.
Pearl Johnson, Fort Dodge.
Louis Rank, Fort Dodge.
Lloyd Carlson, Gowrie.
Ren Crummer, Gowrie.
W. A. Griffin, Gowrie.
F. E. Sitterstrom, Gowrie.
Ed Farslund, Gowrie.
LaVerne Quick, Gowrie.
Ernest Anderson, Gowrie.
Roy Sandon, Gowrie.
A. R. Knutson, Callender.
Martin Thorsend, Callender.
M. H. Peterson, Callender.
Ben Hanson, Gowrie.
Emil Hanson, Gowrie.
A. C. McCullough, Gowrie.
Ole Higgen, Callender.
P. J. Peterson, Callender.
Charles Bohme, Callender.
G. W. Knutson, Callender.
H. Olson, Callender.
Martin Jacobson, Callender.
A. Larson, Callender.
Herold Hunter, Callender.
W. F. Adams, Callender.
George W. Loehr, Moorland.
A. F. Thomas, Callender.
R. H. Biesemier, Moorland.
G. T. Byrne, Moorland.
Mrs. G. Biesemier, Moorland.
Mrs. June Kusterer, Moorland.
Paul Nelson, Harcourt.
Victor Gustafson, Harcourt.
Joe Hill, Harcourt.
C. A. Lindstadt, Gowrie.
Minnie Rasch Anderson, Harcourt.
Reuben E. Anderson, Harcourt.
P. Swanson, Harcourt.
Thomas Anderson, Harcourt.
Nellie Youngdale, Harcourt.
Frank Youngdale, Harcourt.
John P. Gustafson, Harcourt.
A. Martinson, Harcourt.
J. W. Ryburg, Harcourt.
Marold A. Lind, Harcourt.
Josie Lind, Harcourt.
Oscar A. Lind, Harcourt.
Hattie E. Engquist, Harcourt.
Esther Engquist, Harcourt.
Joe Lilyegren, Harcourt.
Oscar Schill, Harcourt.
Emily Schill, Harcourt.
J. A. Holmstrom, Harcourt.
Esther Holmstrom, Harcourt.
F. B. Benzing, Harcourt.
Allin Sandell, Fort Dodge.
Grant Spangler, Fort Dodge.
C. A. Hedeem, Fort Dodge.
L. W. Hoyer, Dayton.
A. H. Johnson, Burnside.

S. E. Manchester, Dayton.
C. E. Johnson, Burnside.
G. G. Berg, Dayton.
George T. Johnson, Burnside.
F. A. Peterson, Burnside.
E. L. Howdy, Badger.
T. A. Chanlland, Badger.
Andrew Rod, Fort Dodge.
J. G. Varland, Badger.
Charles B. Johnson, Goldfield.
Henry B. Olson, Thor.
Sam Christenson, Badger.
T. A. Gray, Badger.
Leonard Thompson, Badger.
Paul Hoen, Fort Dodge.
L. J. Gevoli, Badger.
L. T. Nelson, Badger.
L. C. Falvag, Badger.
C. E. Knudson, Fort Dodge.
Myron Fivold, Badger.
J. H. Locke, Badger.
Frank Groat, Badger.
H. H. Mayer, Fort Dodge.
P. J. Peterson, Badger.
C. J. Hovick, Fort Dodge.
Merl Locke, Badger.
Alfred Knutson, Badger.
Clarence Lock, Badger.
Frank Kendall, Badger.
George M. Anderson, Elliott.
C. A. Thorne, Dayton.
Chris Hanson, Dayton.
T. W. Swanson, Dayton.
S. A. Burnquist, Dayton.
H. C. Sheldon, Dayton.
O. S. Larson, Dayton.
N. H. Hocum, Gowrie.
C. J. Tellren, Gowrie.
Aaron Peterson, Gowrie.
Reuben E. Nelson, Harcourt.
Art Johnson, Badger.
P. O. Bradley, Badger.
Edwin Thompson, Badger.
H. J. Berrier, Badger.
Bert Olson, Badger.
Raymond Axness, Badger.
Ole J. Larson, Badger.
C. F. Berrier, Badger.
L. M. Fevold, Badger.
Floyd Gray, Badger.
G. R. Peterson, Badger.
Andrew Vinsand, Badger.
L. O. M. Yreand, Badger.
James Houge, Badger.
Otto Gangstead, Badger.
C. Cleveland, Badger.
Andrew Chantlund, Badger.
J. F. Olson, Badger.
H. D. Reeves, Badger.
L. J. Cody, Badger.
Alvin Gangstead, Badger.
Henry F. Olson, Badger.
J. G. Mettvedt, Badger.
Robert M. Clark, Mitchellville.
Max McMillan, Estherville.
Mrs. S. F. Putzke, Fort Dodge.
R. B. Booth, route No. 3, Cedar Rapids.
G. M. Goudy, Mount Vernon.

H. H. Rinker, president Boone County Farm Bureau, Boone.
 R. B. Blinks, president Linn County Farm Bureau, Cedar Rapids.
 H. L. Walker, president Washington County Farm Bureau, Washington.
 Erlin Lomen, president Winneshiel County Farm Bureau, Decorah.
 H. F. Lubkeman, president Franklin County Farm Bureau, Hampton.
 Charles Woods, president Lyon County Farm Bureau, Rock Rapids.
 A. C. Hanson, Rock Rapids.
 Bernard Rosonke, New Hampton.
 John Arnhalt, New Hampton.
 L. E. Meyer, Ionia.
 E. E. Tracy, Nashua.
 L. J. Shores, Waucoma.
 George Holkspeier, New Hampton.
 W. W. Karnatz, New Hampton.
 Will H. Lienaur, Fredericksburg.
 S. B. Leichtman, New Hampton.
 F. C. Putan, New Hampton.
 Hubert Laures, New Hampton.
 Mrs. S. B. Leichtman, New Hampton.
 A. R. Mitchell, president Hardin County Farm Bureau, New Providence.
 Frank Bell, president Monroe County Farm Bureau, Albia.
 Lester Hoffa, Grundy County Farm Bureau, Grundy Center.
 F. J. Philpott, Chapin.
 J. G. Showalter, Hampton.
 Donally McKee, Hampton.
 L. M. Lemke, Hampton.
 Peter Harting, Hampton.
 George Stokes, Iowa Falls.
 Mrs. H. T. Lubkeman, Coulter.
 William R. Held, Dumont.
 H. T. Lubkeman, Coulter.
 Austin Reynolds, Hubbard.
 W. B. Hamilton, Hampton.
 Carroll Carson, president Winnebago County Farm Bureau, Thompson.
 Earl Watts, Clarinda.
 Mrs. C. E. Leary, president Westburg Township, Buchanan County Farm Bureau, Jesup.
 Mrs. A. C. Holman, secretary, Westburg Township, Buchanan County Farm Bureau, Jesup.
 H. C. Zeman, director, Westburg Township, Buchanan County Farm Bureau, Jesup.
 Simon T. Jossam, Primghar.
 Harold E. Barringer, Emmetsburg.
 S. Roy Crawrod, president Perry Township, Buchanan County Farm Bureau, Jesup.
 W. D. Patten, director, Perry Township, Buchanan County Farm Bureau, Jesup.
 Alice Laird, secretary, Perry Township, Buchanan County Farm Bureau, Jesup.
 H. E. Winterink, president Floyd County Farm Bureau, Charles City.
 Raymond T. Pim, president Lucas County Farm Bureau, Chariton.
 Ray Redfern, president Des Moines County Farm Bureau, Burlington.
 E. V. Humphrey, president Louisa County Farm Bureau, Wapello.
 R. S. McKee, president Warren County Farm Bureau, Indianola.
 Iowa Live Stock Marketing Corporation, Des Moines.
 Milford Beeghly, president Woodbury County Farm Bureau, Sioux City.
 R. G. Sandager, Calmar.
 Lester Hoffa, Grundy Center.
 Bertel J. Jessen, Missouri Valley.
 D. W. White, president Greene County Farm Bureau, Jefferson.
 Burns M. Byram, Rock Rapids.
 Emil Hanson, Gowrie.
 Mr. and Mrs. W. Van Bloom, Dayton.
 M. J. Norton, 402 Seventh Street, Des Moines.
 S. H. McNutt, Algona.
 F. W. Stover, president Cerrogorde County Farm Bureau, Mason City.
 Jack Liverca, Buffalo Center.

L. W. Scharf, Buffalo Center.
 Dick Winter, Buffalo Center.
 George Liverca, Buffalo Center.
 John Mathison, Buffalo Center.
 A. A. Howe, Buffalo Center.
 J. K. Martin, Buffalo Center.
 Clark Methen, Buffalo Center.
 John Vangerten, Buffalo Center.
 S. O. Smalling, Waterloo.
 W. E. Roberts, Eddyville.
 James E. Downing, Des Moines Chamber of Commerce, Des Moines.
 Wapello County Farm Bureau, Ottumwa.
 John H. Fitch, Lake City.
 Mr. and Mrs. Clifford L. Knight, Springville.

NEBRASKA CITY, NEBR., March 12, 1932.

Mr. E. A. O'NEAL,
President American Farm Bureau Federation, Chicago, Ill.

DEAR SIR: I heard your talk over the radio this noon. I have a farm of 120 acres. My taxes are \$287.70, with corn 25 cents per bushel, hogs 3½ cents per pound, eggs 7 cents per dozen. The farmer is so flat on his back he can't fight back.

I have seen more than 70 years in Nebraska. I went through the grasshopper invasion of 1874, 1875, and 1876, and some droughts which occurred here, but they were not to be compared with this man-made depression. Some one made this depression to gouge the people.

Keep up your fight for the honest dollar.

Very respectfully yours,

Mrs. MARY L. JAMES.

NEBRASKA

Henry Schrieber, Laurel.
 Ward T. Denning, Geneva.
 J. C. Bahls, 1843 K Street, Lincoln.
 George Arendt, 2933 Wendover Avenue, Lincoln.
 John W. James, Nebraska City.
 Dr. F. J. Woods, 3100 North Street, Lincoln.
 R. H. Zimmerman, Sutton.

COLORADO

John Dobler, Bethune.
 A. P. Jaszkwaiak, Sterling.
 Ezra A. Moore, Rocky Ford.
 John T. McClure, 4373 Yates Street, Denver.
 Mr. and Mrs. F. R. Wolfe, Denver.
 Dr. John L. Ceranet, 123 East Third Avenue, Denver.
 C. A. Parker, 3605 West Thirty-second Avenue, Denver.
 S. E. Lumry, Boulder.
 Nancy B. I. Miller, Colorado Federation of Women's Clubs, 117 West Irvington Place, Denver.
 G. H. Sult, Rocky Ford.
 Dr. W. J. Mummey, Denver.
 J. F. Williams, 1101 Steele Street, Denver.
 Mr. and Mrs. Robert L. Pettit, Eaton.

MONTANA

Mr. and Mrs. F. J. Kunz, 319 South D Street, Livingston.
 Mr. and Mrs. Clarence Stevens, Lodge Grass.

WYOMING

F. C. Titus, Wheatland.
 B. J. Schwab, president Deaver Farm Bureau, Deaver.

WISCONSIN

E. F. Raeder, Glenbeulah.

NORTH DAKOTA

R. S. Long, Upham.

UTAH

George W. Brown, secretary Utah County Farm Bureau, Provo.
Raymond Cutler, R. F. D. No. 2, Provo.
C. Z. Harris, Richmond.

IDAHO

M. K. Jenkins, Malad City.
Marie A. Ellis, Hayden Lake.

NEVADA

Florence Bovett, secretary Nevada State Farm Bureau, Reno.

WESTERN REGION

CALEXICO, CALIF., *March 13, 1932.*

EDWARD A. O'NEAL,
President American Farm Bureau Federation,
Washington, D. C.

We indorse your efforts for stabilization of the dollar and trust you will have support of all California Representatives in House and Senate.

IMPERIAL COUNTY FARM BUREAU.

CALIFORNIA

Alexander B. Barrett, 1735 Orchid Avenue, Hollywood.
Mrs. M. L. Thompson, El Monte.
Mrs. M. H. Lane, El Monte.
Fred L. Hogue, Modesto.
William Jaeckle, Grass Valley.
M. O. Diffin, president, Contra Costa Farm Bureau, Concord.
L. E. McChesney, regional director, San Luis Obispo County Farm Bureau, San Luis Obispo.
J. S. Graves, 915 West Pine Street, Santa Ana.
Tulare County Farm Bureau, by M. W. Dula, Visalia.
Charles P. Stone, president, Sonoma County Farm Bureau, Santa Rosa.
Fletcher Ayres, president, Ivanhoe Farm Bureau Center, Visalia.
Los Angeles County Farm Bureau, Los Angeles.
Mrs. Anna D. Parrett, 564 Endicott Street, Los Angeles.
Albert A. Nelson, 564 Endicott Street, Los Angeles.
Mrs. Roy Wehlage, 564 Endicott Street, Los Angeles.
Mr. Roy Wehlage, 564 Endicott Street, Los Angeles.
George D. Hayes, 202 Orange Avenue, Santa Ana.
T. M. Martin, president, Kern County Farm Bureau, Bakersfield.
Roy Newman, director, Rio Bravo Farm Center, Bakersfield.
E. C. Eckmann, director, Shafter Farm Center, Bakersfield.
A. A. Sprehn, director, Weedpatch Farm Center, Bakersfield.
Harry Fowler, Bakersfield.
Frank Coddington, director, Delano Farm Center, Bakersfield.
F. W. Parsons, San Clemente.
Dr. W. N. Sherman, Hotel California, Glendale.
Trace Leon Clark, Tulare.
Mary A. Mastel, Tulare.
Mr. and Mrs. Charles Burkhart, 433 West Ortega Street, Santa Barbara.
Ralph A. White, route No. 1, box 62, Covina.
W. B. Parker, Stockton.
E. P. Shier, president, Butte County Farm Bureau, Oroville.
Alex Johnson, secretary, California Farm Bureau Federation, 338 Giannini Hall, Berkeley.
R. C. MacLachlan, president, San Benito County Farm Bureau, Hollister.

WASHINGTON

J. Carl Laney, secretary Washington State Farm Bureau, Yakima.
Ferdinand Rinaldi, jr., 2615 West Andover Street, Seattle.
James J. Edwards, Dayton.

Walter W. Street, 2726 Sixtieth Street, southwest, Seattle.
Clark Israel, manager Columbia County Grain Growers (Inc.), Dayton.
Troy Lindley, president Washington State Farm Bureau, Dayton.
S. B. Shiley, route No. 8, Yakima.
C. G. Waterman, Oakesdale.
C. R. Kenyon, 413 Liberty Court, Seattle.
Mrs. George H. Morris, 6428 Fawcett Avenue, Tacoma.

Mr. O'NEAL. Mr. Chairman, that concludes my statement, I believe, unless you wish to ask some questions.

Mr. PRALL. I would like to ask the gentleman, Mr. Chairman, just what effect will this readjustment have on unemployment and how?

Mr. O'NEAL. I think this: I have seen charts and have seen studies of the men who have studied the data on a national basis, which show, from past history, that as commodity prices fall, unemployment increases enormously; and I say this, Congressmen, that whatever the effect now is on the farm, on the forest, and on the mines, and if what they produce and what they make has little value, then we simply stagnate our efficiency and our production overwhelms us, and we simply can not move. This results in thousands of people all over the Nation being thrown out of employment.

We go in the eastern section of the United States and see factories dead, folks out of employment, and we say, "There can be no trade; there can be no exchange; there can be no employment unless commodity exchange values are equalized." I venture to say that within the next two months, in spite of the Lord bringing on the gentle season, you will see a million more out of employment.

I talked to one of the greatest bankers in the city of Chicago, where I have my temporary residence, just the other day, and he is a great thinker, a student, and he said:

I see that nothing has as yet been done by Congress that has helped at all.

There is the fear; there is pessimism, and he said:

I would rather keep my money in the bank; why lend it out?

If I make a man a loan, he runs his factory, employs a lot of people, but how do we know he is going to move his goods? We can just say to him, "Yes; you are all right; you are worthy of a loan, but, my friend, you have asked me frankly, and I say that I would like to lend you the money; you pay me interest on it and give me good security, but what good does that do?"

Just think of that fear in the heart of a great banker!

That conveys that fear to the producer out there, and the manufacturer. Take my own farm; I can not get back what I put out last year on my Alabama cotton plantation.

Mr. PRALL. Because you can not sell it.

Mr. O'NEAL. I can not sell it; I can not even give it away. The transportation charges, the fixed charges that are all along the line are too high, and I could not move it. You can not move it, and it stagnates. Agriculture, you know, and the mines and the forests are the producers of wealth, and if we have nothing to buy with how are the factories going to run? They can not operate, they can not run. I was in New York last fall, and one of my business acquaintances there said, "Well, I thought you were always a little wild-eyed, Ed, and an agrarian, but," he says, "we are on the thirty-first story of one of these office buildings and the bats and breezes are blowing through these office buildings in the city of

New York; we are all broke, because the fundamental industries of the Nation are flat; there is no exchange."

Mr. PRALL. Do you think this will revive the general financial condition?

Mr. O'NEAL. I am sure it will. I have here, to put in the record, an analysis of the conditions in France caused by the deflation of the franc; and an analysis of the condition in England, when they came off of the gold standard.

Mr. STRONG. And Germany?

Mr. O'NEAL. I have not a statement on Germany, just England and France.

Mr. HOOPER. Is it your belief that this will revive the condition in the United States?

Mr. O'NEAL. Yes.

Mr. HOOPER. Do you take into consideration the world condition?

Mr. O'NEAL. Yes; I think so.

Mr. HOOPER. The distressed and disastrous condition in which the world is?

Mr. O'NEAL. Yes; I think, as to that, that the economic facts show, first, that America probably is, without doubt, the most self-sufficient Nation; yet, in our economic set-up, we simply have to depend on extraneous conditions, the little surplus that we sell abroad, small in volume, but it affects our whole picture; and I think you should go further: I think that we should have a conference with the nations of the world on this whole exchange question. I think it would be very splendid for this committee, or any committee of Congress, to call in some of the men out in California, for instance—I use that often as an illustration, because they had a commodity out there where their surplus was growing, and they sent scientific men all over the world to see what the money was in every country in the world, what was the medium of exchange, what was the practice and customs of the people of those countries, so that they could get their commodity in shape to deal with those people all over the world, and you will see that that commodity, in our foreign exports, has increased, gone up considerably—those fruit men who produce both fresh and canned commodities.

How do they do such a thing; as one of these scientists said:

I went over there, first, to study their money, what they carried in their pocket; not theoretical money, not gold, but the money, the medium of exchange, and what their habits were; second, so I could come back and reach my conclusions and tell my farm people here how they looked at it over there, and how we could get our commodity over there to them in shape so that their money over there would buy it.

I think that is one of the most enlightening things that has been done in this country in a long time. It is not a theory; money is the most intensely practical thing in the world.

Mr. HOOPER. In my question to you, I wondered if you had taken into consideration the world situation in regard to this particular bill.

Mr. O'NEAL. Yes.

Mr. HOOPER. And what this bill might do for it.

Mr. O'NEAL. Yes.

Mr. STRONG. President O'Neal, if Congress should, as I hope it will do, direct the Federal reserve system to use its powers to stabilize

the purchase price of our dollar, what measure of value do you think we should direct them to use, if any?

Mr. O'NEAL. I think the general commodity price levels, as we say, in 1926 or 1928, along in there, on 501 commodities, would be all right.

Mr. STRONG. Set up by the Labor Department?

Mr. O'NEAL. Yes.

Mr. STRONG. Would you care to give your reasons? I agree with you, but I would like to know your reasons.

Mr. O'NEAL. Well, I think this is it: That plan takes a number of commodities, both agricultural and industrial, and by so doing secures a good cross section of prices in our whole Nation. The period mentioned is fair to all, as farmers can live on prices received in that period, and consumers can afford to pay such prices.

Mr. STRONG. And do those commodities represent all the commodities that people—

Mr. O'NEAL. The basic commodities.

Mr. STRONG. All the commodities that the people of the United States deal with in their exchanges between each other?

Mr. O'NEAL. Yes.

Mr. STRONG. Now, if we do that, the Federal reserve system, of course, will reach the time when they have got to change their policies; that is, they will say: "We will increase the value of money."

Sometimes they will say they will increase it, and they will get to the time when it will be high enough so that they can decrease it.

Mr. O'NEAL. Make them do it, Congressman. I would not fool with them. If they come to that point, I would go right after them. I think they have failed, and I think the country thinks so.

Mr. STRONG. Now, when they do that, do you not think we should have publicity as to what their change of policy shall be, so all the business will know about it and not simply the big bankers as a group?

Mr. O'NEAL. I feel that the governor of the Federal Reserve Board, when a change of policy comes, should announce it to the people of the United States. I think we should have less executive sessions and more open sessions.

Mr. STRONG. Well, as I have studied the effect of it, I feel that the people of the United States are entitled to know when they make a change of policy, when they intend to buy bonds or sell bonds, or raise or lower the discount rate; that all of the people should know it and not a few.

Mr. O'NEAL. Yes, sir.

Mr. PRALL. How could they otherwise do business, if they did not know?

Mr. STRONG. They do not know now. It comes like a flash, maybe not even an announcement; but first they prepare the market, as Governor Strong explained to us in this committee, then they raise the discount rate or lower it, but it comes suddenly; and it seems to me that every business man, every banker, every farmer, and every man connected with any industry should have a right to know when they propose to increase the volume of money by buying bonds, or

decrease the volume of money by selling bonds; and when they decide to raise the discount rate or lower it, it should not be a proposition that only a few people in the United States know of.

Mr. BUSBY. In speaking of the basis for currency, you mentioned gold as being needed to serve business, instead of to dominate it.

Mr. O'NEAL. Yes, sir.

Mr. BUSBY. Is it the position of your organization and yourself that the gold basis for currency should be rearranged by law, so that you would have a variable quantity of gold redeemable by the outstanding gold certificates, those certificate dollars?

Mr. O'NEAL. I think, Congressman Busby, that here has been the whole trouble: That we have built ourselves a golden calf out here. Now, in talking to a high official in the Government two or three years ago—we farmers asked them to do a lot of things away back there—and when we talked to high officials they would say, "Shush, shush; sacred! Be careful! You must not talk about the Federal reserve; you must not talk about the financial system."

I think, as a matter of fact, through the gold medium they are able to manipulate and control the whole fiscal system.

Mr. STRONG. That is, as I have indicated by my questions, in the absence of statute.

Mr. O'NEAL. Yes.

Mr. STRONG. Yes.

Mr. BUSBY. Now, back to the question; would it be your position to advocate fixing by statute an arrangement whereby the dollar, the gold dollar, could be evaluated in relation to the center of gravity of prices, and in saying that I refer to the wholesale commodity index prices determined by the Bureau of Labor Statistics?

Mr. O'NEAL. I believe firmly, Congressman, in a commodity dollar; and I tell you, frankly, we ought not to have any gold money at all. I bet there is not a man in this room who has got one cent's worth of gold.

Mr. BUSBY. By commodity dollar, what do you mean?

Mr. O'NEAL. I like the chairman's bill there definitely. I think it is a fine scheme, and I think it would be a fine scheme also if we could just cut gold out of circulation entirely. You do not need any gold in circulation. What do you want with it?

Mr. BUSBY. You say gold in circulation?

Mr. O'NEAL. Yes.

Mr. BUSBY. I thought your United States gold certificates represented dollars.

Mr. O'NEAL. No, sir; I do not give a darn for the gold certificate—if you will pardon the strong expression—we do not care anything about it; we want a medium of exchange; we want money for circulation. That is the confidence that we have in the Government.

Mr. BUSBY. I understand that, and you are using rather strong language, which I understand fairly.

Mr. O'NEAL. Fine. I am sure you do.

Mr. BUSBY. What would you have to represent your gold, if you are going to use it as a basis, and something did not relate to it in the form of the certificate proposed by Mr. Goldsborough's bill in 1922, and proposed by Professor Fisher's plan. What would you use to relate to this gold, unless you used some order, and some study along the line?

Mr. O'NEAL. That would be fine, but if you make the order so damned difficult to work, then it would not amount to much.

Mr. BUSBY. I want to tell you, frankly, that I am not getting much out of the details you are proposing, because you are too general, and that is the trouble. I am trying to get specific about what we shall have in the legislation which is going to be written into words, and not in the waving of hands.

Mr. O'NEAL. Well, Congressman Goldsborough is already with me.

Mr. BUSBY. I am not being controversial with you.

Mr. O'NEAL. I know, but, Congressman—

Mr. BUSBY. Do not get excited so. I understood your language.

Mr. O'NEAL. I want to say to you, Congressman, that I read your speeches and, why, I am for you. I will let you work that technical part out; I believe you can do it better than I can.

Mr. BUSBY. We are making some progress.

Mr. O'NEAL. I will let you work it out.

Mr. BUSBY. I looked in your "Honest Money" pamphlet, published on January 7, 1932, searching for the plan proposed by the committee that wrote this document. I find on page 32, under the headings of 1, 2, and 3, your proposals in the form of a remedy to meet the present situation, but those proposals would not relate to anything, except a type of activities directed through the Federal reserve system.

That is true, isn't it?

Mr. O'NEAL. Yes.

Mr. BUSBY. There is no other remedy proposed in your pamphlet except those?

Mr. O'NEAL. You have to operate through the Federal reserve system.

Mr. BUSBY. Now, the third one of those, as I understand it, has simply been enacted through the Glass-Steagall bill.

Mr. O'NEAL. Yes, sir; it was hedged around with so damn many "ifs"—you know about those things—I pray to God it will operate, but I doubt it.

Mr. BUSBY. I see you still use that language. I want to tell you I was born in the county adjoining where you were born and I understand it.

Mr. O'NEAL. Good. Do not get too technical with me, Professor.

Mr. BUSBY. Now, I want to come to another thought:

If these transactions dealing in commodities were carried on and executed, at the present time—or, we might use the word, in presenti—there would be no particular complaint about the value of the measuring stick that we call currency, because you would sell eggs cheaper, and buy flour cheaper, and you would sell other things cheaper, and you would buy the things you need on the same basis; that is true, is it not?

Mr. O'NEAL. That is right; yes.

Mr. BUSBY. Does not our trouble at the present time relate back to 3 or 4 or 5 years ago, when we made fixed obligations, commitments, issued bonds, and so forth, at times when those bonds and those obligations were in relation to commodity prices at that time?

Mr. O'NEAL. That is right.

Mr. BUSBY. And now we find ourselves, some years later, at the point where commodity prices, such commodities as you have mentioned, for some resemblance to the commodity prices back where our obligations were fixed.

Mr. O'NEAL. That is right.

Mr. BUSBY. And we find it is impossible, especially in agriculture, to make the payments we agreed to make back four or five years ago; that is the situation, is it not?

Mr. O'NEAL. That is right, yes; not only in agriculture but a lot of other things.

Mr. BUSBY. I am coming to that. Now, agriculture is composed, of course, of commodities that are perishable, that are bulky, hard to transport in commerce, and hard to house and care for; and, therefore, agricultural commodities naturally take a bigger slump than steel and copper and other things, things that are not so hard to care for. But do you know of any commodity that is dealt in, generally, in commerce, or other commodity, that have not met this same hard situation at our present currency conditions?

Mr. O'NEAL. Most of them have.

Mr. BUSBY. Do you know of any appreciable number, or any class of commodities, that have not yet been hit by this inadequate currency set up that we are now struggling under?

Mr. O'NEAL. They are relatively very few. There are a few things that have not come down, things that are fixed by law, such as utility rates and telephone rates, and things like that, and freight rates; and that is where you have been self-governed, in fact.

Mr. BUSBY. I am not, of course, speaking of things that are not subject to the law of supply and demand.

Mr. O'NEAL. Those things have come down.

Mr. BUSBY. I believe that is all.

Mr. PRALL. I would like to ask the gentleman what will be the effect on all other products than farm products under this plan?

Mr. O'NEAL. Congressman, they will all go up. In other words, when the buying power increases of the producers of new wealth that just naturally gets the factories to work. This summer I traveled practically all over the United States, and I went over it twice, and I did not see 20 freshly painted barns. We have got no money to buy any paint, and you do not see many town houses painted. They have factories to make paint, and they have plenty of labor—

Mr. PRALL. I mean the products of the country other than these things connected directly or indirectly with farming or agricultural interests. I have the words of men in every other line of business—

Mr. O'NEAL. It will put the factories to work if we have the buying power and can pay our debts. If we can do that, we can then start industry and commerce to work.

Mr. PRALL. Well, your opinion is that it would comparably benefit every industry—

Mr. O'NEAL. Yes.

Mr. PRALL. Practically every other industry?

Mr. O'NEAL. Yes, sir; and I would say this: The record shows that many groups, the Chamber of Commerce of the United States and other great groups, have finally recognized that when the buying power of agriculture is destroyed, it strikes right at the heart

of every other group of the Nation. That is the reason I told you about the New York business man. It strikes our best market in America, in spite of all we can say, and the market in America is with the producers of the raw materials; and when we can not buy, industry is dead. I might go just a little further and say that I was looking at a chart yesterday by Doctor Warren of Cornell University, showing employment, and it showed when commodity prices go down, there is an enormous increase in unemployment. I am sorry to say that, unless some change is made, we are going on down, we have not seen the bottom of our lot yet.

Mr. GOLDSBOROUGH. Is that all, Mr. O'Neal?

Mr. O'NEAL. There is one other thing.

Mr. STRONG. Until we had the establishment of the Federal reserve system, we had no way to increase or decrease the volume of money, and it was not until after the Federal reserve system was created, that we sought, by directing them to sell or buy Government bonds, that we hoped to carry out the mandate of the Constitution to regulate the price of money by regulating the volume and the theory that supply and demand is the old basic principle by which it has been regulated; and so we asked to have the supply and demand of money so regulated as to establish the price or value in purchasing power. Is not that your theory?

Mr. O'NEAL. Yes; it runs on through, Congressman.

Mr. STRONG. I know, but I am seeking to direct it—

Mr. O'NEAL. Somebody cut that all out of the law.

Mr. STRONG. It was taken out in conference between the Senate and the House when the Federal reserve act was passed.

Mr. O'NEAL. Yes.

Mr. STRONG. And we hoped to have ex-Senator Owen here to speak of that. But it is through the supply and demand of money that we hoped to regulate its value, and we hoped, by increasing the supply of money, to increase the price levels. And I also want to call the attention of my friend to the fact that the price levels or index of commodity prices, as established and set by the Bureau of Labor, does not only include farm products but it includes all products.

Mr. HOOPER. Mr. O'Neal, do you think this bill is broad enough in its language?

Mr. O'NEAL. Generally speaking, was my comment, as I made it in the record. I think that you technical men know better how to work this thing out, but be sure you go far enough.

Mr. HOOPER. What I was getting at was whether you thought this bill covered it.

Mr. O'NEAL. I think it is going in the right direction, and I think these other bills are all in the right direction; but just let me say this in closing, Mr. Chairman. Go far enough and do the job right, and I believe, if there is any criticism, it will be that you are not going far enough.

Mr. PRALL. You mean to put teeth in it?

Mr. O'NEAL. Not only teeth, but operate the teeth.

Now, Mr. Chairman, I want to get back again to what France and England have done, and I want to say that France, instead of pursuing a deflationary policy such as was followed by the United

States and such as was followed by Great Britain in 1925, revalued the franc at a level of one-fifth of its pre-war value. It did this by reducing the weight of gold in the franc to one-fifth the pre-war amount, reducing it from 322.58 milligrams of gold 900/1,000 fine to 65.5 milligrams of gold 900/1,000 fine. This action was taken by the French Government on June 25, 1928.

If France had attempted to revalue the franc at the old pre-war ratio, it would have precipitated a terrific decline in prices because the prevailing prices were based on the prevailing value of the franc which was about one-fifth of the pre-war level. Obviously an increase in the value of the franc to five times the prevailing level would have resulted inevitably in a crash in commodity prices which are valued there in terms of the franc.

France, therefore, avoided a deflationary policy by revaluing its franc at one-fifth of the pre-war level. As a result no serious decline in prices took place until 1930-31. Debts could be repaid without paying back a great deal more than was borrowed. Farm land has a higher value than before the war.

The following extract from Special Circular No. 143, published by the United States Department of Commerce, contains the following analysis of the favorable results expected to follow this action in France:

A further revival of economic activity which is, with few exceptions, already at a satisfactory level, may reasonably be expected and, if political stability and the equilibrium of the Budget can be maintained and the sound policies that have been strictly adhered to by the present Government are continued, France should enjoy a period of increasing productivity and growing prosperity.

The action of France shows how a government can avoid the evils of deflation and stabilize commodity values at a reasonable level so that debtors can repay their debts, employers can keep their factories running, and farmers can sell their products at prices somewhere commensurate with their true value.

During the war England, while theoretically holding the gold standard, actually abandoned the gold standard because of her heavy obligations abroad. The pound sterling was pegged at about \$4.76, or slightly below par (\$4.8665). This went along until the war closed; then the pound was unpegged by the withdrawal of the government stabilization operations. The value of the pound dropped from \$4.76 to \$4.43 in 1919, and to \$3.66 in 1920. In the period 1921-1924 the value of the pound rose somewhat, due to a more favorable balance of Great Britain in her international payments, which in itself had a tendency to increase the value of the pound.

In 1925 the government decided to restore the gold standard. Instead of continuing the reduced valuation of the pound, it attempted to revalue it on a pre-war basis of \$4.86 in our money. The effect of this action was to lower prices and thereby make it more difficult to pay debts and interest charges. Unemployment was increased and business was stagnant. The maintenance of the pound on a \$4.86 basis caused a continual drain on the gold supply of Great Britain. Despite great efforts to maintain the gold standard it was found necessary to abandon it on September 20, 1931, on account of the disastrous conditions created following the revaluing of the pound in 1925.

When England abandoned the gold standard and the attempt to value the pound at the \$4.86 level, the effect was to increase prices for domestic products in England. Lard at Liverpool increased from 42 shillings in early December to 53 shillings in late December. During the same period, when the United States was pursuing a deflation policy, lard at Chicago dropped in price from \$7.30 a hundred to \$5.65 a hundred.

While there were no increases in the prices of numerous commodities, the sharp decline in prices which had been going on in England was greatly checked a result of this action, and the unemployment situation was relieved to an appreciable extent. There was also some improvement in the export trade, particularly in the case of textiles and manufactured goods. The benefits to the British export trade would have been still larger had it not been for countervailing duties put on by countries importing British goods.

In other words, the abandonment of the effort to maintain arbitrarily a high value for the pound, and the decision to let it be valued by supply and demand has reduced the exchange value of the pound but has resulted in increased prices in England, greater ability to pay debts, stimulation of business, and improvement in the export trade.

Mr. GOLDSBOROUGH. Mr. O'Neal, the subcommittee wants to thank you for your fine statement.

Mr. O'NEAL. I thank you, Mr. Goldsborough.

Mr. GOLDSBOROUGH. Gentlemen, we ordinarily recess about this time and then meet at half-past 2, but for the convenience of those who live out of town we will recess now and meet at 2 o'clock.

(Thereupon the committee took a recess until 2 o'clock p. m. of the same day.)

AFTERNOON SESSION

(At the expiration of the recess, the committee resumed its session.)

Mr. GOLDSBOROUGH (chairman). The committee will please come to order.

Will you produce your next witness, please?

Mr. O'NEAL. Mr. Henry A. Wallace, a friend of mine and a distinguished member of our committee that worked on this whole problem. He is the editor of one of the greatest farm papers in the world (Wallace's Farmer).

Mr. GOLDSBOROUGH. Now, Mr. Wallace, I suggest that you proceed in your own way, and when you get through we will ask you such questions as the committee thinks proper.

STATEMENT OF HENRY A. WALLACE, EDITOR WALLACE'S FARMER, DES MOINES, IOWA

Mr. WALLACE. Mr. Chairman and gentlemen of the committee: I happen to be the editor of a farm paper which has a circulation of approximately 250,000. We have had numerous editorials on the stabilization matter for the past 12 years, but more especially during the past year. We called for the signing of ballots which we printed in our paper regarding, substantially, the Strong bill or the Ramseyer bill or the Keller bill, which provided for our readers to signify

that they were in favor of the Federal reserve people being instructed to use their power to restore prices and to stabilize them at the pre-deflation point. Some ten thousand of our readers signed those ballots and mailed them in, which was altogether an extraordinary showing for anything of that kind. We felt that we might get three or four hundred, or something like that, but we were astounded to have them run into such unusual numbers, which showed that deflation had finally had its effect in bringing about a public interest. Back in 1921 when we dealt with the matter, but not quite so emphatically, the returns were not nearly so great, which showed that either the education was only beginning to take hold or that the emergency was not so apparent.

Mr. GOLDSBOROUGH. If you will permit me to say, right there—and this is not intended as an interruption—at that time, if you remember, your paper gave my bill a very favorable editorial, and your distinguished father, the Secretary of Agriculture, was just as kind as he could be.

Mr. WALLACE. Yes, sir.

Well, I am just pointing out that to show the degree of my own interest, and the degree of interest of the farmers of the mid-West in the matter.

Next, I would like to refer, very briefly, to a publication known as Farm Economics put out by Cornell University, the particular issue being February, 1932. Mr. White, who will appear on behalf of the Farm Bureau, I think immediately after me, will deal more practically with this publication, but there were one or two points which I thought I would introduce, and Mr. White will introduce the rest. The first point was: "No one gains by deflation."

I will read this particular paragraph from the statement by Doctor Warren, of Cornell University:

All action, public or private, that is based on the idea that some person or group of persons are to blame for the present situation is unsound. All action that assumes that the losses which one is sustaining are due to gains being made by some one else is equally unsound. The losses are unequal, but practically everyone loses. The trouble is that civilization has not yet progressed far enough to invent a stable measure of value. Not long ago, an outbreak of bubonic plague was blamed on individuals. It is now known that the trouble was due to the lack of development of science or education, or both. Economic diseases are due to a lack of development of economic science and education. Vast sums of money have been spent on chemical and medical research. Very little has been spent on economic research. The little science that has been developed in economics has not become common knowledge, as, for example, the knowledge about bacteria.

Economic troubles are not acts of Providence any more than polluting a stream with typhoid is an act of Providence. Both are acts of man and can be remedied, when there is sufficient knowledge.

Our essential problem, of course, is producing enough of the commodities of life to have a high standard of living. The figures compiled by Doctor Warren indicate that, in this country, since 1840, the output of goods per capita has increased at the rate of 1.7 per cent, which means that our standard of living, per capita, has increased at that rate. Incidentally, wages have increased at exactly the same rate, which does prove that point that labor does add, in terms of wages, to that which it produces. The economic problem is, first, the intelligent planning and control of production; and, second, the

distribution of the result of production. Money is one of the pieces of economic machinery which is used, sometimes most unintelligently, to bring about the distribution of the result of production and also at times, unfortunately, to interfere with the sensible planning of production.

Now, let that point rest there.

I would like to take a very brief survey of the gold situation, and I think it is pertinent to House file 10,517, because this is an all-embracing bill, especially in legislation which deals very definitely with the gold situation. It is a matter of price history that during the period extending from 1260 to 1300, the price of wheat averaged about 17 cents in England; during the period from 1300 to 1350, it averaged about 18 cents; and from 1350 to 1400, about 17 cents; 1400 to 1450, about 17 cents. I may not have the figures absolutely correct, but there was a variation of not more than 2 cents for every 50-year period previous to the discovery of America. Starting with 1260 and until about 1450 the price did not go below 16 cents or above 18 cents.

America was discovered in 1492; and during the first 50 years of the sixteenth century, that is, from 1500 to 1550, the price averaged 22 cents; from 1550 to 1600, it average 58 cents, and from 1600 to 1650, it averaged \$1.08. The larger quantities of silver and gold had begun to flow in from the New World. It is rather interesting to note that, in the King James version, it is suggested that wages of labor was 1 cent a day, a holdover from the period of, perhaps, 50 years before, when wages actually were an English penny, or, we would say to-day, 2 cents in our money; but that was in a period when all things were cheap, before the precious metals had flowed, in large quantities, into the Old World. As a matter of fact, the wages of labor lagged behind the price of wheat and created a very serious situation, which brought its expansion through a series of wars, especially during the first half of 1600.

Coming up to more modern times, of course, you are familiar with the price history since 1850 and the way in which the discovery of gold in Australia and California caused prices to rise all over the world, from 1850 to 1872 or 1873. That is, for the world basis; but in this country the Civil War confused the issue, and the high point was reached here about 1865. On a world-wide basis the high point was reached in the early seventies. New gold was discovered for a period of 20 years, but not enough to keep pace with the demand. The rise of prices all over the entire world during the period created a social tax, of a kind, everywhere.

Then large quantities of gold were discovered in South Africa and the Klondike and elsewhere, and the cyanide process was discovered, and more gold brought into use from 1895 on than had ever been found in all of the history of the world. That caused prices to rise over the entire world, until the World War was on, and then extraneous factors went to work. That is merely by way of background of the gold situation, illustrating that, in the broad swing, gold has actually controlled the world price level.

Now, from our point of view, the price level, of course, is quite independent of gold, although gold will always stand there in the background, ready to assert its influence at the most inconvenient moment.

As I take it, your House file 10,517, the first powers to be invoked is to bring the price levels up to the predeflation point, which would need the forces now possessed by the Federal Reserve Board, or the Federal reserve system, and if they were not efficient, then there would be invoked a variable gold standard, or, in brief, what is known as the Fisher plan, or the Dennis plan, the Goldsborough bill, or the Burtness bill. This bill, I think, expresses wisdom in having it as a reserve measure. It is obvious that the policy of the administration is a credit expansion on the gold basis; that the administration and most powerful bankers feel that we should first use our present gold supply to the maximum, before varying the weight of the gold behind the dollar. From the psychological point of view, I suspect that is sound, unless we could act very suddenly, as the English people acted. If we could go off the gold standard suddenly and without debate, I think it would be the most valuable thing that could happen to the United States, but I am afraid it can not be done that way; and on that account I feel that this measure handles the situation quite wisely.

I would like to comment on a statement made by the Bank of France in January of 1932, in regard to the gold matter. This is the annual statement of the Bank of France, as quoted in the Wall Street Journal:

Firmly resolved to guarantee the free play of the gold standard, we proclaim our unbreakable resolve to remain faithful to this principle to which the American and French Governments, in full accord, have affirmed their attachment.

Mr. GRAHAM. Is the Bank of France on a true gold standard, to observe all conditions?

Mr. WALLACE. I would not presume, myself, to stand as an authority on international exchange. The last quotation I saw on the depressed franc, it was still about 3.93.

Mr. GRAHAM. Does anybody know?

Mr. WALLACE. The Bank of France has such an enormous gold supply, running up to about \$70 per capita in France, nearly twice as much gold, per capita, as we have, and I think it would be able to serve as a requirement of the gold standard.

Mr. GRAHAM. Pardon me for interrupting. I just wanted to know. I was under the impression they did not; that what accounted for them having so much gold was simply the fact that they did not part with it.

Mr. WALLACE. There might be someone in the room who would know positively.

Mr. GOLDSBOROUGH. They are on the true gold standard, at this time.

Mr. FISHER. I would call France on the gold standard.

Mr. GRAHAM. No import or export conditions?

Mr. FISHER. I think so.

Mr. WALLACE. I want to continue with my statement of the Bank of France:

We consider the convertibility of gold not an outworn servitude, but a necessary discipline and the sole effective guarantee of the security of contracts and the morality of transactions.

That is a most extraordinary statement, coming from France, or coming from the French bank, in view of the fact that they allowed their franc to decline from a pre-war normal convertibility of 19.3 to as low as 2 cents, and finally stabilized at 3.93 cents; and in view of the fact that, as the result of that reduction in the gold convertibility of the franc, the price level in France at one time reached more than eight times pre-war, and at the present time is more than four times pre-war; and that France, as the result of that cancellation of internal indebtedness, because that process is the automatic cancellation of more than three-fourths of its internal indebtedness, they were able to relieve very greatly the pressure on their debt-owing class, particularly their farmers, and thus bring about a state of social equilibrium. I think the thing was unfair to the creditors, if they carried it too far; but they were able to bring about a thing which was quite stimulating to those active, energetic sections of the population which are always in debt, and thereby were able to enjoy prosperity of a kind. But to find a nation which did a thing of that kind, when the time comes that another nation like England, for instance, finds it necessary to do something similar, to find France making a pious statement of this kind, "that it looks on gold not as an outworn servitude, but necessary discipline," makes you pause and think and wonder if France and the French nation is quite as logical as it is supposed to be, or if that logic does not apply only to its own interests.

I may say that if this country had done what France has done, the farmers to-day would be able to sell their wheat for about \$2 a bushel, their hogs for \$15 a hundred pounds, and other things in proportion. The farmers' creditors would not be bothering them, the life insurance companies would not be worried; and, incidentally, the railroads would be able to meet the interest on their bonds.

If it is relevant, I would like to make a few remarks on the silver situation, Mr. Chairman. Would it be germane to the hearing to make some comments on the silver situation?

Mr. GOLDSBOROUGH. Yes.

Mr. WALLACE. I read Senator Wheeler's bill with interest. This bill provided for the remonetization of silver on the 16-to-1 ratio—the regular Bryan bimetalization. He wrote and asked me for a statement on the matter, which he did not incorporate in the record. My statement was of such a nature, I suspect, that he did not care to incorporate it; but, nevertheless, I would like to make some comment before this committee on the silver question.

If we are approaching this problem from an international point of view and not merely from a national point of view, it would be a wise idea to bring silver into the picture, providing the other nations, especially England and her colonies, were inclined to come along with us. Winston Churchill and some of the others have made overtures of that kind. Some of the Republicans may not be aware of the fact, although I suspect most of them are, that in the platform of 1896 the Republicans had a plank in which it was stated that the Republicans were in favor of bimetalism, if it could be done on an international basis and not merely national.

On March 3, 1897, an act was passed, and I think was signed by the President, providing for international monetary plans to consider the advisability of remonetizing silver.

Again, we have in the House at the present time a Committee on Coinage, Weights, and Measures, with its investigations dealing with the desirability of an international monetary conference on the matter of the remonetization of silver. Bimetallism is, according to most of the economists, a rather impracticable thing because of the ratio feature, which makes it probable that it may shift the emphasis toward one metal or the other, depending upon mining costs and industrial uses, even tending to become a civic standard of one sort or other. The great English economist, Alfred Marshal, however, perceiving that difficulty, suggested what is known as symmetalism. Under bimetallism, the dollar would be redeemable—assuming the 16 to 1 ratio—in either 23.20 grains of fine gold, or ten times that of silver. Under symmetalization, however, the dollar would be redeemable, assuming the 16 to 1 ratio, for the purpose of illustration, in 13 grains of gold and 160 grains of silver—a little of each. International exchange would be settled, and bars composed of one end silver and the other end gold could be used. There may be, and doubtless are, objections to symmetalism.

The Iowa Farm Bureau Federation in its annual meeting passed a resolution calling on Congress and the administration for an international monetary conference to consider the desirability of remonetizing silver on either the bimetal or symmetal basis, as might seem desirable.

It may interest some of you to know that Nicholas Murray Butler, the conservative Republican gentleman of New York City, in an address in November before the Republican Club of New York City, in outlining the proposed platform for the rehabilitated Republican Party, suggested, as plank No. 11, I believe, in the platform, the desirability of this international monetary conference to consider the desirability of remonetizing silver, and thus restore to a large section of the Orient the particular purchasing power which it now lacks for the commodities of the rest of the world. Silver obviously comes into the picture only if they deal with any international questions. I feel it is hopeless to bring it into the picture in this country by itself; I think that would be a serious mistake, and to that extent I disagree with Senator Wheeler, except for the purpose of strategy, to get it discussed, and it is necessary, if you are going to get the thing discussed, to discuss it, first, on a national basis.

A good friend of mine, whose name must be kept out of the hearings because he is connected in a rather high way with the Federal reserve system. He is a man who has studied these credit matters, to my own personal knowledge, for more than 12 years. I have known him that long myself, and have talked over with him these matters for that length of time. He heard that I was coming back to Washington and expected to talk before the committee on stabilization. I asked him for his suggestions as to the things which might be profitably brought to the attention of the committee, and he writes:

I have been thinking over your note and find it rather hard to give any particular answer. What I feel is that it will have to be a slow and difficult process of education and that all these economists will have to come first. What I mean is, that as long as the economists of the country do not understand this

problem or the strategic approach thereto and can not understand the principles involved, how can we hope that the banker or the business man will do any better?

Personally, I am not very hopeful of congressional action, but as to this you are a much better judge than I am. I am inclined to agree with you that we are in danger of overexpansion when the time comes and possibly a return of a boom situation. Possibly a further wild period of speculation and another collapse is the only way that the importance of credit control can be brought clearly to the popular mind. It might be interesting to suggest that this is the proposition that will happen if we do not adopt a method of scientific control. That is my best suggestion.

That brings me to a discussion of the Glass-Steagall measure and the Reconstruction Finance Corporation—

Mr. GOLDSBOROUGH. Excuse me a minute. What was the date of the letter you have just read?

Mr. WALLACE. March 2.

Mr. GOLDSBOROUGH. Proceed, please. You started to speak of the Glass-Steagall bill and I interrupted you.

Mr. WALLACE. Yes. It is obvious that under the provisions of the Reconstruction Finance Corporation bill and the Glass-Steagall bill it is possible to have enormous credit inflation. The moment there is sufficient confidence in the international situation to permit of certain of the very wealthy hoarders to enter production and speculation with full confidence it is obvious that there may be tremendous inflation and a strong upward movement in prices. I realize that the majority of people in the room probably would not share in this optimism.

The movement is occasioned, to a considerable extent, on the way in which the international situation stands up. If the thing does work out in that way, and the gentleman whose letter I just read seems to feel that there is a good probability of it doing so—and I myself feel there is at least an even chance that it will work out that way during the next year or so—if it does, it can only be followed again by another smash, if the control of our monetary system resides where it does now. Not that I am speaking against any specific banker, but as long as you have men in our regional reserve banks—the fault is more with our regional reserve banks out of New York City than it is in New York City, in my opinion—dominating the policies who have been trained in the country school of banking—which is the school that is excessively careful in times of depression, and is the school that will take a chance and puts out money to profitable uses in times of inflation—just so long will you have exactly the wrong kind of steps taken in the control of this monetary machinery. Perfectly natural, there is opportunity for the local banker to act in that manner, as that is the way in which he makes money and the way in which he survives. Ogden Mills recognized this condition very clearly in the statement he made January 25 before the New York acceptance bankers; Randolph Burgess, of the Federal reserve system, has recognized the condition again and again in his statements—but, nevertheless, we continue to have central bankers, who have come up through the local banking school, acting in exactly the wrong manner as a central banker. He has as associates men who have, in the case of New York City and other centers where they have stock exchanges and commodity exchanges—these associates are men of the type who think in terms of speculative

fluctuations, and who have their security affiliates whose money is loaned to support policies of one sort or another.

That means that the very heart of our banking system is influenced by the short time, selfish, speculative desires. I am not talking against speculation, because I feel speculation has a function; but when speculation in a country like the United States, with its monetary power so centralized, does cause inconvenience to the non-speculating public, and especially to the farming public, as we have seen during the past 12 years. Those of us who do not happen to belong to any speculative system might well inquire into the type of management of our banking system, and suggest that different leadership be given to that banking system than has been given. That, as I see it, is what is proposed under this bill.

As a final, technical approach to the problem, I am not altogether convinced this bill is the last word, Mr. Chairman—and I beg your pardon—but as a general statement, it seems to me to be most admirable.

Mr. GOLDSBOROUGH. It was not prepared, Mr. Wallace, by me with the idea it was the last word. I deliberately prepared it as I did, as a working basis.

This bill will be amended before it is reported out by the committee. It was felt, however, by me, it was better to have a working basis, and let the bill develop during the discussion.

Mr. WALLACE. There is one point in the Keller bill which, it seems to me, might well be included in this bill, and that is part of the Keller bill under section 14 (b) :

For the purpose of enabling the Federal Reserve Board and the Federal reserve banks more effectively to carry out the provisions of section 14 (a) hereof—

which would be the first section of your bill—

the Federal Reserve Board is hereby empowered and directed, whenever it shall become necessary, on the attainment of the object specified in section 14 (a) hereof: (1) To authorize and direct any of the Federal reserve banks to accept—

Mr. GOLDSBOROUGH. What section was that, 14 (a) ?

Mr. WALLACE. 14 (b), and part (2) reads, in part:

And to hold said bond used as collateral under the preceding paragraph subject to the orders of the Federal Reserve Board.

It would seem to me it might be wise to include that. That is a temporary part of the Glass-Steagall bill, if you will remember, operative, I believe, for only one year; but if it could be written into this bill so that it could be operative for a longer period it might be a desirable addition to the powers of the Federal reserve system.

Mr. GOLDSBOROUGH. Well, that same thing was included in sections 2 and 3 of the bill that I introduced on January 19 (H. R. 8026), and from which the Glass-Steagall bill was made up; but that was not accepted by the Federal Reserve Board. The committee drew the Glass-Steagall bill as it was drawn, leaving that provision out.

Mr. WALLACE. Is it not true, however, that the Glass-Steagall bill does have the first part of section 14 (b) ?

Mr. GOLDSBOROUGH. Oh, yes.

Mr. WALLACE. It has that in it, does it not ?

Mr. GOLDSBOROUGH. Yes; but it did not include all that.

Mr. WALLACE. It did not include all of that?

Mr. GOLDSBOROUGH. No.

Mr. WALLACE. There is one other rather technical point which enters into this, it seems to me. Have you and the other members of the committee had members of the Federal Reserve Board before you as yet?

Mr. GOLDSBOROUGH. They will be before us, but not until next week.

Mr. WALLACE. I think, probably, I might well assume that when they come before you and you put this bill up to them that they will hold up their hands and say, "We can not undertake, through our powers, to do a thing of such magnitude as this contemplates; it will put a burden on us and possibly more criticism, which will destroy the Federal reserve system"; and some of them will doubtless even threaten to resign should such a bill become the law.

Mr. STRONG. I want to say that they have taken that position in the past, but they never threatened to resign.

Mr. GOLDSBOROUGH. Do you think any criticism could be any more drastic than the criticism the Federal Reserve Board had after the deflation of 1921 and of 1930?

Mr. WALLACE. Yes; I think it can be more drastic than that, and I think it will probably be, in any event. There are some competent economists who feel this is not possibly the best way to go about it. There are some men, for whose opinion I have the very highest regard, who feel that, instead of price being the criterion, that credit should be the criterion, and that credit should be expanded at a constant rate, equal to the rate at which physical production expanded during the five years preceding, or 10 years preceding.

Mr. GOLDSBOROUGH. You are referring to Mr. Edie's idea?

Mr. WALLACE. Yes; referring to Mr. Edie's idea, that trade is the criterion, and credit is brought in and adjusted to trade.

Mr. GOLDSBOROUGH. That is probably what you had in mind, was it not?

Mr. WALLACE. Yes; it is, exactly. Has that bill been introduced, by the way?

Mr. GOLDSBOROUGH. No; it has not. Professor Fisher, as a matter of fact, brought it with him when he came to Washington, and he gave it to me.

Mr. WALLACE. Now, from my own point of view, I would look on that bill as possibly, eventually, satisfactory to agriculture, if this bill could not be obtained, or something like this. As I say, if the competent monetary authorities really feel that there were altogether too many technical objections to carrying this out, if they did feel this was impossible, then this thing might eventually be compromised.

Mr. GOLDSBOROUGH. May I ask you a question right there:

Do you feel that the carrying out of that bill, the legislation provided in H. R. 10517, is impossible, as a practical proposition?

Mr. WALLACE. I do not think so. There are certain psychological things that we do not know anything about yet which can flow out of this thing.

Mr. GOLDSBOROUGH. We all understand perfectly well that it does not make any difference what legislation is passed, that it is not

going to make people unselfish necessarily, is it not going to make them cooperative and it is not going to make them understand that their own best interests depend upon how the best interests of the great masses of the people are subserved and this legislation will not produce immediately an Utopian situation.

My question is this: As a practical proposition, to be administered by competent men, does it not seem to you that they ought to be able to administer this law as satisfactorily as other laws are administered, and with the same result?

Mr. WALLACE. The ramifications are so infinite that I would hesitate to say yes. My prejudice is to say yes. There is one thing I do like about that though.

Mr. GOLDSBOROUGH. You mean about the Edie bill?

Mr. WALLACE. About the Edie bill, and that is that it does relate to the very fundamental thing, which is the physical production, and the ultimate objective of the monetary change should be to allocate credit in such a way as to have a continuous, increasing quantity of goods for distribution. It is an extraordinary thing, and an unthinkable thing to have, as we do have at the present time, a reduction in manufactured commodities of more than 30 per cent below normal for this year; while, at the same time, you have 8,300,000 folks out of work, according to President Green of the American Federation of Labor, and who desire work, all because of the fact that there is a lack of confidence in the future of the price structure, and that is partly because of the declined commodity values, the declined stock values, and all that sort of thing; but the thing is, they feel that things may go lower yet; and no businessman that is an intelligent man will borrow money so long as there is that fear, and the banker will not lend any money as long as there is that fear. That is the thing flowing out of our money system.

Mr. GOLDSBOROUGH. Now, as a remedy—

Mr. WALLACE. And the bill, if it really does work, of course, would meet that.

Mr. GOLDSBOROUGH. Mr. Wallace, as a remedy—I am talking about an emergency measure now, and this, of course, has emergency features—this bill (H. R. 10517). The Glass-Steagall bill was passed as an emergency measure, primarily. Now, do you not believe that, if the Federal Reserve Board would announce, as a consistent policy, that they propose to go out into the market, with their vast resources, and buy Government securities, until the price level was raised to a given point, and the public in general knew that was going to be done, that that would almost immediately take care of the situation.

Mr. WALLACE. I think so.

Mr. STRONG. Then, regardless of what law were passed, the willingness and the desire of the Federal reserve system to bring about a stabilization becomes a very vital question.

Mr. GOLDSBOROUGH. How is that? Please read that.

(Thereupon the stenographer read the statement of Mr. Strong as before recorded.)

Mr. WALLACE. That is very true; but this bill makes that mandatory.

Mr. GOLDSBOROUGH. The point I make is this: We are in the greatest national emergency we have ever known; we have businesses that

have been careful about their secondary reserves; we have farm families who have been thrifty from grandfather to grandson, who are simply being wiped off of the face of the earth.

Now, that is an emergency. The question I am asking you is: Whether or not if the Federal reserve system would announce a policy such as I have just stated, it would not cause business to resume almost immediately? Now, of course, I understand perfectly well that when you get a thing started and it gets going too fast, it is hard to stop; but, at the same time, it is not, by any means, impossible, as I see it, to stop it; and it is not, by any means, impossible to retard the advance in price levels at such times as to act as a precaution for business not to expand too far.

Mr. WALLACE. I think the retort of Mr. Edie, for instance, to your point of view—and he would sympathize with you about 99 per cent—but the retort of Mr. Edie to you would be this: Suppose the Federal reserve system stepped into the market and bought, we will say, \$500,000,000 additional of Government securities—

Mr. GOLDSBOROUGH. Yes; but they ought to announce what they are going to do.

Mr. WALLACE. So we can all be in on it.

Mr. STRONG. There should be a publication of that action.

Mr. WALLACE. Yes; I think we are all agreed on that. I think Mr. Edie's possible retort would be this: Once you get a thing going after a year or so it might become unbalanced and produce over-production.

Mr. GOLDSBOROUGH. Of course, that is what always happens in times of undue inflation; but here we have got a dreadful condition on our hands. We have got a condition where every bank in the country is apt to fail to-morrow, and destroy the community in which the bank is located. We have got a condition in this country where there is an attempted readjustment of salaries and wages; in other words, the heart is being torn out of everything. Now, when this rise comes, as it certainly will in a few months, the result would be that these wage-earners and these people who draw salaries, and all the different groups who have been deflated, will have their birth pains again, in trying to get back to a normal relation with society. Why do we not stop that now, before all that readjustment becomes necessary? That is what I have in mind, and that is what is in the Glass-Steagall bill. If it is not worth that, it is not worth anything; it can not do anything, if its action does not result in the raising of prices.

Mr. WALLACE. Yes; I agree with you, completely.

Mr. STRONG. May I interject that every bill that we have passed has been an attempt to create some inflation in this country, which might not have been necessary if we had passed this stabilization proposition five or six years ago. We did our best to do so, did we not?

Mr. WALLACE. Yes, Congressman Strong.

Mr. Chairman, I think I have finished.

Mr. GOLDSBOROUGH. Now, Mr. Prall.

Mr. PRALL. I have no questions.

Mr. GOLDSBOROUGH. Mr. Busby.

Mr. BUSBY. Speaking of Mr. Edie and his credit theory, any kind of machinery that is set up by Federal law, in order to be successful, would have to be administered by friends to the idea intended to be carried forward by the credit machinery, would it not?

Mr. WALLACE. Administered by friends, did you say?

Mr. BUSBY. Yes. If you did not get the question, he can read it to you.

Mr. WALLACE. I did not quite get the wording of it.

(Thereupon the stenographer read the question by Mr. Busby, as before recorded.)

Mr. WALLACE. The criterion of the Edie bill is that there is a strategic measure of the rate of increase of physical production, which has been, in this country, up to 1929, about 4 per cent annually.

Mr. BUSBY. I do not care a thing in the world about that. That is not my question at all. My question is this: That no matter what type of credit machinery you set up, to be administered through an agency, in order for that machinery to be successful, friends would have to have it in hand and its administration in hand.

Mr. GOLDSBOROUGH. It would have to be administered by friends.

Mr. WALLACE. You mean a bank would have to administer it?

Mr. BUSBY. No; friends to the idea, friends to the cause, the set-up, or whatever it might be.

Mr. WALLACE. It is my observation of Government boards that whenever the management or the members of those boards tend to be fair-minded toward the intended purpose of the act—

Mr. BUSBY. I will ask you again, the third time, and see if you have the question I am asking.

In order for credit machinery, set up by act of Congress, to be effective for the people to be benefited, the first requisite would be that the act, in its administration, would have to be in the hands of friends or people administering friendly to the cause to be remedied, would it not?

Mr. WALLACE. I begin to get your drift, and I believe you are absolutely sound in that view. In other words, it would be a splendid thing if we had more views like that from our part of the country.

Mr. BUSBY. Do you not understand me?

I want to tell you, frankly, that my notion of those gentlemen who come up from the Treasury is, that they are expert dodgers when it comes to coming squarely to the point, and I do not want you to get in that class. This is the thing that I want to ask you:

In order for credit to be properly apportioned to business, under Mr. Edie's idea, or any other idea, the velocity of credit would have a great deal to do with the convenience or its nonconvenience, at any particular time, would it not?

Mr. WALLACE. Yes; and proportionately as to which one got that credit allocation of it.

Mr. BUSBY. I will tell you what I had started to say. I am trying to get to the weakness of your position that a credit arrangement will supply. Do you know whether or not the velocity of bank credit and currency, that is, the turnover per month, at the present time is about 2.4 to 2.5 times or not?

Mr. WALLACE. The velocity has been very slow during the past year, if that is what you mean.

Mr. BUSBY. I think that is about the right figure. Now, then, do you know about what the velocity of bank credit and currency was during the middle part of 1929, when we had flush times, the turnover per month?

Mr. WALLACE. I would write Professor Fisher, if that question were asked me.

Mr. BUSBY. Did you have anything to do with the publication of the little book *Honest Money*?

Mr. WALLACE. Yes.

Mr. BUSBY. Did you ever read it?

Mr. WALLACE. Yes.

Mr. BUSBY. You have stated those figures here. I have taken them from your own book.

Mr. WALLACE. All right, put them in.

Mr. BUSBY. Now, you speak about the Federal reserve system increasing the amount of buying power of the country by coming out and purchasing Government bonds and securities, until the point was reached where the inflation was satisfactory. You suggested that that was the proper thing to do, did you not?

Mr. WALLACE. I suggested it would have an effect on the price levels, sooner or later.

Mr. BUSBY. What is the Federal reserve system going to purchase these bonds with?

Mr. WALLACE. Under the Glass-Steagall bill, they can purchase bonds by issuing more bonds. You can sell to bankers, and have the bankers bring them in and issue Federal reserve notes, and keep going.

Mr. BUSBY. What is the gold reserve required on those bonds that are issued; is it not about 40 per cent?

Mr. WALLACE. Yes.

Mr. BUSBY. Now, you understand that the Treasury says we only had about \$450,000,000 of free gold at the time they were trying to get the Glass-Steagall bill through, did you not? You remember that, do you not?

Mr. WALLACE. I saw all of that in the newspapers.

Mr. BUSBY. Do you regard that \$450,000,000 of free gold sufficient to carry on the process that you alluded to, until a satisfactory point has been reached, in issuing or buying Government securities?

Mr. WALLACE. I think certain of the reserve powers that the reserve system has will enable them to do that thing. There are adjustments that could be made in the gold certificates, and so on.

Mr. BUSBY. Do you think it is necessary to keep back bonds of perhaps more than \$450,000,000 of free gold, to meet the demands of foreign countries who have credits lodged in this country?

Mr. WALLACE. The possible adjustments that can be made inside of the Federal reserve system, in my opinion, can meet all the possible demands from foreign countries for our gold.

Mr. BUSBY. No; that is a general statement, but the detail of it is what I am concerned with.

Mr. GOLDSBOROUGH. If I may interject at this point, with this Glass-Steagall bill in operation, there is about \$1,400,000,000 of free gold; then the reserve requirement, which the Federal Reserve Board

can do away with, if they see fit, amount to \$1,600,000,000 more, and that is \$3,000,000,000; and then the gold certificates which are out, which could be called in, amount to \$900,000,000, and that would make \$3,900,000,000; and none of that money belongs to any foreign country. The gold that France has is locked up in vaults, safety deposit boxes.

Mr. WALLACE. It is earmarked, all right, is it not?

Mr. BUSBY. I want to say that I am familiar with the details of what you allude to, and I do not see the proposition that way. In the first place, if you call in \$900,000,000 of outstanding gold certificates, you would rob the currency circulation of \$900,000,000 of currency to begin with.

Mr. WALLACE. You can issue Federal reserve notes, as you did before. You have done it before. It only requires 40 per cent reserve.

Mr. BUSBY. I understand that; but you also understand that Eugene Meyer, when he came before this committee, represented that the Federal reserve only had \$900,000,000 of eligible paper, back of 60 per cent of the Federal reserve notes issued and that the remaining part of the 60 per cent that might have been discountable paper was gold because paper was scarce. You remember that, do you not?

Mr. WALLACE. When was it that he made that statement?

Mr. BUSBY. When we were having hearings on the Glass-Steagall bill.

Mr. WALLACE. As recently as that?

Mr. BUSBY. Yes; you knew that, did you not?

Mr. WALLACE. No, I did not.

Mr. BUSBY. You knew that the banking interests of the country had absolutely frozen \$3,500,000,000 of eligible paper that they would not use; you knew that, too, did you not?

Mr. WALLACE. I knew that they had a very vast sum that they were not using.

Mr. BUSBY. And we have no assurance that, under the Glass-Steagall bill, the paper made eligible by that bill will not also join these \$3,500,000,000 frozen paper, that is already locked up by the banks, and which they refuse to use? Have you given any thought to that?

Mr. WALLACE. I have given a great deal of thought to the possibility that the desire might be lacking on the part of our very fearful local bankers, who are out from the centers of population—that the desire might be quite completely lacking to take the chances which are necessary to take, to get this economic machine moving off of dead center.

Mr. BUSBY. You say out in the local places; how about bankers in the big centers, are they not—

Mr. WALLACE. I would include Chicago as one of those local places; they are still very fearful there.

Mr. BUSBY. Chicago a local place? What do you mean when you say "local"?

Mr. WALLACE. I rather think that the New York folks, as indicated in my correspondence with certain individuals, are really getting to the point of being sincerely desirous of rushing this thing along.

Mr. BUSBY. You mean they might use some of this eligible paper they have been refusing to use up to now?

Mr. WALLACE. Yes.

Mr. BUSBY. That is where you are going to get the eligible paper, even with the Glass-Steagall bill working, connected with the other eligible paper that will flow into the Federal reserve system, to back this currency that you are going to issue to buy these bonds with.

Mr. WALLACE. Well, now, that is something which can change in the twinkling of an eye.

Mr. BUSBY. I am not talking about that.

Mr. WALLACE. It can change very rapidly.

Mr. BUSBY. But it has not changed, it has been around the corner for about two years, but we can not get by the corner.

Mr. WALLACE. Yes, I am getting to that.

Mr. BUSBY. Let us go to another thing that might be involved. You recognize that an issue of Government bonds or securities is a charge against the credit of a nation, a type of mortgage, so to speak, against the values there are in the country.

Is not that true?

Mr. WALLACE. Oh, yes; obviously.

Mr. BUSBY. Now, that being a debt already, and an interest-bearing debt, you turn around and issue currency based on a debt, and that currency is still another national debt, and does not even bear interest? Are you not getting in a rather undependable position, pyramiding debt issued by the Government, if you follow that course to any great length?

Mr. WALLACE. I think you are rather inferring, Mr. Busby, that I am standing primarily on certain provisions of the Glass-Steagall bill. In my talk I was dealing with what I thought would possibly take place under the Glass-Steagall bill.

Mr. BUSBY. No, I knew you were not referring to that. I was speaking generally.

Mr. WALLACE. As far as I am standing for a definite proposition, I am standing for this bill here, and certain phases of this, but this pyramiding effect to which you refer—there is a power which the Federal reserve system possesses to reflate, to cause prices to go up, if they so desire; and under this bill I suspect it would be necessary to do some of that pyramiding, which would then bring you, in case that you come to the ultimate point which you apparently fear, of our having insufficient gold to invoke section 3 of the bill.

Mr. BUSBY. Do you not know that the plea against hoarding that is being made by the President and by organized effort is to get people to bring that money in and put it in the banks and take the risk of having those banks break, in order not to have to issue more currency, based on an additional amount of gold and credit; and that the real purpose in antihoarding has never been disclosed to the public; and it is true that the more gold available against a possible run on this country by foreign governments for gold shipments out of the country, in that a new issue of currency, such as you have described, would involve more gold as the backing for that currency? Have you thought of that phase of it?

Mr. WALLACE. No; I had not thought of that particular phase of it.

Mr. BUSBY. You can see some merit to it, can you not? That the more currency there is issued, it would be very easy for the Government to do it, but it would also involve more gold, and the President would rather the people would bring their money in—I will not say, even if the banks go broke—but it would be bringing it from where that man had put it. Now, you involve it in whatever risk is incident in order to free this gold directly, or to keep it, rather, from tying up more gold in issuing a sufficient amount of currency for circulation?

Mr. WALLACE. That is an interesting view that I had not thought of.

Mr. BUSBY. You can see that, to issue more money, would involve more gold as the backing for that money.

Mr. WALLACE. It usually does, although there are certain adjustments that can be made in the Federal reserve system where that would not necessarily follow.

Mr. BUSBY. I do not understand what adjustments you can make.

Mr. WALLACE. I was talking to Senator Owen yesterday afternoon about that particular matter, and he will be testifying before you either to-day or to-morrow, and I would suggest that you take it up with him.

Mr. BUSBY. I will be glad to do so. Now, there is another thing: Do you have in mind any particular legislation, or statutory provision, involving any legislation, which would carry forward the plan to a definite end, in any of the monetary proposals that you have, or would we have to leave that to the good faith or sound administration of somebody like these credit systems?

Mr. WALLACE. Congress always has to leave the carrying out of its laws to some commission of some kind, or some board, does it not?

Mr. BUSBY. Oh, well, there is more or less discretion, and there is more discretion in some and less in others. That is what I am driving at. Then, do you have any other proposals than the ones you have suggested here?

Mr. WALLACE. No further proposals. I would suggest that you give this House bill 10517 the most serious consideration; and, secondly, that you also consider this so-called Edie bill as a possible alternative, in case of the necessary objections which will be urged by the members of the Federal Reserve Board when they come before you; and, third, that you favor the calling of an international monetary conference.

Mr. BUSBY. That has been provided by law since the nineties, you know.

Mr. WALLACE. Since 1897.

Mr. BUSBY. Yes.

Mr. WALLACE. At that time, you will remember, is when President McKinley felt out the nations about the matter, and England, being on the gold standard, was rather against the whole thing. England at the present time is in a much more amicable frame of mind.

Mr. BUSBY. Yes; let me ask you this: Do you regard the price findings of the Bureau of Labor Statistics as dependable?

Mr. WALLACE. As the measure of the wholesale price levels; yes.

Mr. BUSBY. The wholesale price levels is what you meant in the center of gravity in trade, is it not? All of the commodities, taken together, the wholesale commodity index, as fixed by the Bureau of Labor Statistics—do you regard them as being dependable?

Mr. WALLACE. Yes.

Mr. BUSBY. Do you not believe that the currency evaluation range, relating to the wholesale commodity index prices, would not be more dependable than the credit systems that are manipulated and juggled and badly administered?

Mr. WALLACE. I am more willing to take my chances on that.

Mr. BUSBY. Do you regard any metallic base that is not related to the commodity prices along the lines suggested, as being wholly dependable?

Mr. WALLACE. I look on gold and, to some extent, silver as a relic of barbarism, but we are still barbarians.

Mr. BUSBY. Do you not know that gold, or gold and silver, or silver, either one, taken as a base for our currency and the measure of our values, would swing out of line with commodity prices from time to time and cause periods of inflation and depression.

Mr. WALLACE. I am agreeing with you as to that. I think we have got to have control, eventually, but as an emergency proposition to restore the purchasing power to the people of the Orient there is a lot to be said, if you put silver in.

Mr. BUSBY. Is not your organization willing to go forward to the very basic proposition and begin to fight for it in a wholehearted way, at the present time?

Mr. WALLACE. I am a rather humble member of the Farm Bureau Federation, but I would say we are willing to go the limit on the thing, we are willing to go the absolute limit. The only question is, when you consider its intermediate steps—the only reason I have talked, as some of you may have thought, a little bit academically on the question, is, I want you to consider the nature of those intermediate steps; but if you want radicalism, as expressed in the nature of our spirit, we can express plenty of that.

Mr. BUSBY. I do not understand that language. What do you refer to now?

Mr. WALLACE. Well, we do not speak the same language, apparently.

Mr. BUSBY. Well, I understand—

Mr. WALLACE. You understood Mr. Beedy's language.

Mr. BUSBY. I understand the reasonable interpretation of English words, but I do not know what you are applying to.

Mr. WALLACE. You asked how far the American Farm Bureau Federation was willing to go on this money matter.

Mr. BUSBY. I wanted to see where you are. So I want to know how far or how much in earnest the representatives of the American farmers are; and if they are not downright, dead in earnest, I want them to let us go ahead and see what we can do to help the masses of the people. I do not want them to come in here with any half-hearted proposal and then say, "We are afraid to try to do the thing; we know we ought to do, and that ought to be done," as that is getting nowhere, in my opinion.

Mr. WALLACE. Of course, I have spent some 12 years, through my paper, trying to educate folks on this thing, and I speak for my folks in Iowa and the Middle West.

Mr. BUSBY. I think they are ready for it, from what I hear from them, because I get letters from all over the country.

Mr. WALLACE. Our folks are certainly ready to go; and the Farm Bureau Federation went on record, in its resolution in December of 1930 in behalf of the appointment of a committee on stabilization of the unit of value. Subsequently in 1931 such a committee was appointed and prepared a report embodied in the booklet *Honest Money*; and I would say that I have done a very considerable amount of education, and that would result in the membership standing behind me on this general proposition. Now, we have not, as yet brought forward any bill, and we have rather deliberately refrained from bringing forward a specific bill; because you realize that, when you bring forward a specific bill, fear becomes centered in the bill as an educational proposition and later to deal with the thing in general—

Mr. BUSBY. Excuse me, but I have no patience with that way of attacking an evil.

Mr. WALLACE. General advice is the best advice, I think you will find, in the educational program.

Mr. BUSBY. And I regard that move as standing absolutely in the way of our progress, because we can not get people to listen to a proposition; because when they are feeling well, although they have a basic ailment and they ought to have an operation performed, as long as they are feeling well they will go along and defer the operation; and so it is in finances, and if we are not going to deal with a question fundamentally, at the present time, because when we make some recovery, after a degree of suffering, we are going to recur to it. What I want you folks to do is stiffen up and come in here and say, "We stand for something that is fundamentally right" and then we will get somewhere. I do not want these farmers' organizations standing in the way and then hollering.

Mr. WALLACE. I think you had better have him at your next meeting.

Mr. BUSBY. Let us not get off of the subject. There is not any more questions that I would want to ask.

Mr. WALLACE. I think we ought to know what a specific measure contains.

Mr. GOLDSBOROUGH. Mr. Wallace, this committee has met for the purpose of reporting a bill. That is what we are going to do. Now, then, what we want is your best judgment about the legislation. This is not an educational campaign. The country is in a crisis, and we are going to report a bill. I think that is the sentiment of the subcommittee and will be the sentiment of the full committee. So I think we ought to say to you that this committee does not consider this to be educational, except as the general testimony given when any bill is being considered is educational. We are going to report a bill. Now, Mr. Prall, you had a question.

Mr. PRALL. I want the gentleman, for my benefit, coming from the lower part of Broadway of New York City, where we have not many farms—I would like your opinion on this particular bill, as to what its effect will be if we enact, within, say, two months, this bill; and just where that effect will be felt, and just what its effect will be on the unemployment situation.

Mr. GOLDSBOROUGH. Labor?

Mr. PRALL. Yes.

Mr. WALLACE. That is in this bulletin, Farm Economics, which I understand Mr. White is going to enter into your files. On page 167 a chart indicates the effect of the rise and decline of prices on employment. I would assume, from that chart, if prices could be held steady, that employment would be stabilized to a very considerable degree.

Mr. STRONG. In other words, if industry could go along on an even keel, without having inflation and then be ruined by deflation, that it could continue to employ its labor.

Mr. PRALL. That is not the question. I want to know whether or not this bill will do that, or whether this bill should have something added to it, or teeth put in it, or something of that kind? Will this bill get us out of the mess we are in now? That is the point.

Mr. WALLACE. This bill, undoubtedly, if carried out, if you can actually get this bill passed and signed, there is no question but what this bill will carry out an enormous reflation of prices; there is no question about that, if you go clear through. This section 3, for instance, will do it.

Mr. GOLDSBOROUGH. It will depend on the way it is administered.

Mr. WALLACE. Yes; on how faithfully it is administered.

Mr. BEEDY. That is what he wanted to know.

Mr. BUSBY. That is what I was alluding to.

Mr. WALLACE. I wonder if I could make a remark to Congressman Busby, that I am hoping he maintains his same sturdy attitude when the members of the Federal Reserve Board appear.

Mr. GOLDSBOROUGH. You need not be disturbed about Mr. Busby along that line.

Mr. WALLACE. This is my feeling on the thing, gentlemen: That when you have technical men before you, you have to regard their opinion, and that may cause you to make certain shifts here; but I sincerely trust that your resoluteness will stay by you; and when it becomes necessary and we farmer folks can not really be sure what bill to set up before our folks until after you folks have disclosed, after consultation with those technical people, what you are going to report out—

Mr. BUSBY. You do not expect the president of the Federal Reserve and that bunch of fellows to bring you what you are looking for in the way of legislation?

Mr. WALLACE. No; but they put certain brakes on you as Congressmen as to what you will report out.

Mr. BUSBY. Yes; I am sure they will put the brakes on us.

Mr. WALLACE. They may put legitimate brakes on you.

Mr. STRONG. Now, of course, you know that the Federal Reserve Board now has the right to buy and sell Government securities and regulate the discount rate; they do not require any more power to do that? Therefore, if they chose to go ahead and buy Government bonds, and take the bonds out of the market and put the money in it, and lower the discount rate, they could bring about a tremendous increase of commodity prices, could they not?

Mr. WALLACE. Undoubtedly.

Mr. STRONG. Then, the only purpose of our legislation here is to require them and direct them by Congress to do the thing they could do now, if they wanted to.

Mr. WALLACE. That is the chief end if it; yes.

Mr. STRONG. Well, then, of course, whether or not the members of the Federal Reserve Board are friendly to this legislation, must bring out the thought that, if they were friendly, they could do what we want them to do; it is only because they are not friendly to this idea that we are trying to pass legislation to direct them to do the thing we want done, and that is, put more money in circulation at a less price?

Mr. WALLACE. Yes.

Mr. STRONG. Well, now, carrying that thought out a little further, when we direct them to use these powers to put more money in circulation at a less price, for the purpose of bringing about more inflation, then you use those powers to stabilize the purchasing power of money; at that point where we think the price level is just to all the people of the Nation, ought we not give them a measure of value to do it by?

Mr. WALLACE. Certainly.

Mr. STRONG. That is, we ought to direct them, in this bill, to use a measure of value as to certain price levels, index numbers, I mean.

Mr. WALLACE. Yes.

Mr. STRONG. It is your idea that we should direct them to use a fair measure of value or yardstick or what is termed an "index number" of commodity prices.

Mr. WALLACE. Theoretically, the correct measure of that is the point at which the average indebtedness was contracted, which was estimated in this bulletin of Boren's at 150—that is, taking pre-war as 100; that would be substantially the same as it is directed here, which is the average of 1921 to 1929.

Mr. STRONG. We are directing them to use their powers to stabilize the purchasing power of money; what measure of value should we give them to use? In other words, do you think we should use the price index numbers of general commodities?

Mr. WALLACE. You mean the Bureau of Labor indexes?

Mr. STRONG. Yes.

Mr. WALLACE. The Bureau of Labor for what year?

I would say 1926, or, for the foregoing purposes, you can say the average for 1921 to 1929, and that will give the same result, substantially.

Mr. STRONG. I want to say to you, after studying this question for a good many years, I have arrived at the conclusion that the index number we ought to use is the Bureau of Labor index; and in this connection I think it is only fair to say that one member of the Federal Reserve Board seems to feel they ought to have their own index number; and on exhaustive questioning he seems to think that the stock-market prices and the real-estate values should be in that index. In other words, if we do not direct the Federal Reserve Board to use one measure of value, then they may set up one of their own that might not do the thing we want them to do. We are agreed that we ought to use some index number, and you think the index number set up by the Department of Labor is proper? You favor the wholesale index of commodity prices?

Mr. WALLACE. Yes; because it is the most sensible, and as long as you are using an index number, the most complete is the Bureau of Labor's.

Mr. STRONG. Now, another question: Of course, in any operation under this bill, there will be times when they will have to buy bonds and

lower the discount rate, or sell bonds and raise the discount rate; what do you think about the proposition of giving them, in this bill, some direction as to the publicity they should use? In other words, there have been times, for instance, to make it exact, on the 20th day of May, 1920, when a motion was passed through the Federal Reserve Board which meant deflation, and we did not know much about it for several months afterwards, and there are times since when they have decided to buy or sell bonds, or raise or lower the discount rate, without any notice to anybody. Do you not think there should be that publicity which would make it possible for any business man and other person in the United States to know when that change of policy is going to take place?

Mr. WALLACE. Yes; I am strong for that kind of thing, of course, but starting on it suddenly—suppose in the early summer of 1929, that publicity provision you refer to had been in effect, and it came out all of a sudden, the smash would have been terrific. It is hard to start, but once started, it is a healthy thing.

Mr. STRONG. That is true, but the point I want to make is this: That there always will be men who study this situation, who will know, from the trend of things, what the Federal Reserve Board is going to do, and they will have that knowledge in advance of the general public. Therefore, in my bill, and I hope to put it in this bill, I have a clause requiring the governor of the Federal reserve system, when they start a change of policy, to give publicity to the whole Nation.

Mr. WALLACE. I had not noticed it was omitted from this bill. I noticed it in one bill, and it should be in here.

Mr. STRONG. I put into my bill the proposition that we use as a measure of the value of the dollar, the general wholesale commodity index price, as established by the Department of Labor; and then, when any change of policy is decided on, that the governors of the Federal Reserve Board shall give immediate publicity, so that all may know what the change of policy is that has been decided on.

Mr. WALLACE. Of course, it does not become so important if the price level is held steady.

Mr. STRONG. No; but suppose we are going along and buying bonds and reducing the discount rate, for the purpose of raising prices; and then, when we reach the point where the board will say, "This has gone far enough. We had better stop this policy." Should not everybody be advised of that?

Mr. WALLACE. Certainly.

Mr. STRONG. That is the point I wanted to make.

Mr. WALLACE. Yes, sir.

Mr. GOLDSBOROUGH. That is all.

Mr. BEEDY. No questions.

Mr. GOLDSBOROUGH: Mr. Wallace, we thank you, and appreciate very much your statement. It has been clear and entirely satisfactory, and we are very much helped by it.

Mr. O'NEAL. Mr. Chairman, we have Mr. White.

Mr. GOLDSBOROUGH. Now, Mr. White, if you will give your name to the stenographer, please, and whom you represent.

STATEMENT OF CHARLES R. WHITE, PRESIDENT NEW YORK STATE FARM BUREAU, AND MEMBER OF BOARD OF DIRECTORS AMERICAN FARM BUREAU FEDERATION

Mr. WHITE. My name is Charles R. White, and I am president of the New York State Farm Bureau, and I am a director of the American Farm Bureau Federation.

Mr. GOLDSBOROUGH. Just proceed in your own way, Mr. White.

Mr. WHITE. I desire, Mr. Chairman, to go back a little bit in monetary history. In the first place, I think we are somewhat deluded by the idea that this is the greatest depression this country ever had, because I started in a depression as a young business man, and I was in Washington about 40 years ago——

Mr. GOLDSBOROUGH. How old are you?

Mr. WHITE. Sixty-seven.

Mr. GOLDSBOROUGH. It is the worst one I have ever seen. Maybe you saw one ahead of me.

Mr. WHITE. The fact is that following the Civil War we had a period of deflation quite similar to this. The inflation of the Civil War was very different from the inflation of the late war in this country, for the reason that, in the time of the Civil War, the Government was unable to buy gold with bonds, and the credit of the Nation was cut into pieces, and greenbacks were issued. At the close of the war, those greenbacks which had been issued were funded into bearer bonds. The greenback, at that time, was worth about 50 cents on the gold basis. The indebtedness of the farmers and the business men were largely created on the basis of lawful money of the United States, which was the greenback. The result of that was that prices fell very rapidly, and in this bulletin that I have here, compiled by Doctor Warren, the lines are absolutely parallel, showing practically no deviation in the falling of prices following the Civil War and following the late war. Of course, the farmers were met with the same situation as all business men were, and rearranged and adjusted their conditions.

In the late war, we had a gold inflation, most of the countries of the world went off the gold standard, and remember that gold came pouring into this country very rapidly; in fact, so rapidly that hundreds of millions of dollars were sterilized by the Treasury Department; bonds were accepted from foreign countries, rather than gold, so prices would not go any higher. So our inflation at this time was entirely a gold inflation, somewhat regulated by Government edict, but it was on a gold basis at that time. Following the Civil War we funded the greenback debt into interest-bearing bonds. We were a great agricultural Nation, with very little industry, and England was the great creditor nation, who held a large proportion of our bonds, and was a great industrial and commercial nation. She desired our low-priced raw materials, our low-priced cotton, and low-priced food. It was during the period I speak of, that I happened to have been in here on some occasions——

Mr. GOLDSBOROUGH. When was that, sir?

Mr. WHITE. That was during the nineties, the early nineties. There was the very strong belief that pressure was brought to bear by English interests. A great deal of influence was exerted in Washington for the purpose of demonetizing silver, so as to further deflate prices.

If they could get our prices of food and raw materials down, that placed them in a powerful position.

Now, we had one great major depression before that, the deflation after the Napoleonic war.

One thing I want to bring out is, that we find in an examination of these tables, going back to the statistics, that the gold production in the world, and the commodity prices run absolutely along parallel lines, except a deviation about 7 per cent for one short period, and occasionally up to 8 per cent, for very short periods.

Mr. BEEDY. When was the 7 per cent period?

Mr. WHITE. I do not remember—I could find it—but we find the commodity prices and the gold prices run parallel. The English statistics, which have been compiled for a period of 90 years, show that situation, also the monetary commission of the League of Nations have shown that whenever we fail to produce in the world 3.1 per cent increase in our gold output compounded each year, the commodity prices fall; and whenever we exceed 3.1 per cent increase, the commodity prices rise. When we exceed in the gold production 3.1, prices rise; and when we fail to produce 3.1 per cent increase, compounded each year, then the prices will fall.

The little bulletin I have here is the same bulletin that Mr. Wallace presented, and I would like to leave this bulletin with you, if you desire it, because it has very complete tables and charts, showing all of these facts; so that we would like to have it presented.

COMMODITY PRICES

With wars or political unrest in much of the world and many countries no longer on a gold basis, the future of the general price level is very uncertain. But farming is such a long time industry that every farmer, either consciously or unconsciously, is adapting his practice to what he thinks the price level will be. Since the most important problem that confronts agriculture is the future of the general commodity price level, a large portion of this number is devoted to commodity prices, physical volume of production, money, wages, and probable future prices. Every plan of farm operation is based on the farmer's guess about future prices. It is not possible to give a perfect answer to the problem, but a knowledge of the basic facts will help. These facts are complicated, but no more complicated than vitamins.

There are always variations in prices of individual commodities. To adjust farming to these is difficult enough, but during the last 17 years, the major problem has been to forecast the general price levels because this rather than fluctuations in prices of individual commodities has been of overwhelming importance.

The movements of the general price level in the Civil War period and the fluctuations in the price of hogs about the general level of commodity prices are shown in Figure 1. The hog cycle was important, but the serious thing was the decline in the general level of commodity prices which dragged the hog cycle down. The same comparisons for the World War period are shown in Figure 2. The whole price structure has declined from 244 in May, 1920, to 100 in December, 1931. The major part of the decline in the price of hogs is not due to the hog cycle but to a general collapse in all prices.

Similar comparisons for wheat during the Civil War period are shown in Figure 3. Wheat prices fluctuate violently, primarily because of variations in weather. Following the Civil War, these fluctuations were about a steadily declining base. Wheat prices and all commodity prices for the World War period are shown in Figure 4. Wheat prices are again fluctuating around a declining base. It is to be expected that wheat prices will continue to follow the general price level and fluctuate about it. There seems to be no fundamental reason for anticipating a change in these relationships at the present time.

It is extremely difficult to imagine a fluctuating price fluctuating about a fluctuating base. The inability to imagine the conditions shown in Figures 1 to 4 leads to erroneous actions. It also makes it difficult to appreciate the underlying principles governing prices. Many persons imagine that a stable general

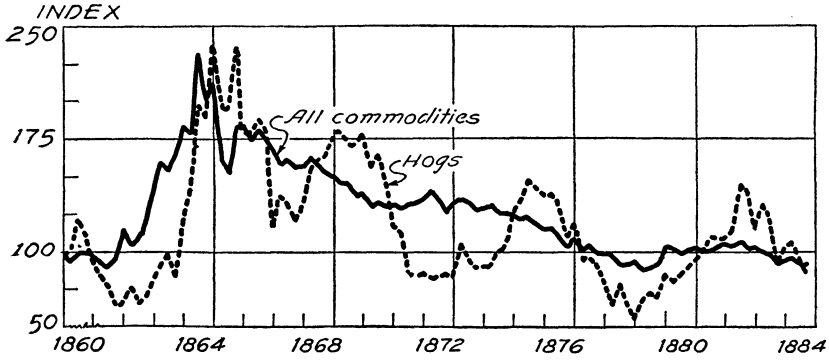


FIGURE 1.—Index numbers of wholesale prices of all commodities and of prices of hogs at New York city, 1860-1885. 1856-60=100. The usual hog cycle continued but fluctuated about a declining base

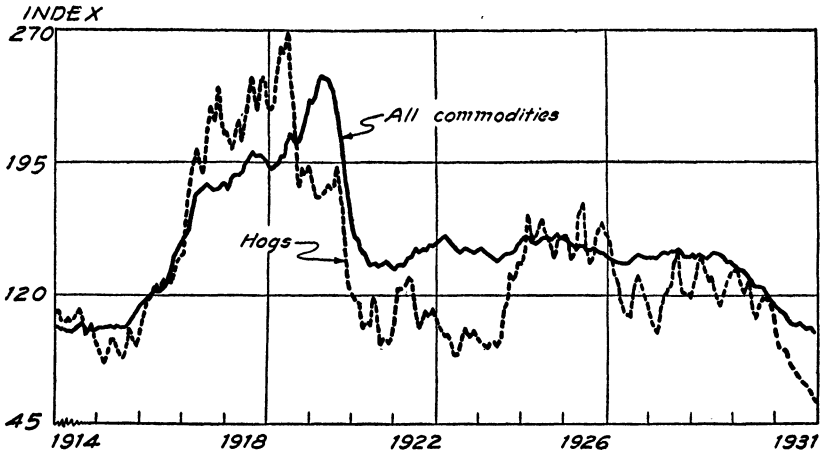


FIGURE 2.—Index numbers of wholesale prices of all commodities and prices of heavy hogs at Chicago, 1914-1931. 1910-14=100. As in the Civil War period, the hog cycle continues but is dragged downward by the decline of the whole price structure. It is to be expected that hog prices will continue to fluctuate about the general price level

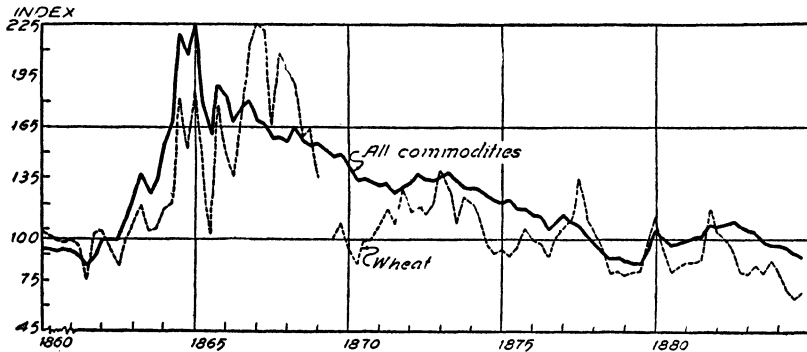


FIGURE 3.—Index numbers of wholesale prices of all commodities and prices of winter wheat at New York city, 1860-1885. 1856-60=100. Wheat prices fluctuated about the general price level, which steadily declined

average of commodity prices would mean stability in each commodity. It would mean that the hog cycle would fluctuate about a stable base. Price changes would therefore be due to changes in the supply of or demand for hogs rather than to a crash in the foundations of the whole price structure. Violent changes in

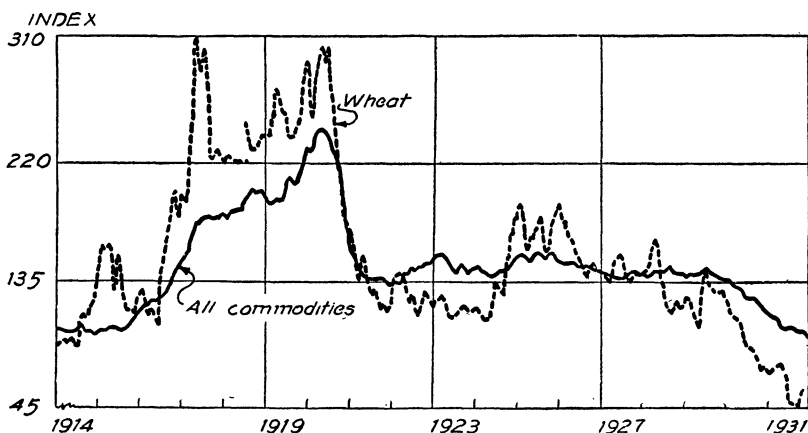


FIGURE 4.—Index numbers of wholesale prices of all commodities and price of No. 2 hard winter wheat at Kansas City, 1910-1931. 1910-14=100. Wheat prices are again fluctuating about the general price level. It is to be expected that this relationship will continue

the general price level do increase somewhat the violence of price changes due to other causes.

The statement is commonly made that prices are due to supply and demand. This is a half truth. It has led to tremendous losses on the farms and in the cities, and has led to the adoption of erroneous public policies. Price is a ratio of the supply of and demand for gold to the supply of and demand for a commodity. In short periods of time credit may act independently of gold to in-

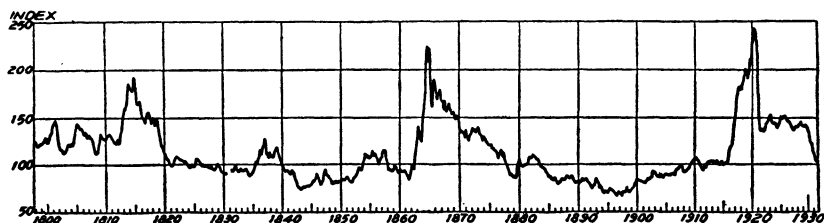


FIGURE 5.—Wholesale prices in the United States for 135 years, 1797-1931. 1910-14=100. During most of the last 135 years, instability of the general price level has been the most important problem of agriculture. The periods of rising prices have been periods of agricultural prosperity, and periods of falling prices have been periods of agricultural distress

crease or decrease prices. Also in short periods of time, speculation may act independently of the supply of or fundamental demand for the commodity. But prices due to speculation are generally brought back with a jerk. Similarly, if credit gets very far from its normal relationship to gold, it is brought back with a jerk.

The movements of the general price level are primarily due to monetary factors. Mere adjustment of the wheat acreage does not solve this problem.

The movements of the commodity prices due to monetary causes have been of overwhelming importance for more than half of the time during the past 135 years (fig. 5).

The comparative price declines in the different war periods are shown in Figures 6 and 7. After each war, prices were cut in two. Both the rise and the decline in the World War period were more violent than in previous war periods.

PRICES IN DIFFERENT COUNTRIES

Prices in different countries since the World War are shown in Table 1 and Figures 8 and 9. Prices in England in November, 1931, were 67 per cent below the average for the year 1920, and 28 per cent below 1929. The long decline followed by the crash since 1929, resulted in so much unemployment, business failures, and other distress, that England discontinued the gold standard on September 21, 1931. Rarely, if ever, has a country stood a decline of 67 per cent

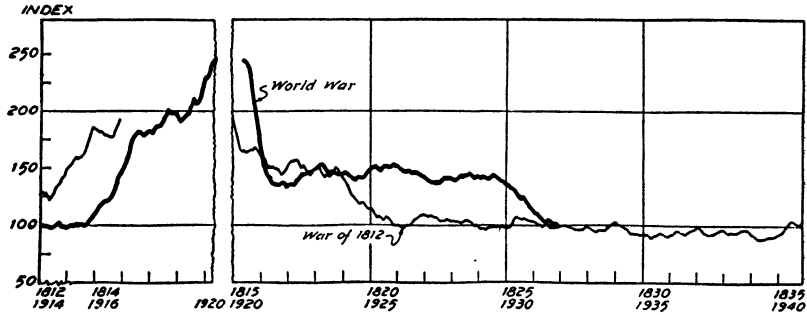


FIGURE 6.—Index numbers of wholesale prices, War of 1812 and World War periods. 1910-1914=100

in its price level, without a revolution or a currency change. England now has about 3,000,000 unemployed.

TABLE 1.—Comparative price declines

| | England Statist- Sauerbeck index ¹ 1910-1914 =100 | France Statistique Generale index ² 1910-1914 =100 | Italy Ricardo Bachi index ³ 1913 =100 | Germany Statistisches Reichsamt ³ 1913 =100 | United States all com- modity index ⁴ 1910-1914 =100 | United States 30-basic commodity index ⁵ 1910-1914 =100 | North China index ⁶ 1913 =100 |
|--------------------------------------|---|--|---|--|---|--|--|
| Peak year | ⁷ 304 | ⁸ 709 | ⁸ 618 | ----- | ⁷ 226 | ⁷ 231 | ----- |
| Year 1929 | 139 | 617 | 440 | 137 | 139 | 141 | 165 |
| November, 1931 | 100 | 412 | 320 | 107 | 103 | 84 | 179 |
| Per cent decline from peak | 67 | 42 | 48 | ----- | 54 | 64 | ----- |
| Per cent decline since 1929 | 28 | 33 | 27 | 22 | 26 | 40 | ----- |
| Per cent advance | ----- | ----- | ----- | ----- | ----- | ----- | 8 |

¹ The Statist, Vol. cxiv, No. 2812, page 80, Jan. 16, 1932. The index numbers on the 11-year base 1867-1877 were converted to the five years 1910-1914 by multiplying by 1.2107.

² Annuaire Statistique for 1928, Vol. 44, p. 115, 1929. To convert to the 1910-1914 base from the 1901-1910 base, multiply by 0.8726; from the July, 1914, base, by 0.9888; and from the 1913 base, by 1.0096.

³ Monthly Labor Review, United States Bureau of Labor Statistics, Vol. 33, No. 6, p. 238, December, 1931. The November, 1931, index numbers were supplied by Ethelbert Stewart.

⁴ Warren, G. F., and Pearson, F. A., Wholesale Prices in the United States for 135 Years, Farm Economics No. 72, p. 1587, September, 1931, and table 1, page 1634 of this issue.

⁵ Table 1, page 1704, of this issue of Farm Economics.

⁶ Nankai University Statistical Service, Nankai Institute of Economics, Nankai University, Tientsin, China, Vol. III, No. 22, p. 109, June 2, 1930, Vol. IV, No. 49, p. 223, December 21, 1931.

⁷ 1920

⁸ 1926

During the first six years of declining prices in England and the United States, France inflated the currency. Prices rose, production was profitable, and there was full employment. All the other conditions were such as accompany rising prices. Instead of attempting a complete deflation as was attempted in England and the United States, France reduced the weight of gold in the franc to one-fifth of the pre-war amount on June 25, 1928. No serious decline in prices occurred until 1930-31. Prices in November, 1931, were four times the pre-war level (figure 8). Any debts incurred at pre-war prices or at four times pre-war prices

could be readily paid. Farmland is, of course, worth much more than before the war, and a house built before the war is valuable property. But France was becoming adjusted to a price level of about six times pre-war. A price level only four times pre-war is now a serious matter, and France has unemployment.

Italy revalued her currency on December 22, 1927, so that prices are far above pre-war. But Italy was becoming adjusted to a price level of about four times

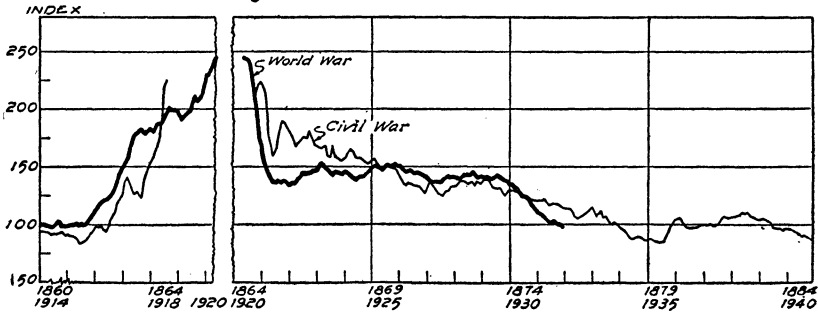


FIGURE 7.—Index numbers of wholesale prices in the Civil War and World War periods. 1910-1914=100. The price declines following the World War were similar to the declines following the Civil War, but were more violent

pre-war so that a drop to an index of three times pre-war, or a decline of 27 per cent, since 1929 has resulted in about 1,000,000 unemployed, a record for Italy.

Since 1929, prices in Germany have declined 22 per cent and it is reported that 5,500,000 are unemployed, the highest number ever reported.

In the United States, prices declined 54 per cent since 1920. No other important country that had such a large price decline is continuing without some monetary change. Since 1929, prices have declined 26 per cent.

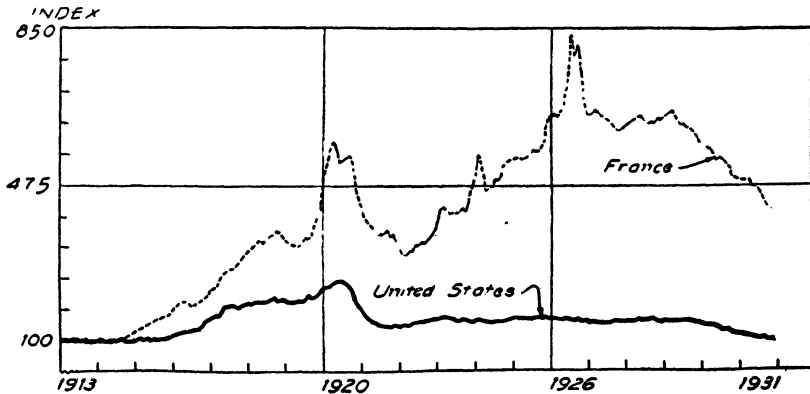


FIGURE 8.—Index numbers of prices in the United States and prices in France, 1913-1931. 1910-1914=100. France has been on a gold basis since 1918, but since the currency was revalued, prices are about five times as high as in England or the United States.

Prices of basic commodities in the United States declined about 64 per cent since 1920, and 40 per cent since 1929. These prices are the average at which farmers and other basic producers must sell. They are a sufficient explanation of the decline in freight-car loadings. The popular explanation of railroad difficulties is that the trucks are getting the freight. The freight does not exist.

The unemployment in the United States is variously estimated at from six to eight million.

Since 1929, the decline in prices in England, France, Germany, Italy have been very similar, France 33 per cent; England, 28; Italy, 27; United States, 26; and Germany, 22.

Since 1929, prices in China have risen 8 per cent. China is on a silver basis. In the same period, prices in gold using countries have declined from 22 to 33 per cent. At the same time that other countries are feeling the effects of declining prices, China is feeling the effects of rising prices (fig. 9). There is full employment and profits are large. It does not follow that the prices in the gold using countries would have been the same as the prices in China had these countries been on a silver basis. The use of any metal as money changes the demand for it and hence changes its value.

EFFECTS OF DECLINING PRICES

Every human relationship is affected by prices. It is sometimes said that lenders and those who live on wages or salaries profit by declining prices. Practically every one loses when prices decline seriously. Production stops. Courage in business is penalized. The physical property of the nation deteriorates. Declining prices do not merely transfer wealth—they destroy it.

EFFECTS OF DECLINING PRICES ON PRODUCERS' AND CONSUMERS' PRICES

When prices rise, producers' prices rise faster than consumers' prices. For the year 1917, American grown food sold at 56 per cent above pre-war retail

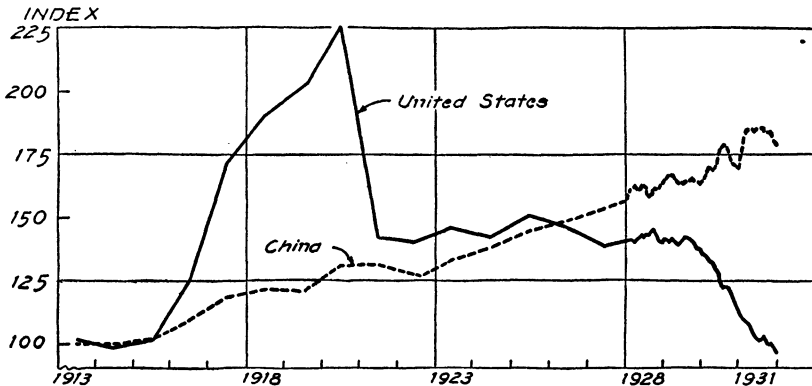


FIGURE 9.—INDEX NUMBERS OF PRICES IN THE UNITED STATES AND IN CHINA, 1913-1931

Pre-war=100¹

From 1913 to 1920, prices in the United States rose much more rapidly than in China. Since then, prices in China have continued to rise and prices in the United States have fallen. Prices have been extremely erratic in both countries, but have been more stable in China than in the United States

prices. Farmers received 81 per cent above pre-war farmer prices. With declining prices, this same food sold at retail in 1923 at 54 per cent above pre-war, but farmers received only 24 per cent above pre-war. In these two years retail prices were practically identical, but prices which farmers received fell from an index of 181 to 124. These relationships for other years are shown in figure 10. For the year 1931, retail prices of American grown food averaged 135 when pre-war is 100. The cost of distribution averaged 178. The farmers received prices only 89 per cent of pre-war. The same relationship holds for other products. The index for 30 basic commodities for 1931 was 90, but the cost of living index averaged 151.

Farmers sell at wholesale and buy at retail. In a period of declining prices there is a wide discrepancy between the prices at which they buy and the prices at which they sell. This discrepancy has lasted for 11 years, and will continue so long as prices decline. If prices rise above the cost of distribution, the situation would be reversed. If the general price level should remain stable, adjustment would ultimately occur, but this would require many years unless prices rise materially.

¹ The wholesale prices for North China are those reported in the Nankai Weekly Statistical Service, Nankai University Committee on Social and Economic Research, Tientsin, China, vol. 3, No. 22, p. 109, June 2, 1930. The index numbers are on the 1913 base. The index numbers of wholesale prices for the United States are those reported by Warren, G. F., and Pearson, F. A., Wholesale Prices in the United States for 135 years, Farm Economics No. 72, p. 1537, September, 1931, and page 1634 of this issue. The index numbers are on the 1910-1914 base.

How slowly the adjustment takes place is shown by the changes that occurred from 1921 to 1929. In this period, the general price level was fairly stable. For the year 1929, retail prices of food were 174 and farmers received 151. Had prices remained stable another 10 years, the readjustment probably would have been completed. For farmers who are not heavily in debt, this price discrepancy is the most serious single effect of declining prices.

Manufacturers have the problem of hiring labor which has a high cost of living to produce products at a low price. Farmers have the additional problem of buying at retail and selling at wholesale. Manufacturers buy at wholesale prices which are low and sell at wholesale prices which are also low, but the farmer buys at high prices and sells at low prices. This is the reason that farmers are so anxious to buy cooperatively at wholesale.

EFFECTS OF DECLINING PRICES ON DEBTS

Before the panic of 1920, relatively few debts had been incurred at the high price level. By 1929, the whole international, national, and other public and

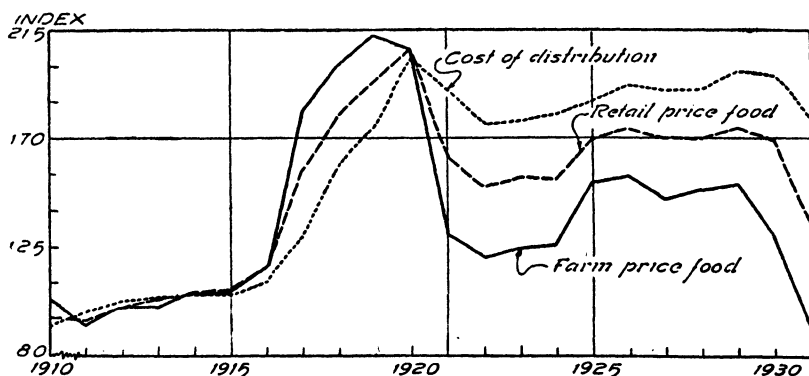


FIGURE 10.—FARM AND RETAIL PRICES (OF FOOD AND COST OF DISTRIBUTION 1910-1931)

1910-14=100

When prices rise, costs of distribution rise less rapidly and farm prices more rapidly than retail prices. When the prices decline, costs of distribution remain high and farm prices decline more than retail prices.

private debt structure was adjusted to a commodity price level of about 150. In fact, debts were somewhat high even at this level.

Commodities are the basis of most credit. Brazil expected to pay its debts with coffee. Australia expected to pay with wheat and wool. The State of Georgia and its farmers expected to pay with cotton.

Most of the security for debts is commodities, either movable ones or those that have been built into homes or factories. Most of the taxes are raised by assessing such property. If commodities drop in value, the movable commodities, as well as the railroad ties, rails, electric lines, and houses decline in value. The present public and private debts and taxes would not be particularly burdensome at the price level at which they were incurred, that is, at a wholesale commodity price level of about 150. A large part of the indebtedness can not be paid at a price level of 100. It is commonly believed that lenders profit from declining prices because they are paid back with dollars that have a higher value than the dollars which were loaned. Lenders would profit if they were able to collect in full, but the losses of principal are so great that few lenders profit. When the farm or home is foreclosed, it means a total loss to the previous owner, but may also mean a total loss to the lender. He may not be able to sell it for enough to pay taxes and costs while it is held waiting for a sale. Declining prices take property away from persons who want it and place it in the hands of those who do not want it. A long time is then required to find persons who want the property and are able to pay for it.

Rough approximations of certain debts are shown in Table 2. Most of the indebtedness doubled since 1922, and is about four times the pre-war amount. The most serious single unadjusted factor is not wages but debts. There is

trouble enough in lowering costs of distribution, rents, and the like, but the process of debt liquidation is even more serious. In many cases the best method of handling debts is to write them down just as rents and commodity prices are being written down.

TABLE 2.—*Estimated public and private debts of various classes in the United States*

[000,000 omitted]

| Year | Gross public debt less sinking fund assets of all classes of government organizations in the United States | | | | | Build- ing and loan assets ¹ | Bank loans ² | Farm mort- gages ³ | Corpo- rate liabili- ties ⁴ | Life insur- ance policy loans and pre- mium notes ⁵ |
|-----------|--|--------------------|--------------------|--|------------------------|---|----------------------------|-------------------------------------|---|--|
| | National | States | Counties | Incorporated places and all other civil divisions | | | | | | |
| | | | | Cities over 30,000 ⁶ | All other places | | | | | |
| 1912..... | ¹ \$1,029 | ¹ \$346 | ¹ \$372 | ⁷ \$1,809 | <i>\$1,374</i> | \$1,138 | \$14,041 | ⁸ \$3,320 | ----- | \$588 |
| 1922..... | ¹ 22,156 | ⁹ 834 | ¹ 1,273 | 3,281 | <i>3,200</i> | 3,343 | 27,684 | ¹⁰ 7,858 | ----- | 1,141 |
| 1929..... | <i>16,000</i> | ⁹ 1,662 | ----- | 5,530 | <i>6,970</i> | 8,695 | 41,782 | ----- | \$76,096 | 2,379 |
| 1930..... | <i>16,000</i> | <i>1,800</i> | ----- | 8,000 | <i>7,000</i> | 8,829 | 40,510 | 9,241 | ----- | 2,807 |
| 1931..... | <i>18,000</i> | <i>2,000</i> | <i>3,000</i> | <i>9,000</i> | <i>7,000</i> | ----- | 35,211 | ----- | ----- | <i>3,400</i> |

Figures in italics are estimates.

¹ Statistical Abstract of the United States 1930, fifty-second number, pp. 220 and 277.

² Comptroller of the Currency for 1930, reported loans and discounts as of 1930 for banks, pp. 737 and 745. Statistical Abstract of the United States 1912, pp. 622-625, 1922, pp. 516 and 521; 1924, p. 243; and 1930, pp. 267 and 271-273.

³ Yearbook of Agriculture 1924, p. 190 reports the farm mortgages for 1920. Later data by E. Englund and D. L. Wickens of the United States Department of Agriculture.

⁴ Furnished through the courtesy of E. White, chief statistician, office of Commissioner of Internal Revenue, U. S. Treasury.

⁵ Insurance yearbooks of the Spectator Co., and furnished through the courtesy of W. A. Berridge, of the Metropolitan Life Insurance Co.

⁶ Financial Statistics of Cities Having a Population of Over 30,000: 1929, U. S. Department of Commerce, Bureau of the Census, p. 5.

⁷ 1911.

⁸ 1910.

⁹ Financial Statistics of State Governments: 1929. Bureau of the Census, p. 3.

¹⁰ 1920.

Extremely rough estimates of the total indebtedness are shown in Table 3. The total debt is approximately \$1,700 per capita, or about one-half of the national wealth in 1929. If the value of commodities is to drop one-third and remain at that level, the debt would become about 75 per cent of the value of the property. So much of this can never be collected that it is probable that the lenders would have a greater buying power if they were paid in full at a price level of 150. The usual argument for reducing wages is that a dollar has more buying power. This same argument might be applied to debts which are the most serious result of deflation.

TABLE 3.—*Rough approximation of public and private debts*

[From Table 2]

| Debt | Amount, billions | Per cent | Per cap- ita |
|--|---------------------|----------|-----------------|
| Corporations..... | \$76 | 37.4 | \$618 |
| Urban mortgages ¹ | 37 | 18.2 | 301 |
| Bank loans..... | 35 | 17.3 | 284 |
| State, county, and local..... | 21 | 10.3 | 171 |
| National..... | 18 | 8.9 | 146 |
| Farm mortgages..... | 9 | 4.4 | 73 |
| Life insurance policy loans and premium notes..... | 3 | 1.5 | 24 |
| Retail installment paper ² | 3 | 1.5 | 24 |
| Pawnbrokers loans and unlawful loans of all kinds ³ | 1 | .5 | 8 |
| Total..... | 203 | 100.0 | 1,649 |

¹ Based on estimates furnished through the courtesy of George Terborgh of the Brookings Institution.

² Based on reports of the National Association of Finance Companies.

³ Ryan, F. W., Family Finance in the United States, the Journal of Business of the University of Chicago, Vol. III, No. 4, pt. 1, p. 404, October, 1930.

Unliquidated public and private debts are the most serious problem in the United States at the present time. These debts could be paid at the price level at which they were incurred. Many of them can not be paid at a pre-war price level.

The decline in commodity prices has resulted in many business failures. During the last two years 3,635 banks have suspended, with deposits of \$2,624,000,000. In the same period, 54,640 business failures have occurred, with liabilities of \$1,405,000,000.

EFFECT OF DECLINING PRICES ON HOME OWNERS

The home owner's security is in the value of a home. If commodity prices fall so that the home can be built for 25 per cent less than he paid, his equity is gone

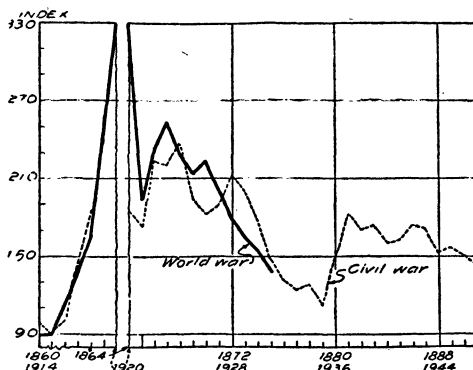


FIGURE 11.—Prices of white pine and brick for the Civil War period and of yellow pine and brick, for the World War period. In each case pre-war is 100. The course of prices is similar in the two war periods but is more violent this time. If the similarity continues, prices will rise in 1936

unless he paid more than 25 per cent down. But when all the bankrupt properties are thrown on the market, buyers disappear as if by magic, and the multitude of sellers depress prices so that an owner who paid 50 per cent down may see his equity disappear. In such a time it is well to remember that well-constructed, well-located homes have a permanent value even if they are unsalable for a time.

The prices of white pine and brick in the Civil War period and of yellow pine and brick in the World War period are shown in Figure 11.

City homes are much like agriculture in that they have a very slow turnover. Most industrial and mercantile operations have a relatively rapid turnover so that adjustment is completed before many years. Agriculture being a biological industry has a slow turnover, and homes last for many years.

After the panic of 1873, building materials declined in price for six years. Apparently building equities were then liquidated, for prices of building materials rose. If the readjustment requires the same period of time in this depression, home building would be expected to commence in 1936. House rents for five large cities in the Civil War period and eight large cities in the World War period are shown in Figure 12 and Table 4. Rents reach bottom and stabilize before building starts.

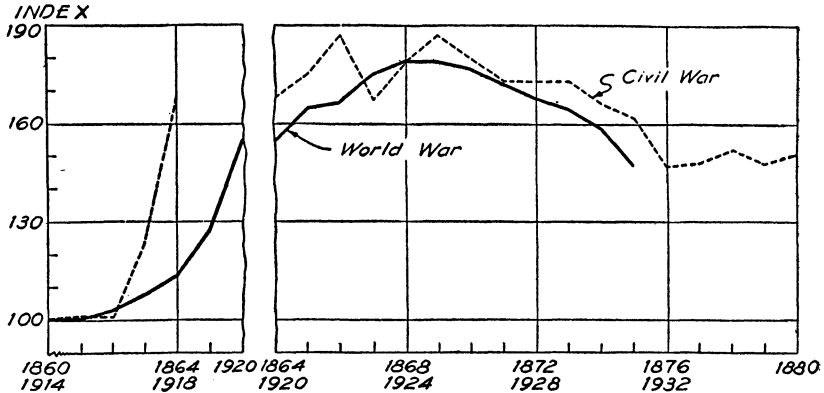


FIGURE 12.—Rents in five large cities in the Civil War period and in eight large cities in the World War period. In each case pre-war is 100. Thus far the experiences of the Civil War have been repeated

TABLE 4.—Rents in large and small cities in the United States, 1860–1880 and 1914–1931

| Year | Civil War ¹ | | World War ² | |
|-----------|--------------------------|------|--------------------------|----------------------------|
| | 5 large cities, 1860=100 | Year | 8 large cities, 1914=100 | 10 lesser cities, 1914=100 |
| 1860..... | 100 | 1914 | 100 | 100 |
| 1861..... | 101 | 1915 | 100 | 97 |
| 1862..... | 101 | 1916 | 103 | 95 |
| 1863..... | 123 | 1917 | 108 | 94 |
| 1864..... | 168 | 1918 | 114 | 111 |
| 1865..... | 175 | 1919 | 128 | 128 |
| 1866..... | 187 | 1920 | 155 | 146 |
| 1867..... | 167 | 1921 | 165 | 151 |
| 1868..... | 179 | 1922 | 167 | 149 |
| 1869..... | 187 | 1923 | 175 | 149 |
| 1870..... | 180 | 1924 | 179 | 147 |
| 1871..... | 173 | 1925 | 179 | 146 |
| 1872..... | 173 | 1926 | 177 | 145 |
| 1873..... | 173 | 1927 | 172 | 140 |
| 1874..... | 166 | 1928 | 168 | 133 |
| 1875..... | 162 | 1929 | 165 | 130 |
| 1876..... | 147 | 1930 | 159 | 125 |
| 1877..... | 148 | 1931 | 147 | 118 |
| 1878..... | 152 | | | |
| 1879..... | 148 | | | |
| 1880..... | 151 | | | |

¹ The rents for 5 large cities from 1860 to 1880 include Boston, Philadelphia, Cincinnati, Louisville, and St. Louis. Weeks, J. D., Report on the Average Retail Price of Necessaries of Life in the United States. Report on the Statistics of Wages in Manufacturing Industries, Tenth Census of the United States, Census Office, Department of the Interior, vol. 20, pp. 104 to 107. 1886.

² Cost of Living, Monthly Labor Review, United States Bureau of Labor Statistics, vol. 28, No. 2, p. 178, February 1929, and later numbers. The rents for 8 large cities from 1914–1928 include Baltimore, Boston, Buffalo, Chicago, Cleveland, Detroit, New York, and Philadelphia. The rents for 10 lesser cities include Houston, Jacksonville, Los Angeles, Mobile, Norfolk, Portland, Me., Portland, Oreg., San Francisco and Oakland, Seattle, and Washington, D. C.

EFFECT OF DECLINING PRICES ON TAXES

Public debts incurred at a price level of 150 become extremely difficult to pay with a price level of 100. Public debts take preference over private debts, because taxes are the first lien on the property. After the preferred creditor has been paid in full, there are times when there is nothing left for the other creditors. To make the tax problem still worse, taxes that are based on profits are greatly reduced and many taxpayers are unable to pay. This necessitates new taxes or heavier taxes on those who can pay. To make matters still worse,

falling commodity prices result in increased public expenditures for charity, and the Federal Government is called on to assist banks, railways, and agriculture. It would be desirable to have public reserves in times of prosperity to be used in periods of depression. The major portion of the difficulty could be remedied if violent fluctuations in the general price level could be prevented. There is much heated discussion about tax reduction. Public debts and fixed charges make reduction very difficult. The only way to provide real tax relief is to continue the price level to which debts and business were adjusted.

OTHER EFFECTS OF DECLINING PRICES

The above are but a few of the innumerable effects of a declining price level. Another serious result is the effect on buying. Losses of profits and unemployment of course check buying, but falling prices in themselves are a check on buying. When year after year everything that is bought could have been purchased at a lower price at a later date, a philosophy of delayed buying develops. If after a period of falling prices prices begin to rise, an abnormal demand develops. Buying is not only for current needs but to make up shortages.

Another effect of declining prices is on wages and employment, which are discussed on pages 1671 and 1677.

A clear presentation of the method by which a decline in commodity prices causes business paralysis is given in the Cleveland Trust Co. Bulletin.¹

"During the past two years the general levels of wholesale prices have dropped both here and abroad by about one-third, and have fallen to their pre-war figures. The result is that business relationships and procedures all over the world have been disrupted and partly paralyzed. As business everywhere slowed down, the banks began to feel the pressure of curtailed activity. Credit was contracted by the paying down of business loans, and bank profits were reduced. For a time these developments were not serious, but soon bankers began to realize that trade advances that had been amply secured by the pledge of marketable commodities were no longer so fully protected when the market value of those commodities was rapidly falling. As the banks brought to bear increasing pressure for the payment of such loans the prices of commodities fell still further and faster.

"Then followed a long procession of declines in the market values of other things in which banks everywhere were financially interested. If agricultural commodities were worth less than they had been a short time before, then the farms that produced them were worth less, and farm mortgages were not so secure. As the products of mines declined in value, the stocks and bonds of mining companies became less desirable, and the loans made by banks on such securities were not so safely protected. As manufactured articles fell in price, industrial stocks and bonds declined, and successive payments were demanded by banks on loans secured by such collateral. As the volume of trade declined similar pressure was brought against securities of shipping and railroad companies.

"During much of this year the banks of this country, and of all countries, have been engaged in a race for liquidity. As the prices of commodities continued to sink, as stock prices fell, and as the values of real estate shrank, the banks have been calling upon their customers to make payments on their loans. Some banks moved in these matters less promptly and less vigorously than others. Soon bankers began to realize that the institutions which were falling were largely those that had followed a lenient policy toward their borrowers until collateral values had fallen so low that the loans could not be paid. In banking parlance the loans were frozen.

"The resulting tendency was for every alert banker to resolve to protect his institution and his depositors from the hazards of holding frozen assets, and to do it by getting into the most liquid condition possible. The way to get liquid was to get borrowers to make payments on their loans, and in order to do this many borrowers had to sell securities that had been deposited with the banks as collateral for the loans. Each new wave of selling carried market prices further down, and each new decline in market prices reduced the value of collateral behind other loans and called for further sales. This was a vicious circle of deflation that caused deflation. The individual institution had no choice but to follow the policy of liquidity. It was good banking in each separate case, for it protected the bank and its depositors, but its general results tended to defer business recovery * * *".

G. F. WARREN and F. A. PEARSON.

¹ The Cleveland Trust Co. Business Bulletin, vol. 12, No. 12. Dec. 15, 1931.

Mr. PRALL. I wonder if every member of the committee might have a copy?

Mr. WHITE. Doctor Warren was with me in Syracuse yesterday and I asked him to send me 50 copies, so they will be here soon. If the other Members of Congress want it, we can procure them. This bulletin is a recent publication. Doctor Warren has devoted a great deal of time to this matter; in fact, it is his principal hobby—the study of money. I tried to get him to come before the committee, but he does not like to go before committees.

Mr. PRALL. It might be well to send a copy to each Member of Congress.

Mr. WHITE. That can be done, I think. We will be very glad to do it. This is bulletin 74, Farm Economics, Cornell University.

I wish to say, in this connection, that Doctor Warren and I are very personal friends. I talked with Doctor Warren yesterday purposely. Doctor Warren is of the opinion that the stabilization of the gold unit is absolutely imperative. There are two theories—the quantity theory of currency, which is the furnishing facility for handling the product of the country, and the other the velocity theory. Both are secondary in their effect on prices, and we may get into positions where the gold factor is so much stronger than either one of these that it is absolutely impossible for inflation, currency inflation, to overcome the increased value of gold, due to falling supply and increased demand.

Mr. WALLACE. I think, perhaps, at that point it is well to just visualize what we have done under the section of the Constitution empowering Congress to coin money and fix the value thereof. The Bureau of Standards, in working upon other standards of measures, have gone to the extreme degree of perfection. In many instances there are variables that they have to overcome, just as we have variables here in our attempt to use a given quantity of a given commodity on which to express the price. We have that variable which is due to the amount of gold produced and the world demand for it. We find it in the regulation of a clock, where we recognize that the temperature will expand and contract the pendulum, and then we place tubes of mercury, which will also do the same thing, and just act as a counterbalance. We find in our watches, for instance, there is an adjustment made so that no matter how cold or warm it is, that the metal in its contraction and expansion have been counterbalanced. We find in nautical instruments the same thing functioning. When we come to the question of the money unit, we started in 1837 buying gold at \$20.67 an ounce, and we have continued it ever since, regardless of the amount of gold in the world, regardless of the demand for gold in the world. Therefore, we have been using 22.23 grains of fine gold or 25.8 grains of nine-tenths fine gold in which to redeem our dollar.

This is a peculiar situation: If you should take 100 old, worn silver dollars over here to the Treasury and ask them to give you five \$20 gold pieces, brand new ones, they would give them to you, but if you should take five \$20 gold pieces that are worn, they would not give you back your old silver dollars, but they would give you back what your gold weighed out at 25.8 grains to the dollar. I had an experience a number of years ago, in which I was paying for a car-load of tile, and as I was near the express office, I bought an express

order for \$100 and sent for a car of tile. A few days afterward, the express agent called me up and wanted to see me, and I went to his office, and he said he had sent that gold to New York and there was a shortage of \$2.40. In other words, when it got to the big bank in New York, it was weighed, and worth just what the gold was worth that was in the coin. It is what we express it in, and it does not matter if it is a Federal reserve bank note, silver certificate, or Treasury note, it is convertible from one form into another, and its ultimate redemption is in 22.23 grains of fine gold.

There is one other thought that I would like to leave with you: If you should go down through the history of currency, I think you will find there is no place where you get an inflation of currency until currency has left its redeemer; that is to say, the greenback left its redeemer, because there was not gold to redeem it, and so there were 50-cent greenbacks instead of 100 cents. No matter where you place your currency, the value of a dollar is going to remain at what the gold is worth, until you have issued to the point where the people do not regard it as safe currency, and then it begins to get cheaper, and in terms of that currency, you will get inflation.

Now, Mr. Wallace spoke of what France did. As a matter of fact, a number of foreign nations, when they went back on the gold standard, did not go back at the original amount. France went back on a 3.93 franc, as against 19.3. People say that was not honest, but a repudiation. Well, France and Italy had been through a war, and a very large proportion of their debts were created upon a value that was comparable with our wheat at \$2.20 a bushel, and their whole war debt was on an inflation basis. France placed her franc right at the same basis that her war debt was created upon, and that made it possible for the people to pay their obligations in money of the same value the debt was contracted in. It is a questionable thing in my mind whether you should allow a contract to fix the value of your dollar. Whether it is legal or constitutional is a question involved. It amounts to the same thing. Both of those countries have an ample gold supply, because they have not exacted from their people an excess of gold to meet their obligations over and above what their obligations were, or the terms their obligations were made in.

England, contrary to the advice of economists, as I understand it, insisted upon going back upon the \$4.86 pound. She had her gold, and she bought gold in this country and in France, and then had to go off of the gold standard because her people could not buy gold enough with their commodities to meet their obligations.

That is exactly our position. We are being deluged with every kind of commodity to-day. There is a certain, definite amount of gold, or its equivalent, and gold is so scarce and so dear that we can not get enough of it with our commodities to meet our obligations and taxes. I am in perfect accord with Doctor Warren, and many others, that the value of the gold dollar should be brought into conformity with its true value; in other words, if the United States were buying gold at its true value, we would be paying about \$30 an ounce, which would leave 15.5 grains to the dollar, instead of 22.23 grains.

Now we come to this question of the Federal reserve system.

I am from the State of New York, and I have heard some things in New York City, as I am there quite often, that make me doubt whether the influences that could be brought to bear in New York

would be such that would make the Federal reserve system inoperative in permitting expansion in the interest of the people. I want to mention one other thing: I happened to be in New York City on a State tax commission, that I happened to be a member of, about six weeks ago, and in the evening, after we finished, I was in the New Yorker Hotel, listening to the radio in the room, and I heard a gentleman there from New York University speaking to the Society for Industrial Democracy, and he made the statement that prices in this country were not too low, and should remain there, and that we should not raise prices.

He said, to be sure, the farmers and business men would be sold out, go into liquidation, but that they could start over again.

I saw a speech printed in the Rochester paper that the same gentleman made a week later, in which he said, going one step further, we were about halfway through the liquidation period, and we should continue. This professor is from one of the big New York City universities; I do not know how much he knows about economics, but I do not think he knows much about sociology, if he feels we should sell out our farmers and business men and have them start over again.

Mr. STRONG. He probably knows whom to depend on for his salary.

Mr. WHITE. Yes; that may be true. I said to Doctor Warren, after he got through: "I can't understand an economist making such a statement." He said: "You must not be too hard on them. The economist is like the old style doctor; if he is a general economist, he doctors everywhere from tooth to toe. It may be this gentleman has not made a special study of the monetary question, like some of you gentlemen have."

I hope that that is so, because I can not conceive of a man making such a statement.

Mr. STRONG. Only from the viewpoint that I have suggested.

Mr. WHITE. In speaking of the amount of gold and what we buy gold at, \$20.67 an ounce, and thereby making the equivalent of 22.23 grains of pure gold to the dollar, we have arbitrarily taken a unit of a commodity against which to measure other things. I think, gentlemen, if we could get away from the dollar idea a little and just think of the possibility of taking any specific unit of any commodity, how impossible it is to maintain the quantity and value at the same time. To give a little illustration, suppose when wheat was worth \$1 a bushel, and we could not sell it, but could trade it, a man put up 100 bags of wheat, with just \$1 worth in each bag, so it would be convenient to go and trade it. At \$1 per bushel, he would have 1 bushel in each bag, but if in a few months from that time, wheat had gone down to 50 cents per bushel, he would have to put in 2 bushels, if he would maintain the value of his bag of wheat. If he had insisted upon keeping the same amount of wheat in it, he would have a bag of wheat worth 50 cents, and if wheat had gone to \$2 a bushel, he would have had to reduce the amount of wheat in his bag to half a bushel. There is no difference between wheat and gold, in the matter of the law of supply and demand; they are both products, both used the world over, and both subject to the laws of supply and demand. It would seem as if we ought to introduce into our monetary system a scientific method of holding the value constant. We predicate obligations, running over

long periods of time, in terms of the unit of \$1; and yet that dollar, in its value, its purchasing power, may vary 50 or 100 per cent during that time. There is no other measure that is comparable with the dollar, so far as utility is concerned; it is something we are using millions of times every day, yet it is not resting upon any scientific basis whatever but it affects us more than anything else in our business relationships.

I know a young man in my town who bought a farm right after the war, a splendid farm. I do not remember what the price of it was, but I know that he went to the widow from whom he bought it a short time ago and told her she would have to reduce the mortgage \$8,000, or he would have to throw up the farm, because he just could not produce the stuff to pay it. She did so. But that is not the case of a good many of them; they are sold out.

Now we come to the other question involving the Federal reserve banks. We have, it seems to me, three factors involved:

We have taken a body of men, that must have discretionary powers, that must exercise judgment, that must measure trends, and be competent to understand those trends and use their powers in the open market operations, to either increase or decrease currency, so as to stabilize prices. We do not give them any index by which to do that. We do not tell them when they should stabilize prices. While they do not need to lower commodity prices, they can stabilize them on the basis that will produce the original prices. If, in their judgment, conditions are such that they should increase the prices of commodities, then they can stabilize them, and they can increase currency and raise prices. We have, and will have to, of course, in that measuring, give some discretionary powers. I have been in the public service, and I know that men in the departmental service dread discretionary powers more than any other one thing, if they are honest, because they have imposed on them the exercise of judgment sometimes under very difficult circumstances, and they are liable to be blamed. Then, again, here is some possibility. I do not want to even imply that there has not been absolute honesty in the exercise of authority in the Federal reserve banks.

I have been told that if the Federal reserve bank had exercised its power early enough in this depression, they might have avoided the collapse; but you know what was in the minds of the American people, and you know we thought we would never go into a period of depression, we never thought we would have lower prices; and I know, from my experience in New York City, there were thousands of men in New York City that thought it could never affect New York City. They had not studied the statistics; they had not studied these charts, to see where things would go. When we were talking, three years ago last fall, about stabilizing prices, when our farm prices were getting so low, they ridiculed the idea, when those who had some understanding of economics told them it would get them, and they said, no, that it would never come down to New York. They did not realize the fact that grain prices, meat prices, and those things, being lower, even though it did not get to the consumer, would bring disaster to them. They did not think it would affect them but thought it would make greater profits to the trade. Temporarily it brought more money into the cities in this case, as it has in every other similar case, to inflate city values and stimulate a building boom through lower prices

for the necessities of life. That only caused a more drastic deflation. You can see what it is in New York City at the present time. That is where we are hearing the worst cries about taxes in my State, right in New York City.

I do not want to go too far into details with this, gentlemen, but it seems to me that the United States can do what France did. Those foreign countries never asked us what they should do, whether they should go on with the gold basis at full value, or whether they should go on at a lesser value, or whether they should go off of the gold basis. I think they did the right thing in France and Italy, when they let their people off in terms of dollars valued as nearly as possible commensurate with the debt level. We can not act without somebody else being hurt, but we can pay the debts of America in the value of commodities and labor and service as nearly as possible on the basis of the major part of our long-term debt.

I went through that period, as I said, after the Civil War, early in the nineties, and I remember a Bryan campaign, and I remember what was said about it, that silver was a dishonest dollar. Debtors do not want to pay their debts dishonestly. I can not understand why the debtor should be accused of not wanting to pay his debts honestly, when he was using a cheaper dollar, than it is for the creditor to ask the debtor to pay him with a dollar that costs twice as much. One is just as honest as the other; and until this country gets on the basis of scientific money there will be dishonest dollars.

The question is raised, "What about labor?" Mr. Ogg, here, of the American Farm Bureau, and I recall other representatives of the American Federation, went last fall and had a conversation with Mr. Roberts, of the Federation of Labor, and he said he did not know, but they did not like the idea of changing values, and I said, "Mr. Roberts, it is economically unsound not to bring your values up to the price comparable with the value of the dollar. You may be an employee, and you are going to be deflated, if commodities are deflated. Men in business, either on the farm or on the railroads can not pay you if they get lower prices for their commodities. You will have to come to it, if the commodities go down, and when your wages go down, the same thing will happen to you that will happen to the farmer; and all of your people who are in debt on their homes will be forced out of their equities."

Gentlemen, there is a great lot of people in every walk of life that will be affected. Doctor Warren was telling me how it affects their university, and about a professor who came there a few years ago, bought a home, gave a mortgage on 50 per cent of its value, and a second mortgage, and was called to another institution, and he had offered his home to a friend of Doctor Warren's, who came to see about what it was worth. Well, he had his first mortgage yet unpaid, and \$300 unpaid on the second mortgage, and Doctor Warren told him if the owner would pay up the balance of the second mortgage of \$300 he would be justified in buying the place and assuming the first mortgage. In other words, that man had been there about 10 years, teaching in the university, and putting his savings in his home, and when the time came to move away, he lost his equity and was still in debt \$300.

Speaking to this bill, I feel that the principles are right in all of the bills. I think action ought to be mandatory with reference to the

Federal reserve banks. I believe, if the Bureau of Standards were called upon to work out a dollar, a static dollar, with a static yardstick, they could do it, if you put scientific action back of it; and you have got that, gentlemen, in these bills.

Now, as to the matter of the reserve banks taking care of the currency supply, that is one of the finest inventions that was ever made; its powers, as far as the regulatory powers are concerned, are comparable with the central banks of Europe. The Bank of England has never been able to accomplish it; our banking institutions could not do it before the establishment of the Federal reserve system; and the Bank of France never accomplished it. In other words, with those same prerogatives, those countries' banks have never been able to stabilize price levels.

I do not know that there is anything more, gentlemen.

Mr. PRALL. Mr. White, did you discuss the merits of these bills with Professor Warren?

Mr. WHITE. Yes, and I tried to get him to express an opinion. He has not studied the particular bill, except in these features, but he is favorable, as the first move, to stabilizing the gold unit on a scientific basis, and he is rather of the opinion that you are going to have a condition that is very similar to what the Federal reserve bank has gone through, pausing for a few months, to enable you to cope with the situation.

I want to ask you to consider this question: If the Federal reserve banks, during the past eight or 10 months, had the power and did not exercise it, what is the matter? In 1920, they had the power, and they did exercise it.

Mr. GOLDSBOROUGH. Exercised it in the wrong direction.

Mr. WHITE. Yes; and I know three men, personally, that appeared before the Federal Reserve Board, protesting against what they did in the way of handling prices; and the answer was that the cost of living had to come down. We started right out after the war with this thing, generally, in our great centers, that the cost of living must come down. We started with it, and we are here now.

Mr. BUSBY. That was the burden of the argument of Mr. Mitchell, one of the big bankers of New York, was it not?

Mr. WHITE. I think so.

Mr. GOLDSBOROUGH. I may say to you, Mr. White, that I have reason to think that Professor Warren is in favor of the principles embodied in this bill.

Mr. WHITE. Yes, Doctor Warren does not undertake to try to prescribe the form of the bill, at all. I tried to get him to come down here, and he said:

I want to do the research work and furnish the facts. It is not my idea to get into hearings; it is up to you men to go to the hearings and work it out, but I do not want to do it. I want to study the facts.

Mr. BURTNES. I would like to ask you this question, and I assume it is not an easy one to answer: Suppose that we had had the provision in the Federal reserve act in 1929, when the present most serious decline in price levels started, carrying the idea that the Federal Reserve Board should conduct their operations in such a way as to stabilize price levels, do you think they could have done it with just that alone, and without the powers suggested in paragraph 3 of this particular bill introduced by Mr. Goldsborough?

Mr. WHITE. I suppose you refer to the inflation of the stock market?

Mr. BURTNESS. I referred only to the general commodity price levels. I think the stock market feature is separate and distinct.

Mr. WHITE. I think, when it came to that, we were under a general inflation, and there was a speculative mood on the part of our people; we had simply gone crazy on speculation, and I do not believe the Federal reserve banks could have stopped it; in fact, I know that men were putting money into New York, when it was 14 or 16 per cent, that money was flowing from private sources into New York.

Mr. BURTNESS. I think you misunderstood my question. I apply it to something that occurred before the decline. The price levels as compared to the period since July 1, 1929, was relatively stable; and if there had been a mandate in the law to them to stabilize price levels, would there have been any way in which they could have prevented the general commodity price levels from declining, on and after July 1, 1929?

Mr. WHITE. Well, that brings us right back to the question whether the enhanced value of gold, the scarcity of gold in the world, and the declined production—the effect of that was strong enough to overcome anything that might have been done by secondary currency measures.

Mr. GOLDSBOROUGH. I would like to insert the Edie proposal into the record at this time.

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

A BILL To prevent excessive waves of inflation and deflation and to maintain a more steady and orderly flow of credit to meet the requirements of trade and production

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act approved December 23, 1913, known as the Federal reserve act, as amended, be further amended as follows:

“Add to section 14 the following paragraphs:

“(g) For the purpose of utilizing more effectively the credit resources of the United States as a means of promoting the orderly development of industry and of agriculture and as a means of curbing excessive fluctuations in employment, the Federal Reserve Board and the Federal reserve banks shall establish as one of their prime objectives of policy the maintenance of a rate of growth of bank credit approximately equivalent to the average long-term rate of growth of production and trade of the United States.

“(h) To influence the volume of credit, the Federal reserve authorities shall use their powers to buy and sell bills and Government securities in the open market as well as to raise and lower their discount rates.”

Gentlemen, the committee will now adjourn until 10.30 to-morrow morning.

(Thereupon, the subcommittee adjourned, to meet at 10.30 o'clock a. m., Thursday, March 17, 1932.)

STABILIZATION OF COMMODITY PRICES

THURSDAY, MARCH 17, 1932

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON BANKING AND CURRENCY,
Washington, D. C.

The subcommittee met pursuant to adjournment at 10.30 o'clock a. m., in the committee room, Capitol Building, Hon. T. Allan Goldsborough, chairman, presiding.

Present: Messers Goldsborough (chairman), Busby, Prall, Strong, and Beedy.

Mr. GOLDSBOROUGH. The committee will come to order. Now, gentlemen, if you will put on your first witness, we will be very happy to hear him.

Mr. O'NEAL. Mr. Chairman, our next witness is Mr. C. A. Ewing, of Chicago, who is a member of the Stable Money Association, and head of the National Live Stock Producers Association.

STATEMENT OF C. A. EWING, DECATUR, ILL.

Mr. EWING. Mr. Chairman and gentlemen, my name is C. A. Ewing, of Decatur, Ill. I am connected with the National Live Stock Marketing Association, but am not expressing their views of this occasion, because I am not so authorized. I happen to be a member of the currency committee of the American Farm Bureau, which I very greatly appreciate, and I concur in their report, but my feeling about this matter runs further than their view in the report of the committee, Mr. Chairman, and I believe that it might be necessary and desirable, as a mode of living, to do the things suggested in their report, until you can go further and agree upon the real base of this trouble. All I aspire to do now, briefly, is to bring you men a word of encouragement, if I can, not as a representative particularly of any organization, but as a farmer who, through a long and bitter experience, has learned that there is something radically wrong in our system of finances.

I was born, Mr. Chairman, in the hard times of the seventies, and I started in business in the middle of the hard times of the nineties, facing a very heavy debt. During the past 10 years, since the fall of prices in 1921, we have not been able to earn 2 per cent on our investment in lands.

Mr. GOLDSBOROUGH. Speaking of farming, now, are you?

Mr. EWING. I will get onto the currency matter in a moment.

Mr. GOLDSBOROUGH. I say, you are speaking of farming?

Mr. EWING. Yes. I want to point out to you that, during that time, Mr. Chairman, for the money needed in carrying on this business, I have had to pay a rate approximately 300 per cent higher than I have been able to earn.

I own one of the best sections in McLean County, which is one of the best in the United States. McLean always stands among the

first half a dozen counties in the country in the value of its output, but taxes get 50 to 60 per cent of my income.

Mr. GOLDSBOROUGH. You mean net or gross?

Mr. EWING. Gross. The interest on the debt that has accumulated in these years, the past decade, and the upkeep and taxes will exceed my income by \$2,500 on that farm.

Mr. GOLDSBOROUGH. For how many years?

Mr. EWING. That will be true this last year; with oats at 12 to 14 cents, corn from 16 to 25 cents, and similar prices upon other products, the farmer—

Mr. GOLDSBOROUGH. What is the size of the farm?

Mr. EWING. It is a section.

Mr. GOLDSBOROUGH. Six hundred and forty acres?

Mr. EWING. Yes. Now, Mr. Chairman, my father died from working in the campaign of 1896, which was a money campaign. He wore himself out in it, came home, voted, and died before the returns were received. That attracted my attention to this currency question. I am not speaking as an economist, but I am speaking out of experience and observance and contact with it, that cover more than 30 years.

When Cæsar lay cold in death and his friend, Mark Antony, came to pay tribute to him, he said to those gathered about his bier: "I come here to bury Cæsar, not to praise him." I want to say to you that I come not here to praise the gold standard, but to bury it; it is dead, and it ought to die, because, throughout the whole hook up of our Government there is not another case of cart before horse so colossally wrong, and so iniquitous and so devastating, as the idea of those who produce the wealth, and those who create the wealth, should choose a measuring stick like the gold limit, out of their control, and say we shall stabilize on this level, and interpret all values of our properties in this thing that is entirely false. Look back over the ups and downs since the depression of 1930, and you will find in each instance, Mr. Chairman, that inevitably the result of currency is to spread the relationship of creditor and debtor apart.

Mr. GOLDSBOROUGH. To whose advantage?

Mr. EWING. It has been to the advantage of the creditor.

Mr. GOLDSBOROUGH. Exclusively?

Mr. EWING. Yes; in that 100 years, you will find a few points so brief as to be the exception that proves the rule, where it has been to the advantage of the debtor.

I feel about this gold standard, Mr. Chairman, a good deal like the man that got a wire announcing that his mother-in-law had passed on to her reward, and which inquired, "Shall we embalm, cremate, or bury?" And he replied, "Embalm, cremate, and bury her; take no chance." And I want, as a man speaking for the thousands of others who have not had an opportunity to solve the reason why they suffered, but who are fully assured that something is radically and drastically wrong—I want to tell you that man never created a Frankenstein so terrible as the gold standard, nor one so heartless, with which he is unable to keep up. Shylock only demanded a pound of flesh, but this thing will demand three or four pounds, if you let it, and then take a deficiency decree on your farm, and still be dissatisfied. What is responsible for most of the wreckage, most of the heartbreak, and failure and defeat and bankruptcy, than any single thing in our scheme of government?

I am convinced, Mr. Chairman—and I came to this conclusion long before I had the pleasure of knowing Doctor Fisher—that there is only one safe measure that we can depend on to preserve the few cyclic changes of commodities which are bound to occur, which are as inevitable as the coming and going of the tides and the flight of time, which the hand of man can not stay. We devised money to serve us, and its first duty is to preserve the parity of relationship and equities that exist between the debtor and creditor, as they existed at the time the debt is incurred.

Mr. GOLDSBOROUGH. Right at that point, what do you think should be done to preserve the proper relationship between debtor and creditor? Do you think it can be done with substantial justice and success by stabilizing the general commodity price levels?

Mr. EWING. Mr. Chairman, I hear mostly from financiers, and they, to-day, are talking about stabilizing money at some fixed point. My view of it is that if you are to preserve these equities, you have got to ride not only some arbitrary level up here, but you have got to keep the facts, accept the facts, and peg your currency to these commodities, based on the proper index figure, with a wide enough base to insure your representing these factors of values with the wholesale commodity prices, and ride those waves up and down, and preserve that adjustment in its proper and equitable relationship; but when you say, "We will stabilize up here," you have lost a very fundamental thing.

The Stable Money Corporation, composed of the biggest financiers in the country, and organized in 1927, has tried to evolve some way that seemed feasible that it could present to do this thing, and what has it found out? I dined with one of the financiers not so very long ago, and the result was that they had not a suggestion to offer. Why? Because you can not do it. You can agree on a commodity base, and then do these things, and go along with that in the proper adjustment on your index figure. That is what I want to see done, and I believe it should be done.

Mr. GOLDSBOROUGH. Have you any observation to make about the soundness of the principles involved in this bill which is under discussion, this specific bill?

Mr. EWING. As I said, this is a mode of living, nothing more, until you can go boldly out and do this thing. Can you do it? I will tell you here to-day, you are going off of the gold standard. Whether you get off, or are pushed off, you are going off.

Mr. GOLDSBOROUGH. Have you considered carefully section 3 of this bill?

Mr. EWING. I can not say that I have. I did not know I was going to appear before you as a witness until last night, and other engagements have made it impossible for me to study it carefully; but it might be of interest to every man—

Mr. GOLDSBOROUGH. I wish you would read the bill. Just sit down and interrupt yourself for a moment and read this bill, and see if, in principle, your views are not embodied in the bill. This bill is not supposed to be, technically, what it should be; it was not prepared for that purpose, but it was supposed to embody the correct principle.

Mr. EWING. Speaking after that hasty examination, and making allowance for that fact, I would say that as a citizen in business, I would prefer not to leave to any board the question of what the price level is; that I would prefer to leave it to the arithmetical computation on the index figure.

Mr. GOLDSBOROUGH. What you mean is this—and let us see if we are not together on it, anyhow—I think what you mean is this: That you would prefer that the bill be amended so as to direct, specifically, the Federal Reserve Board to use the particular index number, for instance, like the Bureau of Labor Statistics of the Department of Labor?

Mr. EWING. Yes.

Mr. GOLDSBOROUGH. That is what you mean?

Mr. EWING. Yes; that is good enough. I think you will find, as the economists tell me, that during the past 10 years that figure has been far more stable than either gold or silver.

Mr. GOLDSBOROUGH. All right; we have disposed of that, and I think we are in agreement on it. That was left out, in order to promote discussion. Now, what is your view about section 3 of the bill, which maybe provides for just what you have in mind.

Mr. EWING. Well, in the light of that previous explanation, I think it is proper.

Mr. GOLDSBOROUGH. It provides a flexible monetary system?

Mr. EWING. Yes. Now, as to this thing, you recall there was an international chamber of commerce meeting here last May, when I had the pleasure of meeting some of the English delegates and discussing with them what England was going to do with her crisis. I suggested: "Why don't you go off of the gold standard?" and their leader, Sir Somebody, said, "Oh, no; that is too risky; we can not do that." But another member of that commission, a man widely engaged in international commerce, pointed out that the index figure found in English commerce had more stability than either gold or silver; and it was not three months until England did come off it.

That leads me to this thought: In connection with this work you are undertaking now, there is not a more crying need to save the world to-day than international currency, and an international currency with which we can deal with some assurance. I can see no other base that is safer or sounder for such currency than the commodity base. It would seem to me that it might be the obligation of this country to invite a conference on such a proposition; there is certainly nothing inhibiting it; because of the flow of foreign commerce during the past decade, and the disparity of the currencies of the countries trying to engage in it with each other.

I do not wish to take more than my share of time, because there are other witnesses; but how deeply this runs in my thought, as to its importance, I wish I could convey. How great the opportunity I believe is yours to bring the relief that has long been needed, I can not express.

Mr. GOLDSBOROUGH. What you do have in mind, I presume, is that you think legislation of this kind, if it can be perfected and passed, will indicate that civilization is coming more and more to the conclusion that, in order for it to be successful, it must be cooperative and just to all classes of people.

Mr. EWING. Justice is the corner stone of all government.

Mr. GOLDSBOROUGH. And the bill, you think, points in that direction?

Mr. EWING. If you don't have that, you have not a good government.

Mr. GOLDSBOROUGH. I am asking you, specifically, of whether you think this kind of legislation points towards justice.

Mr. EWING. I am sure it does. I very much appreciate your courtesy.

Mr. GOLDSBOROUGH. We enjoyed hearing you very much, indeed.

Mr. BUSBY. I would like to ask a question.

Mr. GOLDSBOROUGH. I beg your pardon, gentlemen. Mr. Busby.

Mr. BUSBY. You speak of international currency; do you have a definite idea as to what it would be, or what it should be, or how it would be formulated?

Mr. EWING. I do not assume to be an expert on things of that character, but it seems to me that if it is practical to have a bank of international settlement, it would be practical to have an international bank of commerce, and let each nation take a share of stock commensurate with its contribution to the world trade, sufficient to revolve that contribution to the trade, and have a perfectly sound institution.

Mr. BUSBY. Of course, the Bank for International Settlements was an agency to treat, primarily, with reparations.

Mr. EWING. Yes, sir.

Mr. BUSBY. It would not be parallel, I believe, with your idea of an arrangement for handling international currency.

Mr. EWING. Well, we struck a balance through it, did we not?

Mr. BUSBY. We sold bonds for it and paid the money over to friends and some of the reparation claimants, but we have not struck any balance, if you go to gather up the bonds at the present prices; but this is what I want to ask you, further, and that is, how would you settle your international balances and in what commodities, and how would you arrive at an adjustment of the claims of one country against another, as currency, unless you had some medium that would be acceptable, or whether you would pay it in commodities, or whether you would agree—

Mr. EWING. I see no reason why gold could not function; but instead of interpreting things in gold, we can interpret gold in things.

Mr. BUSBY. I see.

Mr. GOLDSBOROUGH. You, of course, realize the very great difficulty of having an international currency, as long as the countries of the world, civilized and semicivilized, have their present tariff policies, do you not?

Mr. EWING. I understand that the domestic values of the countries would depend very largely on whatever their tariff policy was.

Mr. BUSBY. Following that same question just with one more, perhaps, do you not think it would be very well for us to determine, in this country, commodity values, with regard to wholesale—I mean by using the commodity wholesale index price, as ascertained by the Bureau of Labor Statistics, and then using a metallic base, gold and silver, or silver or gold, and relating that to the commodity price in a variable way, so that the commodity could remain reasonably stable; and that gold would measure the commodity, probably, from time to time, in relation of one commodity to the other, and in relation to the fixation of debts and obligations.

Mr. EWING. I think it might be possible, provided you arranged to follow the trend of the commodity index prices.

Mr. BUSBY. That is the world's salvation, as I see it.

Mr. EWING. I thank you, gentlemen.

Mr. GOLDSBOORUGH. Thank you very much, sir. We will now hear Mr. Hearst.

STATEMENT OF CHARLES E. HEARST, PRESIDENT OF THE IOWA FARM BUREAU FEDERATION

Mr. HEARST. In appearing before you this morning as a director of the American Farm Bureau Federation, as vice president of that organization, as chairman of its legislative committee, and president of the Iowa Farm Bureau Federation, I am impressed with the interest of the members of the subcommittee in arriving at the features of a definite bill which will secure what all of us desire in regard to stabilizing the unit value so that a dollar in different decades will have approximately the same purchasing power. It shall be my effort in part to apply myself to the kind of measure we desire this committee to report, after calling the attention of the subcommittee to certain conditions that exist.

I desire to place into the record the resolution of the Iowa Farm Bureau Federation, adopted at our last annual meeting, on the subject, "Money and credits."

Moneys and credits: While we realize that the evils of depression have now become so pronounced and universal that they can not be permanently removed by applying local remedies, yet we voice the conviction that a sound policy of reconstruction should first seek to make the foundation secure upon which national prosperity rests. We maintain that agriculture which provides the necessaries of life is that foundation. The prolonged and abnormal deflation of agricultural values has so impoverished our farm people as to imperil the entire economic structure of our country. We believe that inflation in the value of the gold dollar, the fatal shrinkage in the available supply of money and the concurrent contraction in the volume of indispensable credit are the chief causes responsible for the deplorable condition now prevailing. We urge that all necessary action be promptly taken to insure a return to the honest dollar, to secure a normal supply of available money and to bring about a sound and sufficient expansion of credit.

We call attention to the statement of George Harrison, governor of the New York Federal Reserve Bank, to the effect that the present gold supply in the United States makes possible the expansion of credit to the extent of \$35,000,000,000. Inasmuch as the Federal reserve system can at once bring about expansion of credit on a gold basis without any action by Congress or the President, we call on the Federal Reserve Board and the governors of the Federal reserve banks to purchase Government securities in large volume and thus lay the groundwork of the credit expansion which the present \$2,000,000,000 Reconstruction Corporation so clearly contemplates.

We urge on President Hoover the advisability of calling an international monetary conference to consider international action of remonetizing silver either by the method of bimetallism or symmetallism as may seem most practical.

We call on Chester H. Gray and the legislative committee of the American Farm Bureau to give special attention to carrying out the monetary resolution as adopted by the National Grange in its meeting in November and the American Farm Bureau Federation in its meeting in December providing for "reversing the process of deflation" to the point where general prices are returned to the average price level at which the present long-time indebtedness was incurred and stabilizing them there. We suggest to the American Farm Bureau Federation that they keep in continuous close contact with the members of the banks and currency committees of both houses of Congress to the end that some fundamental effective bill may be reported at this session of Congress.

We commend the Congressmen who, regardless of party, have supported the program for expanding the financial resources of the Federal land banks and launching the emergency-credit corporation. We urge on these Congressmen the desirability in all measures of this sort that they not only thaw out the frozen assets of the insurance companies and banks, in the way of railroad bonds, and so forth, but also of furnishing effective credit for the agricultural West and South.

This resolution in substance agrees with the position of the American Farm Bureau Federation and of the three national farm organizations, the statements of which groups have been already placed in the record during these hearings. However, may I point out an aspect or two in the Iowa resolution not contained in the other statements of position thus far presented to this record by representatives of agriculture.

The money question is not only a domestic one; it is international in character, at least in some of its features. This may be particularly true in regard to the silver question which, being a prime medium of exchange in many a foreign nation, properly should be considered in our approach to the money question in its broadest relationships. Whether or not our own Nation, without concerted action on the part of other dominant nations, should act in any certain way in regard to the silver question is a debatable question at the present time. There seems, however, to be a growing thought that an international monetary conference at which the silver question would be of paramount importance could be helpful in establishing a more definite international exchange of commodities, and by so doing enlarge our foreign trade without sacrificing the fundamental basis upon which our domestic trade is founded.

This question is approached in the Iowa resolution, and we urge the consideration of international action to remonetize silver either by the method of bimetalism or symmetalism, whichever one may seem to be most practical. In our Iowa resolution we also give special attention to the monetary resolutions adopted by the national farm organizations, of one of which, the American Farm Bureau Federation, the Iowa Farm Bureau Federation is a member. We, in Iowa, believe that the process of deflation should be reversed so that general prices may be returned to that approximate level which existed at the time when the present long time indebtedness was incurred.

Some of the bills pending before this committee indicate that the period 1926 to 1928 might be a period to take as being indicative of a proper price level of all commodities. That is a question which

I do not need to discuss at the present time, but I wish to say briefly that with the monetary condition of exchange as it is at the present time, a person in Iowa, whether on the farm or in our cities, who a few years ago incurred an indebtedness, now finds that to pay that indebtedness he must produce and sell from two to five times as many units of his commodity, agricultural or industrial, as the case may be, as would have been required when the indebtedness was incurred.

This statement leads me to remark briefly that things are happening in Iowa very disadvantageous to the farming population in that State. Very harmful things are happening also to our large industrial and city population. Principally on account of the high exchange value of the dollar, comparatively speaking, farmers now find approximately 4 bushels of corn no more effective in meeting obligations than 1 bushel formerly had been. They find three head of hogs of uniform weight necessary to be sold to bring an income, measured in dollars, equal to that which only a few years ago could have been secured from one head. We in Iowa are rapidly developing as a dairy State. We find our dairy products already shrunken in exchange value much below where they were when not many years ago the dairy industry began to advance rapidly in our State. Our town population has found, also, that whether measured in the remuneration for a day's labor or in the units of manufactured commodities sold in exchange for money, more labor and more units of commodities are necessary to exchange for a monetary unit than was true formerly. This has brought the citizens of the State of Iowa to a position approaching bankruptcy.

The productivity of our State, agricultural and industrial, is as great as ever it was. The net income is less than it formerly has been, primarily because more of our commodities are necessary to exchange in order to buy the dollar which has become too high in value. We want the dollar value more nearly held in line with commodity values. Some have called this desire the commodity dollar. Many other names are applied to it—some with reproach. However, we are not wanting to coin commodities into dollars, nor to weaken the monetary system of our Nation. We want to retain the national standard of money which we now have, but we do not wish that standard to continue in future so dominant, so inflexible, that as it becomes scarce or plentiful all other commodities exchangeable for it fluctuate through wide swings of prices from low points of value to high ones alternatively.

We see no logical reason why there should not be a sort of equilibrium between prices of all of our commodities and the price or prices of whatever commodity constitutes the basis of our monetary system. At the present time, of course, gold is the basis of our monetary system and as it, according to present laws and administration thereof, is held inflexible and unchangeable in weight, naturally all other commodities exchanged for gold fluctuate widely in the process of exchange.

These considerations have led us in Iowa, as well as farmers all over the Nation, and people in various activities other than agriculture, to conclude that legislation similar to that which is now pending before the House Banking and Currency Committee should be enacted.

As I view the pending bills they classify under two general heads. First, we have such bills as those introduced by Congressmen Strong, Ramseyer, and Keller, which seek to accomplish stabilization of values by authorizing and directing the Federal Reserve Board to use their discounting and rediscounting privileges and to change the eligibility rules so that wide fluctuations in value in the exchange of commodities for the dollar may be avoided.

Another sort of legislation is proposed and is now pending before this committee contained in the original bill by Congressman Goldsborough and the measure by Congressman Burtness. This type of legislation seeks to correlate commodity and monetary values by the method briefly defined as changing the weight of the dollar as conditions in commerce change. According to the Iowa resolution, which I have already presented to the committee, it is my belief that both of these types of legislation will be necessary. Perhaps the Federal Reserve Board, even if given the powers and authorities designed to be given it by the Strong, Ramseyer, and Keller types of legislation, would find itself either unable or unwilling to interpret and administer those bills in ways to accomplish what the measures so definitely indicate. This leads me to remark that whatever the type of legislation results from these and former hearings on this subject, all of it must be lodged for enforcement, I assume, in the Federal Reserve Board.

Perhaps it is not timely for me to suggest it at this time, but safeguards to secure the administration in the proper spirit of such legislation as we are advocating will either now or in time need to be drawn around the Federal Reserve Board. I mean that should Congress enact the most helpful sort of legislation of the kind we are advocating, and should that legislation depend for its success on the administration of an unsympathetic reserve board, our whole cause would be lost either temporarily or permanently. The time must come in our American fiscal history when the Federal Reserve Board will be composed not exclusively of representatives of the banking fraternity but of representatives of all the groups of industry, agriculture, and labor in our great nation. Fiscal affairs of a nation should be approached in regard to their administration and solution from the point of view of serving the public welfare and not merely of serving and protecting the welfare of concentrated wealth.

Therefore, my hope is that the Federal reserve act, perhaps not in the bills now pending but in separate legislation and in the not distant future, may be amended so that our Federal Reserve Board will be more truly in its personnel a cross-sectional reflection of our entire nation rather than as is now too much, or exclusively, the case, a representation of banking interests alone.

Coming now to the specific measure pending before the committee, may I call your attention to H. R. 10517, by Congressman Goldsborough. This measure, as I view it, is an effort to consolidate in one bill the two ideas relative to monetary stabilization, which I have already briefly discussed. First, the Goldsborough bill seeks to authorize the Federal Reserve Board and the reserve banks to maintain as much as possible a straight line of relationship between commodity and monetary value. Second, the measure in its last section makes an effort to raise or lower the official price of gold if the provisions in the first part of the measure are not wholly effective.

H. R. 10517, therefore, is a consolidation of the ideas contained on the one hand, as I view it, in the bills by Congressmen Strong, Ramseyer, and Keller, and on the other hand of the former bill by Congressman Goldsborough and the one of Congressman Burtness. It is my firm conviction that both efforts should be incorporated into a composite bill; that is to say, that every authority, along with complete directions, should be given the Federal Reserve Board to use all the powers of the board in maintaining a more stable purchasing power of the dollar.

In doing this, however, it may be found indispensably necessary that the dollar in value and weight be changed from time to time. I fear that the pending bill by Congressman Goldsborough is not as explicit in either of its provisions as it should be, but it is undoubtedly the type of bill which it is our hope and desire the committee will report upon favorably in the near future.

In drafting the legislation along the line of H. R. 10517 I wish to suggest that the committee use the thoughts in the Strong, Ramseyer, and Keller bills, which will accomplish the purpose of putting a responsibility on the Federal Reserve Board to stabilize the purchasing power of the dollar. I wish to suggest, also, that when it comes to enacting legislation which will change the number of grains of gold in the dollar, such as is suggested in the last section of H. R. 10517, more specific instructions and directions are needed.

In other words, I wish to recommend to the committee in writing its soon to be reported bill a careful study of H. R. 800 by Congressman Goldsborough and H. R. 20 by Congressman Burtness. The last two measures, when incorporated into the pending legislation, will secure what some people call the commodity dollar. Others refer to it as the variable dollar. It has been for years referred to as the Fisher dollar. Whatever designation may be applied to it, the legislation when enacted will give us a standard of exchange which will not be so dominant in dictating high and low values to all other commodities, owing to its own flexibility.

In closing, I wish to recommend to the committee that the two ideas relative to the general type of legislation pending should be incorporated into one bill to be reported from this committee, and the outline presented in H. R. 10517 is a worthy one to follow, with further specifications contained in relation to the two methods of approach to the general question of stabilizing the purchasing power of money.

Now, Mr. Chairman and gentlemen, I come from a big agricultural State, and I want to give you, which perhaps is not necessary, the conditions in our State in regard to the income of the people of our State.

Mr. GOLDSBOROUGH. That will be very interesting, I am sure.

Mr. HEARST. In 1929, for all field crops—this is taken from the United States Department of Agriculture—our farmers in 1929 received a little over \$500,000,000; in 1931, the decline was over one-half of what we realized on our products in 1929. We had to take a decline of 55.2 per cent in income from those field crops between 1929 and 1931.

Mr. PRALL. How does that compare with other lines of trade and business, as between 1929 and 1931?

Mr. HEARST. It falls below; the agricultural incomes fall below the other lines of trade, that is, other lines of industrial pursuits.

Mr. PRALL. The percentage is greater?

Mr. HEARST. The percentage of decline is greater, although they show a marked decline. Livestock is our chief product, and we produce between 25 and 35 per cent of all of the hogs produced in the United States. We send to Chicago from 18 to 20 per cent of all of the cattle that go there to be slaughtered. The corn, through which we produce the livestock, also is an important industry. The value of our livestock was a little over \$500,000,000 on January 1, 1930, and it shrunk to less than \$250,000,000 by January 1, 1932, or a decline of 51.3 per cent. The corn, through which means we produce this livestock, had a value of \$310,000,000 in 1929, and in 1931 it was \$136,000,000, a decline of 56.1 per cent. So that, taking it all in all, this thing has reacted terrifically against prosperity in the agricultural States that have to endure these kinds of losses, and it is a loss, a distinct loss.

Mr. PRALL. Did you raise as much corn, and produce as much corn, in 1931, as you did in 1930?

Mr. HEARST. Yes; it varied the least little bit.

Mr. PRALL. And the price had shrunk for the same amount of products; that is what I am getting at.

Mr. HEARST. The production was very near the same, and the price had shrunk to the place where there is scarcely any price at all in almost a year. To go a little further, when you come to this decline in price, when you take a 10-cent drop per bushel in corn, you think that is all the loss there is; but if this corn is to be marketed, to go into commerce and be sold upon the market, your 18-cent corn is just as expensive to market as 35 or 50 cent corn. Well, then, corn finally gets to the place where you can not afford to take it to the market, or ship it out, or deliver it for distribution.

Mr. GOLDSBOROUGH. Your State does not grow very much wheat, does it?

Mr. HEARST. We grow between 9,000,000 and 13,000,000 bushels, mostly in the southern part of the State.

Mr. GOLDSBOROUGH. Now, what I had in mind was this: When your wheat falls from \$1 to 40 cents a bushel, does the individual who has to eat bread in Chicago and New York, and any other center of population, get any benefit, any appreciable benefit from that loss in price which the farmers secure for their wheat?

Mr. HEARST. A few years ago I made a study of wheat and pork; the pork I produced on my own farm, and the wheat some of my neighbors produced. I found that in a 12-month period most of my living, or my food, dropped 100 per cent, or in other words, I got one-half for the amount of pork that I grew. I have relatives and friends in Chicago who pay practically the same retail price as they were paying before. I think that was in 1924, along in there. I took another 6-month period for wheat, and exactly the same thing prevailed, with the exception that bread did come down a little bit.

Mr. PRALL. Who made that profit on your pork?

Mr. HEARST. I would like to find that out myself, sir. I would like to know all of the entities that dealt in it.

Mr. PRALL. You do not know?

Mr. HEARST. No; and I would like to know that right now. The first carload of hogs that I sold off of my farm this winter brought \$3.65 in Chicago, and they were the best you could raise, 225 to 240 pound Hampshire hogs, and when the check got back home it brought a little over \$3 a hundred pounds. The spread between what I received and what the consumer paid was greater than the spread on my pork that I sold some years ago for three times that price, or two and one-half times that price.

Mr. PRALL. Was it equally divided among those who handled it, after it left you?

Mr. HEARST. We are not able to tell in this type of market, because of the means people have of covering up costs, and so on.

Mr. BUSBY. Let me suggest this, for your thought: Trade, of course, is represented by the velocity that credit moves and that, while a drop of one-half in the velocity of credit, or in the amount of trade, so to speak, would not be continuous, fixed overhead or business tend to absorb considerable profit that there appears to be in the difference between the former sale price of your wheat and \$1, and the low point of the sale of wheat and 50 cents? In other words, if there is a thinning out of business, and a continuous overhead, would not business trail, to some extent? I am not offering that—

Mr. EWING. We realized there are fixed charges all along the line. The farmer has fixed charges that he can not shirk.

Mr. BUSBY. He goes under?

Mr. EWING. They are in his costs, whether he wishes them or not. His costs of distribution are in there, and what it costs to make the crop, plant it and gather it. They have that overhead; it is there. They can not dodge it; and then they have an investment, which is an overhead. So that, all along the line, there is a fixed overhead.

Mr. BUSBY. In slowing down the trade of the world, the overhead gets out of proportion to what it used to be, when they had more volume and more trade, to some extent.

Mr. HEARST. This appears to be a fact: The retailer takes advantage of the low prices for his commodities at the time, and there is the desire to build up at that time against the time when the commodity prices may cost him a good deal more. We feel they are laying up against too many rainy days.

Mr. PRALL. You mean the packers are realizing a greater profit now than they were in 1919, for instance?

Mr. HEARST. I think the packers are doing right well now. I just noticed the other day reports coming in, and they have raised prices to the retail trade 3 per cent.

Mr. PRALL. While your price is going down?

Mr. HEARST. No; our price just took a slight increase about 10 days ago, as a result of which the packers, I am told, have advanced their prices three-tenths of 1 per cent. We have had an advance on hogs of about 70 cents a hundred in the past 10 days.

Now, Mr. Chairman, I do not want to go further with this situation; we do not know where it will lead next week, or next month. Some of these reasons, I think, are the reasons our farmers have taken this decided stand on this money question, and we realize it is a difficult road. The handling of our finances is a difficult thing in this deflation, and affects us more than any one particular thing. We can not understand why a commodity should be taken as a

measure of the value of all other commodities when this commodity itself has a fluctuating value of its own. If you had a token or symbol of some kind to measure the commodity value, such as labor, interest rates and all of those things, that were stable and did not fluctuate, but stayed put, then there might be some chance of going forward; but with a commodity which, itself, has a fluctuating value, as we have realized in the last two years, with which to measure all of these other services and values, we just feel that something must be done now to assure any prosperity to this Nation.

We are not talking from the farmers' standpoint alone, because we do realize that, if this farmer buying power can be restored, that the unemployed men in the State of Iowa—and we have a lot of industries there, after all—can be put to work to-morrow; because I need on my farm, and my neighbor farmers in that State need, an adequate supply of materials on our farms, which we have not been able to purchase. Give us the buying power and those men in Iowa, and those men in Chicago, and elsewhere, will be put to work. Here is the situation, and I have taken only a few of our commodities that are stable: When our income has been cut down over 50 per cent we still, Mr. Busby, have our fixed overhead there, so that really any lowering of our income runs into 75 or 80 or 90 per cent, when you get down and figure it in toto.

Mr. BUSBY. In cutting off this difference in price that you receive at the present time, you cut off not only part of the profit, but all of the profits, in your operation, in many instances, do you not?

Mr. HEARST. We have dug into our capital investment until the capital investment is gone in many, many instances; and I told some of our people that, if we can not stop the downward trend of commodity price levels, "The closer you are to the edge now the better off you are, because the fellow that is in fairly good shape now will have his agony prolonged for three or four years longer, and then he will go." Really, the fundamental difficulty lies in using an unmeasured commodity for the measure of value.

Just another thought, and I am not going to take any more of your time: I had a very close friend, and a dear friend, on the Federal Reserve Board, who passed away a year ago, and I talked with him often in regard to this matter, and I found, I would say, that he was working against a great many odds, but that he was very careful not to disclose any confidences. I agree with Congressman Strong and some of the other men here yesterday, when they suggested that a change in policy should become public before it took effect, rather than a change of policy being put across and the public waking up and finding that a change of policy had been effective some time previous to that time, and only a few insiders knew it earlier. But I want to say, if we put into the hands of the Federal Reserve Board the option to do certain things, that is not enough, to my mind; there should be the direction there, the direction that the Wall Street bankers, these big financial institutions, can not go to their friends on the Federal Reserve Board and say to them, "You can't, or you must do this and that." I would like to have some definite direction to them so explicit, so definite, that, when you finally adopt a policy in Congress, that group must be forced to do as the legislation specifies; and I would further like to suggest, as I did before, that the board be com-

posed of not banking interests alone, but of agriculture and all other interests, and that it be a friendly group.

Mr. Chairman, that is all I have to say.

Mr. GOLDSBOROUGH. We thank you, Mr. Hearst.

Now, just one minute, to discuss the phases of the situation that you have in your department. The country is now in the midst of a desperate emergency, I mean a deadly emergency. Are you familiar with this legislation known as the Glass-Steagall bill?

Mr. HEARST. I have tried to familiarize myself with it, without giving the study I wish. I could not be here when the hearings were held.

Mr. GOLDSBOROUGH. Is it your impression that the purpose of Congress in passing that legislation was easily understood and comprehended the implied direction to the Federal Reserve Board to raise the price level, and the statement to them, legislatively, that we are furnishing the tools for them to do it with?

Mr. HEARST. That was my understanding.

Mr. GOLDSBOROUGH. As far as you know, was not that the understanding of the farm people everywhere with whom you discussed it?

Mr. HEARST. May I go back just a little for a moment?

Mr. GOLDSBOROUGH. Yes; you may.

Mr. HEARST. Last fall the bankers organized what they called the National Credit Corporation, and the word went out throughout the country that this was going to save the situation. As a matter of fact, there was a group of bankers, who were all supposed to contribute to the common pot, to help each other; and immediately, prices on the stock market took a decided spurt, and then went down like a shot. The last condition was worse than the first. People lost confidence in that endeavor; and then the Reconstruction Finance Corporation came into being. We are favorable to it; we feel that it might be a good idea; but we realized then, and realize now, that any aid to agriculture would have to come trickling down through other sources. In other words, that it was an aid to the bankers and the railroads and the insurance companies. Then the Glass-Steagall bill came on, and we hoped that it was directed to the right thing, in a way that will help to cure these things; but we do not believe the Glass-Steagall bill will do the thing at all until this dollar is managed.

Mr. GOLDSBOROUGH. Why will not the Glass-Steagall bill be effective, in your judgment?

Mr. HEARST. My judgment is that the Federal reserve system will take the powers they have—and they have had a lot of powers before and have not used them—and they will use that power as, in their judgment, they will see fit. I hope I am wrong, but unless it has enough direction in it, so they must do it—

Mr. GOLDSBOROUGH. I am going to ask this question, and I want to preface it with this statement: During the passage of the Glass-Steagall bill through Congress, it was said in the Senate, may times, and broadcast throughout the country—it was never said in the House, to my knowledge—that the measure was, in no sense, an inflationary measure. That was not the purpose of it, at all. Is it your impression that statements of that kind, and the feeling which the public then took that it was to be used for the purpose of raising prices, has had a very detrimental effect on the efficacy of the bill?

Mr. HEARST. Speaking now man to man, this effort, this terrific effort that is being put over the whole country to keep from using the word "deflation"—or wearing out our dictionaries to find some synonym—has done a lot of damage.

Mr. GOLDSBOROUGH. What you mean is, we need a raise in price levels, do we not?

Mr. HEARST. Yes. We may need restoration, if you want to call it that, and we must have it.

Mr. GOLDSBOROUGH. Do you think that if the Federal Reserve Board would come out and put in the press of the country a statement along these lines: "We have available vast resources, which we had prior to the passage of the Glass-Steagall bill, and we have the additional resources that were given to us by that legislation, and when that legislation was passed it was an implied direction to us to raise price levels, so that the debts of the country could be liquidated and business resumed, and what we propose to do is to use all of our powers to raise price levels to a given level," which they set in that statement, "and we are not going to stop until we do it," do you not believe that that assurance, that positive assurance, would have an immediate effect on business throughout the country, and if it was carried out, and the people knew it was being carried out, business would recover in a very short time?

Mr. HEARST. Yes; if they knew it, but they have been told that prosperity is around the corner until they have gotten cross-eyed looking for it. They told us the Reconstruction Finance Corporation would do it, but they have got to see the performance.

Mr. PRALL. When you say that, who do you mean?

Mr. HEARST. The press, the publishers that speak for the people.

Mr. PRALL. I thought you said the President.

Mr. HEARST. I say the press.

Mr. PRALL. May I ask the gentleman a question?

Mr. GOLDSBOROUGH. Yes.

Mr. PRALL. What effect do you think this will have on the unemployment situation—

Mr. HEARST. The stabilization of the dollar—

Mr. PRALL. This legislation, I mean.

Mr. HEARST. If you stabilize the dollar down on the basis we have now, it is going to ruin labor and the farmer and every small business man in the United States—that is, if you stabilize prices down where they are now, if you stabilize the dollar at the height it is now.

Mr. PRALL. I say, with respect to this bill, if this bill is passed and should become law, what effect would that have on unemployment?

Mr. HEARST. To my mind, there could not be anything done so effectively to assist labor, in relieving unemployment, as the stabilization of the price level where it belongs. People can not employ labor now, and they could heretofore.

Mr. PRALL. Do you know whether the Federation of Labor have taken any action on it?

Mr. HEARST. I understand they are backing this movement. A part of our group met them this week, and they are backing this movement. That is hearsay; I have no connection with it, myself; but I can see nothing that will stimulate employment so quickly as the immediate turning up of the price level.

Mr. PRALL. Would it be in order, Mr. Chairman, to move that the American Federation of Labor be invited to appear before the committee?

Mr. GOLDSBOROUGH. I think it would.

Mr. PRALL. I so move.

Mr. GOLDSBOROUGH. I think we should take that up in executive session.

Mr. PRALL. All right.

Mr. HEARST. I thank you, Mr. Chairman, if there is no other question.

Mr. GOLDSBOROUGH. We are very grateful to you for your helpful statement.

Mr. HEARST. I do want to say to you that since I have been in Washington, I have gotten many letters and telegrams from business men, chambers of commerce, bankers, the governor, the Secretary of Agriculture, and our Farm Bureau people which show the active interest of the farming people, industrial people, and the business people. I did not want to encumber your record, or bother you, with them, but I can bring them over to you, but the drift of these communications, which just came in yesterday morning and this morning, is that they insist that this commodity price level be stabilized, and the dollar stabilized, so they can not go shifting up and down.

I know the situation there, but consequently I can easily comprehend why all of these protests and requests came in this morning and yesterday morning. They are watching Congress; I have never seen our people watch Congress before as closely as they are now. They know Congress has it in its powers to do some of these things, and if you will do them you will have their support, I care not who you are, or what political faith you have. You will have the support of the people when you try to break up this thing, and bring up these commodity price levels. I want to leave that with you, gentlemen.

STATEMENT OF L. J. TABER, COLUMBUS, OHIO, MASTER OF THE NATIONAL GRANGE

Mr. TABER. I want to first compliment this subcommittee on the bill here, and the work of the Banking and Currency Committee. Speaking for the National Grange and its membership scattered through 33 States in 8,000 local units and more than 800,000 members, I desire to commend this committee and the Congress for the constructive steps already taken to remedy some of our present-day difficulties; in other words, I commend the Congress for the constructive steps seeking to reach the situation, but organized agriculture recognizes that no amount of legislation to extend credit facilities will solve the problem. This committee and this Congress know so much about the bad condition of agriculture and business that it would be foolish for me to take any of your time in discussing what has happened in that regard.

This committee understands as well as any other group the sad effects of this depression and the world-wide ramifications and dislocations resulting from the losses of the World War.

We in America have been affected by the machine age, which has accelerated speed and multiplied the power of human hands. Faulty distribution of wealth has contributed in a marked degree to our

present condition. Agricultural inequalities, which have taken \$30,000,000,000 out of the capital account of agriculture, and many an additional billions from the farmers' income during the past decade, has been a factor equally marked.

We have actually taken thirty billion dollars out of the capital account of American agriculture, and we have actually taken multiplied millions out of the annual income of the farmer. In addition to all of these things, there had been an unsound standard of wealth; and speculative inflation and deflation have taken their direct toll. But back of all that, the lack of monetary stability seems to us to be the great problem that is affecting us in this land. The major factor that can not be overlooked, however, is unsound standards of wealth and unstable measures of value. Speculation, with its series of inflations, followed by deflations, has been serious; but the outstanding fact remains that, as a nation, we have failed to provide a monetary structure suitable to the age in which we live.

To go back a moment, if you will bear with me, I want to read a statement from an American that all of us venerate, Abraham Lincoln. The direct responsibility of government was well summed up by Abraham Lincoln, when he said its purpose was—

To remove the obstacles from the pathway of all, to open the avenues of honorable employment to all, and to give to all an unfettered start and a fair chance in the race of life.

Discussing the monetary problem and the effects of deflation, almost 75 years ago, Lincoln said:

When one hundred millions, or more, of the circulation we have now shall be, withdrawn, who can contemplate without terror the distress, ruin, bankruptcy and beggary that must follow. The man who has purchased any article—say, a horse—on credit, at \$100, when there are two hundred millions circulating in the country, if the quantity be reduced to one hundred millions by the arrival of pay day, will find the horse but sufficient to pay half the debt; and the other half must either be paid out of other means and thereby become a clear loss to him, or go unpaid, and thereby become a clear loss to the creditor. What I have here said of a single case of the purchase of a horse will hold good in every case of a debt existing at the time a reduction in the quantity of money occurs, by whomsoever, and for whatsoever, it may have been contracted.

The general distress thus created will, to be sure, be temporary, because whatever change may occur in the quantity of money in any community, time will adjust the derangement produced; but while that adjustment is progressing, all suffer more or less, and very many lose everything that renders life desirable.

I think that quotation, in its honest relationship, at a time when contraction was going on, has a direct application to-day.

The monetary problem is not new to the organization I have the honor to represent; in other words, I have the honor to represent an organization that is not new to depression. Our grandfathers faced the struggle of 1873; they strung the grange like wildfire across the continent, and put the organization in action in 18 months. Our fathers were interested in the problems in the nineties. So our organization has lived through two great depressions, and we propose, or at least we hope, to have the endurance to live through this one.

But this is what I want to point out: That in 1873 and 1893 the first ground swell of American agriculture, sometimes called the green-back movement, sometimes called free silver, and sometimes otherwise named, was but making articulate the protest of those who toil against an economic structure that did injustice to almost every group of our citizens. We were against the contraction of currency.

Our organization was not directly on record relative to the silver issue in 1890, but we were seeking a better banking system; we were struggling and did struggle for 40 years before we got a farm-loan system. We are trying to correct the agricultural inequalities.

Now, I would like to read a resolution which the National Grange adopted at Madison, Wis., last November, and which is as follows:

The deflation of the past three years has injured farmers more than any other class of producers in the country. While the average of all wholesale products has fallen 30 per cent, the average of prices of farm products has fallen 45 per cent. This means that the burden of debts, most of which were contracted more than three years ago, and of which there is estimated to be \$11,000,000,000 secured by farm mortgages, has increased 60 per cent in terms of the products which farmers sell.

"In view of this serious situation, we urge upon the Federal reserve system and the Federal Government to take all steps possible to secure (1) restoration as nearly as may be of the wholesale price average as computed by the United States Bureau of Labor Statistics to the level prevailing in 1926, or the average of 1923-1928, and (2) the stabilization of the price level as nearly as practicable at that point.

Contributing to these ends, the National Grange recommends the following measures:

1. An increased purchase in large volume of securities in the open market by the Federal reserve banks.
2. Reduction of rediscount rates by the Federal reserve banks.
3. Reduction of the legal minimum gold reserve rates of the Federal reserve banks to points materially below the present 35 and 40 per cent legal ratios, to the end that the surplus gold in the United States may be exported without endangering the gold standard.
4. An international monetary conference for the purpose of (a) stabilizing the gold price of silver and (b) stabilizing the purchasing power of gold in terms of the average of wholesale prices of commodities.

Now, there is not a Member of Congress that does not realize the result, the serious result, of deflation, which has been augmented by bank failures, hoarding, and other methods of contraction until literally billions have been withdrawn from the currency and the Nation's credit structure. It is not inflation—I am not afraid of the word "inflation"—but restoration that agriculture demands.

I think it was the President who said, the other day, that we must reverse the processes of deflation that brought about the present conditions. I rejoice that organized agriculture sits in this room almost united. Of course, you could not expect us to be an absolute unit on the exact interpretation of a principle; but we stand here to-day, representing 27,000,000 people, and are practically a unit on the program of monetary stabilization and restoration, and we hold that there is nothing sacred about currency.

A gold dollar or a silver dollar or a paper dollar is no golden calf that we intend to worship. It should be the servant and not the master of exchange. We want a currency with which to pay our debts; we want a currency that will let the farmer pay his interest, and let the farmer live, and let him continue along the patient way that he is trying to follow. I know something about conditions down on the farm, where we milk Jersey cows. We are selling our milk at the lowest price in 33 years; yet the taxes on that little old farm have gone up 1,000 per cent, and they have to be paid, or somebody else owns the farm.

Mr. GOLDSBOROUGH. That is besides the gasoline tax.

Mr. TABER. You are right. What agriculture means by restoration is that we be permitted to pay our debts in the same kind of

dollars we borrowed, and to pay interest on the same basis found in the notes and mortgages that we signed. It is economically impossible and morally unjust to compel the Nation to pay its taxes and its debts with a different kind of currency than that upon which these obligations were contracted. Agriculture has a lot of fixed charges. It has been estimated that the farm debt is approximately \$11,000,000,000. It has been estimated that the farmers' freight bill approaches \$1,000,000,000, and that the interest on the farm mortgage debts is more than \$600,000,000. That is the charge in normal years, to say nothing about a lot of other matters.

I had the great pleasure, as some of you know, of appearing before a joint meeting of the House on this matter more than two months ago. At that time I made a little statement under the heading of "Iron debts and rubber money." At that time the agricultural index was 66, but in the last 60 days the price index has dropped from 66 to 60. Now, that is an intolerable condition; it is a condition which makes it impossible for agriculture to pay its debts. That statement pointed out agriculture's impossible position. The drop in the agricultural price index from 66 to 60 changes the figures then submitted, and tells a startling story. The price index on February 15, stood at 60.

Mr. GOLDSBOROUGH. You are speaking about general commodity prices?

Mr. TABER. The agricultural price index. Pardon me. I am trying to record agriculture. In 1930 it stood at 80. Suppose a farmer borrowed \$1 during the depressed year of 1931, and in June, 1931, he had to pay back \$1.33 for every dollar he borrowed in 1931. Dropping on down, if he borrowed a dollar in 1924, he has to pay back \$2.37. If I borrowed a dollar in 1919, and have to pay back in hogs, or in milk, or in cotton, or in the average agricultural commodity, and I have got to return to the market, \$3.33 for every dollar I borrowed. This table takes us into something else: On this 15-year average the farmer has to pay back \$2.48 for every dollar borrowed. There is not any use to worry about what is the matter with agriculture; it is told to you right there. You have got the mortgage on your farm, you have got the fixed charges, and you have got to pay \$2.48, on 15-year average, for every dollar you owe. That is something that can not be done.

The table to which I refer is as follows:

| Index | Year | Equi- valent payment required to-day | Index | Year | Equi- valent payment required to-day |
|------------------------|-------------------|--|----------|------|--|
| 60 ¹ | 1932 ² | | 132..... | 1923 | \$2.20 |
| 80 ¹ | 1931 | \$1.33 | 130..... | 1922 | 2.17 |
| 117 ¹ | 1930 | 1.95 | 119..... | 1921 | 1.98 |
| 133..... | 1929 | 2.22 | 152..... | 1920 | 2.53 |
| 137..... | 1928 | 2.29 | 220..... | 1919 | 3.66 |
| 138..... | 1927 | 2.30 | 203..... | 1918 | 3.37 |
| 129..... | 1926 | 2.16 | 192..... | 1917 | 3.20 |
| 143..... | 1925 | 2.39 | 146..... | 1916 | 2.48 |
| 142..... | 1924 | 2.37 | | | |

¹ Department of Agriculture statistics. Other figures from Yearbook.

² February.

Mr. GOLDSBOROUGH. I have said, a great many times in the last year, that I thought the mortgages on the farms of the United States would amount to more than the selling price of the land at the present time, and I firmly believe it.

Mr. TABER. You are correct. I imagine that if every mortgaged farm in the United States went under the hammer to-morrow, they would not satisfy the mortgages.

Mr. PRALL. Is not that true of all real estate?

Mr. TABER. I am not so familiar with city real estate.

Mr. PRALL. It is practically true of everything.

Mr. TABER. I think that is probably true; but, Congressman, if you please, the price index as of February 15 issued by the Bureau of Labor Statistics gives all the commodities at 119, and agriculture at 60. Consequently, the agricultural dollar is only worth 51 cents; and an impossible and intolerable situation exists.

Mr. PRALL. We have just heard a witness say that, regardless of the decreased price of pork, for instance, the consumer is paying just as much. Now, his general condition is just the same as agriculture, so that if he is paying just as much with the smaller dollar he is being hit just the same way.

Mr. TABER. I do not think this is confined to agriculture. I had not tried to confine it to agriculture; but as a farm representative, my purpose is to present the farm problems, primarily, and I have tried to outline the present difficulties of the farmer.

Mr. GOLDSBOROUGH. As I understand it, you are merely using those figures, with which you are familiar, to illustrate the varying value of the dollar.

Mr. TABER. That is exactly right.

Mr. GOLDSBOROUGH. Not only in the case of agriculture, but in the case of other economic influences in the country.

Mr. TABER. That is exactly correct, Congressman.

My point is not to make a proagricultural story at all, but to point out agriculture's place in this general picture, and place agriculture in the picture on the wall before us.

Mr. PRALL. I think, again referring to the Federation of Labor, that it is going to strengthen your cause, and the whole cause, if we can get them here, to show that the same conditions exist there that exist in the agricultural sections.

Mr. TABER. I agree with you, and I hope that my distinguished friend from Ohio, Mr. Greene, will testify, because he is one of the level-headed men of America, and he is the chief spokesman for labor.

I want to emphasize just one other thing about interest before I pass to something else, to show why it is hard to do these things: 6 per cent interest is equivalent to 14.9 in commodities at present prices; 7 per cent interest is equivalent to 17.33; 8 per cent interest is equivalent to 20.7 in commodities. This is an impossible situation. The commodity price level must be raised to approximately the same level upon which our debts were contracted. Unfortunately we all know the banker to whom we pay our money receives no benefit from the fact that we must give him more than \$2.20, measured by commodities, for every dollar borrowed. I pay my interest to the banker, because I am different from a Congressman. I have debts,

and they are burdensome. Of course, you can not understand that, but it is real to us folks.

Mr. PRALL. We take exceptions to that statement.

Mr. TABER. I have to pay 6 per cent interest to the bank, and sometimes 7; and that, stated in milk, means you have got to milk three and one-half old cows to pay the same interest you used to pay with one.

Mr. PRALL. Is that true of upper New York State?

Mr. WHITE. Yes, sir. If I may be permitted to say that I happened to serve on a tax committee in New York and heard one member say that the liquidation of real estate debt would not leave any equities.

Mr. TABER. I am just as afraid that is true in farm areas as in the cities. I do not think it is quite as true, because agriculture has had 10 years of this. We have had 10 years of misery.

The Grange was for the passage of everything that you have passed, and we commend you for any bill that we believe has been a step in the right direction. You have served in mobilizing more substantially the financial resources, and with the mobilization of the legislative machinery, you will finally touch the heart of the problem, and the heart of the problem is monetary stabilization.

The farmer is constructive rather than destructive in his program. We desire to lift farm values, to increase farm purchasing power, rather than to pull down the standards of other groups. It is apparent to thoughtful individuals that in the long run either capital, transportation, commerce and labor will approach agriculture's level or farm purchasing power will be lifted. It is time to think of America first. We realize that the whole world is in chaotic condition, but the home market is America's best market. We are not compelled to wait on the rest of the world to start the forces of recovery.

We are not destructive, we are constructive, and we hope and pray that we do not have to pull down the other folks. We do not want to pull anybody down to our level, but we are determined to get on a higher level, and we have got to find, first, a method by which to get on a higher level.

Mr. PRALL. We hope to help you.

Mr. TABER. We know that.

This is not the place to talk about debentures and other things. I am discussing purely one step, because the equalization fee, or the debentures, or any other plan for stabilization, or allotment, or any of the programs yet suggested, will not cure the agricultural ills, especially with a yardstick that has 18 inches in it to-day and 36 inches in it to-morrow. You have got to dig deeper, you have got to go farther, if agriculture is to be lifted. No pump ever primed itself; no depression ever cured itself. It is time to courageously recognize that every influence of Government and of statesmanship must be utilized in the emergency. Commodity values can be lifted, bank failures have already been checked to a marked degree. The forces of business stabilization are at work, but the whole program will be of no avail unless labor can again be employed, unless farm prices and commodity prices are such that the American people can pay their debts, their interest, their taxes, and have something left to purchase the necessities of life and maintain our standards of living. As I say, in human history, as I can read it, no depression ever cured

itself; but some things have helped to change the course of farming, and can change the course of depression. I think we have checked bank failures, and that gives us some courage. I say "we" because I have some interest in this problem, but I mean the Congress and the administration.

Mr. GOLDSBOROUGH. Congress can not do anything, unless it has the public sentiment of the country back of it; so when you said "we," you expressed it correctly.

Mr. TABER. All right, Congressman, we feel that you can determine what is right. I am not pessimistic. We are not going to go to the the dogs. We can get out, but we have got to fight our way out; and in fighting it out we must have, first, governmental assistance. Going right back to Lincoln, I am not afraid to say that the Government has contributed toward getting us in the shape we are in, not only the Government of America, but the governments of the world, and they can help us get out. However, business must reorganize; agriculture must reorganize.

I got into a lot of trouble up in New York on the radio when I said that a million farmers, organized, were better than a million speeches in Congress; and the Senate did not like what I said. So I suppose maybe I was wrong, and I will have to withdraw that.

Mr. BUSBY. You did not hear from the House.

Mr. TABER. No. Now, my friends, the point I am trying to make is this: That Congress, when it eliminated from the original Federal reserve act definite instructions to the Federal Reserve Board, it made a grievous error. It just said: "Now, be good boys, and be wise, and do a great job."

In other words, the Congress, when it eliminated from the original Federal reserve act the instructions to stabilize the general price level, left in the hands of the Federal Reserve Board unlimited power and no definite instructions to follow. Unless the Congress makes definite provision by statute, no Federal Reserve Board can be expected to assume the responsibility of checking the forces of either undue inflation or unnecessary deflation.

The constitutional provision that Congress shall have the power to coin money and fix the value thereof has never been fully exercised. Under modern conditions, those who have the control of credit have the power to directly affect the value of money. Unless by definite mandate, Congress instructs the Federal Reserve Board to so regulate the volume of money and credits as to stabilize commodity values at fair and reasonable levels, then it is guilty of violating a solemn trust. Everything is fine, when prices go up, but after prices go down, you hear people say it is speculation. The constitutional provision giving Congress the power to coin money, and regulate the value thereof, has never been fully understood and exercised.

Mr. GOLDSBOROUGH. The difficulty was this: When the Constitution was written, it was not written by those who were interested, primarily, in lending money; but after the Government began to function, it gradually got into the control of those who loaned money; and that is the reason, and in my judgment, the sole reason, why that section of the Constitution has remained in a slumbering condition.

Mr. TABER. Well, Mr. Chairman, I am afraid you are right; but be that as it may, Congress has not exercised its authority and can

not exercise it, until it does something to stabilize commodity values; and unless you do that, it seems to me that Congress is guilty of a breach of a solemn trust.

Now, I want to pause and look over the group of bills before us. These include bills of Congressmen Ramseyer, Strong, Keller, and yourself, dealing with the quantitative idea of money, which ought to be commended. I feel that Mr. Strong's bill is not quite specific enough, and the same is true of the distinguished Congressman from Iowa; and I feel that you ought to go a little further than you have gone.

The Keller bill comes very close to the resolution of the grange. It has a feature that we would like to have in your bill, H. R. 10517.

Mr. GOLDSBOROUGH. That is the bill that is now under consideration.

Mr. TABER. Yes; and it has much to commend it, but I want to come back, in just a moment, and suggest what we think is a needed amendment to that legislation. The distinguished Congressman Burtness' and your bill, dealing with the qualitative theory—when we have a profound philosopher like Doctor Fisher around, farmers ought not to talk about it—but I hesitate to advocate legislation on the quantitative theory of money, reducing the number of grains of gold in the dollar. I am not sure about that. It seems to me that wise statesmanship should act, first, on the quantitative theory, that we should go the limit on that line of activity; and then, if we have failed, Congress has the solemn obligation, or this committee has the solemn obligation, to explore every angle for reaching a solution of this problem. It seems to me that there may be ways of approaching this matter on the quantitative, rather than the qualitative program, because of the international difficulties and the legislative prohibitions and inhibitions, that that might cause us no little concern, if all of our debts are to be paid by a dollar of so many grains of fineness.

However, I suppose Congress could correct that.

Mr. BUSBY. I would like to ask you some questions in connection with the point to which you have referred, if you have no objection.

Mr. TABER. I have no objection.

Mr. BUSBY. Well, the range of our prices, of course, is on a gold set-up; is not that true of all of the countries of the world, that are off of the gold standard to-day?

Mr. TABER. Yes.

Mr. BUSBY. Notwithstanding they are off of the gold standard, that there is a gold currency base through international exchange rate fixation, from day to day, by the powers that fix it; that is true, is it not?

Mr. TABER. That is correct.

Mr. BUSBY. Notwithstanding they have not the gold to meet their currency and redeem it, through the fixation created by the national exchange rate, they are held strictly to the gold standard by the few countries that yet remain on the gold standard basis.

Mr. TABER. You are correct.

Mr. BUSBY. Now, is it not the fundamental trouble with the commodity prices in this country, and in all of the other countries of the world, that are engaged in commerce—and I come to that because you discussed the qualitative theory of money, and because I feel it is fundamentally a sore spot that can be corrected—

Mr. TABER. The qualitative phase of money?

Mr. BUSBY. The qualitative phase of money, and I do not believe that the quantitative, which is a credit arrangement, ought to be a contraction and a relaxation to redeem at the rate of the individual, for private gain, rather than public benefit—that we would be making a mistake to settle down and compromise by saying that we will take the quantitative theory, and let it go at that, at the present time.

Mr. TABER. Congressman, I have every sympathy with your suggestion. I think the farmer is out of place when he has the fears about changing the number of grains in the gold dollar. I think that is a matter for the great minds and the international bankers, not the kind we talk about.

Mr. BUSBY. I wanted to call attention to that. Now, we deal with gold in settling international balances as a commodity, and sell by weight, do we not?

Mr. TABER. Right.

Mr. BUSBY. Now, the variable dollar, according to the domestic range set up by us, would be controlled by this same international exchange rate on that dollar, just the same as it is on the present dollar, would it not?

Mr. TABER. Yes, you are right.

Mr. BUSBY. And there would be no complications in getting an adjustment with some foreign country that we owed, when we primarily supplied the quantity of gold, even though the international exchange rate or fiat stamp of the dollar changes from day to day, can you tell any complications that we do not have under the present system, that would rise up if we dealt with money on the qualitative idea, rather than quantitative?

Mr. TABER. Well, of course, a dollar would cease to be just a dollar in the exchange.

Mr. BUSBY. Well, it is only that in theory, to-day, is it not; the gold dollar is only a gold dollar in theory, because I do not believe, in all of this room, there is a man with a gold piece in his pocket.

Mr. TABER. Yes; I have got two; but they are Jersey gold medals.

Mr. BUSBY. I want to ask you just one question, and I will not take any more of your time: Say, for instance, the United States, France, Holland, Switzerland, which are practically the only countries in the world—there may be some other small ones—on the gold standard basis, their currencies are entirely out of line, according to the international exchange rate, with the currencies of all of the countries that are off of the gold standard basis.

Mr. TABER. That is correct.

Mr. BUSBY. But their commodities, in the world trade field, are not out of line with the commodities of the countries that are off of the gold standard basis, are they?

Mr. TABER. No.

Mr. BUSBY. That militates against the countries that are on the gold standard, in that their currency is tagged by this fixation out of the reach of the trade coming from the countries which have cheaper currency and a lower international exchange rate; is not that true?

Mr. TABER. That is correct, Congressman.

Mr. BUSBY. Is not that militating very greatly against the trade in our country, and of the few countries that are boasting about their stabilized money, entirely backed by an amount of gold, making it seem beyond question that they can remain on the gold standard?

Mr. TABER. I quite agree with your conclusions in the main, Congressman, and I am not afraid to say that I think I will live to see the day that we will have the best of all measure back of our money, and that is the commodity value; we shall sometime have a commodity value. I may not live to see it, but I think I will.

Mr. BUSBY. Is not the commodity value what we are using to measure our currency with, to-day?

Mr. TABER. Right.

Mr. BUSBY. A piece of commodity, which is gold, and you are casting aside consideration for all of the 784 commodities that go to make up all our commodities, because the index commodity price as ascertained by the Bureau of Labor Statistics—you are casting all that aside and looking solely to the value of one commodity, which is gold, and which varies extremely in value and purchasing power; that is correct, too?

Mr. TABER. Yes; that is correct.

Mr. BUSBY. Now, the supply and demand of a commodity usually determines its price, does it not?

Mr. TABER. Yes; it determines its price, if the avenues of exchange are open and free and not clogged up.

Mr. BUSBY. Not clogged up by some fixation.

Mr. TABER. Yes.

Mr. BUSBY. That is true as to gold, as well as to wheat.

Mr. TABER. Yes.

Mr. BUSBY. Now, if gold is in supply to the amount of say \$11,300,000,000 in the entire world, and there is maldistribution and \$4,000,000,000 of that is sterilized by the United States and France, that would be equivalent to a lack of supply, would it not?

Mr. TABER. Certainly.

Mr. BUSBY. But the lack of supply can come by reason of the lack of production, or the lack of supply may come by reason of intentional or wilful manipulation, or the maldistribution, particularly, of gold, could it not; and is not that our trouble to-day?

Mr. TABER. That is largely our trouble, but I do not think it is all of our trouble.

Mr. BUSBY. I think it is almost all of our trouble, in that all of the currencies of the world are tied on this little amount of gold, whether they be on the gold standard basis or not; and they are tied on specifically by the international exchange rates, that are not fixed by the Government, but by the international credit sellers. That is all I have to say.

Mr. TABER. I have read some of your speeches, and you have gone very thoroughly and very deeply into the matter; but I still believe we should try the quantitative theory first.

Mr. BUSBY. I do not want you to misstate me. I think that is a very important element, but a quantitative element that relates to money must always take into consideration the velocity of credit and money, which you can not control, and which you have no power over. I do believe that it ought to operate in the credit field, and I think the Federal reserve system is a wonderful machine to operate in that field; but I think it is mighty poor machinery to operate when it comes to fixing the basic value of the commodity, the basic value that a commodity ought to bear to the currencies that are measured.

Mr. TABER. I just wanted to give you my idea on that score. You have given us a very illuminative picture of the problem.

I want to call attention to two phases of the Grange resolution, which have not been emphasized a great deal. I am not going to try to state that it would be great value to reduce the gold minimum below the 34-40 basis. We have, in the past 100 years, stayed on the gold standard most of the time, with a 5 per cent reserve. We never dared to come closer to it, without having some trouble. I think this committee, or this Congress, should call an international conference to standardize the gold value of silver. Silver is the money more than a billion people, and it has been that for more than a thousand years; and while India and the Orient are temporarily thrown from the silver standard, it is just because they can not purchase with silver as unstable as it has been recently; and the gold price of silver can be stabilized by international agreement; and, second, we think this same conference should be called to stabilize the purchasing power of gold in terms of commodities.

I do want to say, in this regard, while I am a farmer and in favor of an international conference, I want us to realize that America does not have to wait on the rest of the world. The home market is the best market. We can put America to work and make America prosperous and get ourselves out of the woods, regardless of the terrible conditions of the rest of the world, because of our natural resources, and because of our people, and because of our machinery. I believe that criticism, complaint, and denunciation are valueless. Never in history has as vast credit machinery been mobilized in so short a time. In a nonpartisan manner the Congress and the administration have given a heartening example of patriotism, but failure to touch the monetary problem mars this constructive program. It is time to turn from gloom and despair. It is time to realize that legislation, plus national organization and leadership, can put millions back to work and give assurance that stable conditions are ahead. The farmer is not lost in doubt, confusion, and uncertainty. Equality for agriculture, employment, and stability for labor and industry can be secured, but monetary stabilization is the essential step in this program. I repeat, the farmer is not lost; he is confused, but he is not lost, because he knows where he wants to go. We want equality for agriculture, and we want to put labor back to work. Monetary stabilization is the first step, and the most essential of all steps, leading to prosperity and a better day.

Mr. STRONG. In directing the Federal reserve system to use its powers to stabilize the purchasing power of money—and I looked into the matter a great deal—I have felt that we ought to give them a yardstick to use in valuing money, in measuring the value of money; do you think that should be done?

Mr. TABER. Yes.

Mr. STRONG. And would you say what yardstick you think might be best, or what index number?

Mr. TABER. I would say 23-28, the average of the 23-28 index numbers.

Mr. STRONG. As put out by the Secretary of Labor?

Mr. TABER. The Bureau of Labor Statistics, yes. May I say this: I think, Mr. Chairman, that your bill, in section 31, should be more specific. I think the steps should be enumerated in section

31, page 1, lines 7, 8, 9, and 10 of your bill. I think there should be some specific instruction placed in there; because if there is nothing definite, and not placed in the bill, you will find yourselves back where you are now.

Mr. GOLDSBOROUGH. I am very certain there will be something put in the bill, before we get through with it.

Mr. STRONG. Now, there is another idea that seems to me to be very necessary, and that is, when they do change their policies in buying or selling Government bonds, or raising or lowering the discount rate, that publicity should immediately be given, and the public notified of what they are doing.

Mr. TABER. Absolutely.

Mr. STRONG. You believe that should be published?

Mr. TABER. I believe it should be published, all of it, yes; we farmer folks were caught three months late in 1920.

Mr. STRONG. I know that; so was the Banking and Currency Committee.

Mr. TABER. We all know that, to our sorrow.

Mr. STRONG. That is all; thank you.

Mr. TABER. I certainly thank you, Mr. Chairman. I thank you very much for your courtesy.

Mr. GOLDSBOROUGH. It has been very inspiring to hear you.

Mr. TABER. This is St. Patrick's day and I hope you will emulate St. Patrick in seeing that there are no snakes in this bill.

STATEMENT OF JOHN A. SIMPSON, NATIONAL PRESIDENT OF THE FARMERS' UNION

Mr. SIMPSON. Mr. Chairman, my name is John A. Simpson, and I am national president of the Farmers' Union.

It seems to be the universal opinion that there is not sufficient money to do the business of the country. Everybody now realizes that deflation was carried too far. Every money proposal at this time is for inflation. Economists, statesmen, politicians, and everybody now agree that price levels of commodities must be raised, all of which makes necessary an increased volume of money and credits.

The Farmers' Union is in hearty accord with these views. But, we are against a money system based on liabilities. We are for a money system based on assets. We are against a money system that contemplates perpetual debt. We are against a money system that involves the payment of interest.

The total interest debt of the United States per annum is more than \$10,000,000,000. The total tax debt is more than \$13,000,000,000. This makes a fixed charge for the taxpayers of the Nation of more than \$23,000,000,000 each year.

Staggering under this load, the best wisdom of Congress and the administration produces more interest-bearing bonds every time they need money. Evidently the philosophy of Congress is to put out the fire by pouring oil on it. Evidently it is the philosophy of Congress that a drowning man needs more water, and they pour it on.

Mr. BUSBY. Why do you refer to Congress all of the time, in that regard?

Mr. SIMPSON. Congressmen are the chaps that do it.

Mr. BUSBY. You are starting out to antagonize the bunch you are trying to work with.

Mr. SIMPSON. I am trying to wake them up. The Farmers' Union is going to have a clear record here of advocating something worth while, instead of something that will prove worthless like your moratorium and Reconstruction Finance Corporation have.

Mr. GOLDSBOROUGH. We are in entire sympathy with the general purpose of what you are going to say; but let me suggest that an emotional statement is not going to be helpful. Of course, you know the number of billions of dollars of bonds Congress has paid off since the war.

Mr. SIMPSON. They have not paid off anything in the last two or three years.

Mr. GOLDSBOROUGH. Since the war, they have paid off something like \$13,000,000,000 of bonds.

Mr. SIMPSON. Under the present policy, you have increased bonds \$3,000,000,000 in the last three years.

Mr. GOLDSBOROUGH. Just proceed in your own way.

Mr. BUSBY. I want to suggest that is begging the question; by not stating the facts fully and fairly might do over the radio, but it is not going to get you anywhere here, or anywhere else.

Mr. SIMPSON. It gets me, Congressman Busby, just where I want to be. I want the facts in the record.

Mr. BUSBY. You are not benefited by it. Your statement is discredited before you make it, because it does not visualize the proper scheme. We want the facts. We do not want a lot of insinuations and arguments that are not founded on facts, and are solely children of your own brain, and I want the record to show this: That we can properly visualize your mental attitude when you come here to make your statement, and you do not come with the facts; and when you come with assertions of private sentiment, I do not believe the organization stands for it.

Mr. SIMPSON. I am here interpreting the resolutions of our organization.

Mr. BUSBY. I want the record to contain all that I have said, because it is fair to us.

Mr. SIMPSON. I do, too. I want to say to you gentlemen of the committee that the Farmers' Union is making a record here. I am saying what Congress has done is of no avail; and you have just listened to the master of the National Grange showing you it has been of no avail and that price levels are lower than they were 60 days ago. The Farmers' Union is here to-day telling you that the thing you have in this bill is not worth a dime toward bringing about a return of prosperity to this country. I am not like the master of the grange; I do not owe anybody anything, and I have some cash.

Mr. GOLDSBOROUGH. You are a very lucky man. Now, just proceed in your own way.

Mr. SIMPSON. I am proceeding in my own way. When they said the moratorium would cure things, I said it would not. It did not cause me to invest my cash because I knew prices would not increase. I kept my money, because I knew that I could buy cheaper later on. You passed your reconstruction bill, and I did not invest my cash, and I am still glad of it, because I can buy cheaper than when you passed your reconstruction bill. You may pass this bill and those

who have cash will still refuse to invest. You follow the Farmers' Union program, and in 30 days cash will be seeking investment, because our program will make money cheaper, and commodities higher.

Mr. PRALL. May I ask you if you are opposing this bill?

Mr. SIMPSON. I am saying you are not going far enough.

Mr. PRALL. I asked you if you opposed it?

Mr. SIMPSON. Sure. I am not going to stand for a bill that will not accomplish anything.

Mr. PRALL. You are not in favor of this bill?

Mr. SIMPSON. No, sir; not as it is. I have that right, do I not, Congressman?

Mr. PRALL. I understood you were here with these other gentlemen, going to produce something constructive, and in favor of this bill. Evidently, you are opposed to the bill.

Mr. SIMPSON. Yes, sir; I am opposed to anything that the international bankers of this country are not opposed to.

They were not supposed to be in favor of the Federal reserve act when it passed in 1914, but it turned out to be all right for them.

There is a bill pending in Congress that will increase the volume of money without cost to the taxpayers, without anyone receiving interest, or without fear that a little handful of international bankers will withdraw it from circulation some time in the future. The bill to which I refer is the Evans-Wheeler bill, and provides for the remonetization of silver.

This bill, if made a law, would probably increase the circulating medium of the country by \$2,000,000,000. There is every reason to believe it would bring to our shores half the population of the world as buyers of our products, who are now barred from purchasing here because of the high purchasing power of the gold dollar. You just brought that out a little while ago, that under the present gold standard, people of foreign countries are selling to us, but they are not buying of us. Canada, to-day, is shipping in dairy products, paying the tariff, and taking the gold dollar of the United States back to Canada, changing it into their depreciated dollar and thus making a profit.

Remonetization of silver, in my judgment, would double the prices of all farm products in 60 days. With gold and silver as our basic money we can trade with every nation on the face of the earth. With paper money based on public improvements there can never be a panic created through withdrawal of credits. The paper of this Nation, and the Government itself, under the present monetary system and present credit system, are absolutely at the mercy of the international bankers of Wall Street. They can extend or restrict credits at their pleasure. They can inflate or deflate currency at their pleasure. No public improvement can be made without paying tribute to them.

Mr. GOLDSBOROUGH. Would you mind stating how the international bankers of Wall Street can inflate and deflate currency?

Mr. SIMPSON. Sure. They deflate by telling the Federal reserve banks, and the Federal reserve banks tell the little banker, "You have to pay," and the little banker tells the farmer, "You have to pay." As notes are paid, Federal reserve currency is destroyed. I used to be in the banking game.

Mr. GOLDSBOROUGH. Your argument is that the reason for that is, the Federal reserve system is under the control of the international bankers of Wall Street.

Mr. SIMPSON. Congressman Goldsborough, the latter part of January, 1920, I was in Washington for my organization, and I went to see John Skelton Williams, the Comptroller of the Currency—I believe he came from your State.

Mr. GOLDSBOROUGH. No; he was from West Virginia.

Mr. SIMPSON. And I said, "Mr. Williams, when will deflation begin?" Tears came in his eyes, and he said, "The other members of the board voted the other day to have it begin about May 1." That was when deflation commenced.

Mr. BUSBY. May 28.

Mr. SIMPSON. Well, about the 1st of May. That is what he told me at that time. He said, "I told the other members of the board, 'Do you not know that that will break lots of little country bankers?'" And he said, "They cold-bloodedly answered me, 'They ought to break; there are too many of them.'" He told them, "Don't you know it is going to ruin lots of farmers?" And he said, "They cold-bloodedly replied to me, 'They ought to be ruined; they are getting so prosperous they will not work.'" I can go into a court of record and get 50 witnesses who will substantiate and corroborate this testimony of mine. I thought enough of what Mr. Williams told me that I went to my home at Weatherford, Okla., and I made a public sale. I sold everything I had. I sold registered shorthorn cattle and registered livestock, that six months later would not have brought one-fourth of what I got on the 5th day of February, 1920.

Mr. BEEDY. Do you want that to go in the record?

Mr. SIMPSON. Sure.

Mr. BEEDY. You took advantage of your own people on inside information?

Mr. SIMPSON. No, sir; as the editor of our Farmers Union paper, I warned them.

Mr. BEEDY. Is not that what you are complaining about the international bankers doing?

Mr. SIMPSON. Congressman, I just told you that, on February 1, 1920, in the Oklahoma Union Farmer, I warned our members of what I found out down there in Washington.

Mr. BEEDY. Was that before or after you got your money?

Mr. SIMPSON. I had my sale the 5th day of February, one week after I returned home; I did not hesitate.

Mr. BEEDY. So the fellows did not believe your warning?

Mr. SIMPSON. Some of them did not, some did. There are a lot of Members of Congress who will not believe the warning I am giving you now, but you will find out it is true.

Mr. BEEDY. I think perhaps there is something in that, but I think it is unfortunate you are putting it over in the manner you are doing.

Mr. SIMPSON. I have been elected sixteen times to high official positions in my organization, and that is sufficient proof that I am representing them. You have no right to discredit my authority to represent my organization.

Mr. BEEDY. Some of us have been elected a good many times, but we still keep in mind that we are servants and we are trying to be courteous to each other. You can say whatever you want to.

Mr. SIMPSON. Sure, and I shall.

Mr. BEEDY. I am sorry that you are showing so much animus.

Mr. SIMPSON. No, sir; I am not showing animus.

Mr. BEEDY. I do not show what you want to label it.

Mr. SIMPSON. I am showing a sincere, patriotic devotion to my country, trying to save it, Mr. Congressman; that is what I am trying to do.

Mr. BEEDY. We are all anxious to do that.

Mr. SIMPSON. I am telling you that you do not realize what you are sitting over; I am here, telling you that, unless something is done that is real, instead of what in three months you find out is nothing, something will happen in this country. I am trying to avert that. I do not have to be here. I am independent, as far as finances are concerned I am here, away from my good home, because I believe it my patriotic duty to be here.

Mr. BEEDY. There is nobody finding any fault with that.

Mr. GOLDSBOROUGH. Now, proceed.

Mr. SIMPSON. If the people of Nebraska decide to build \$50,000,000 worth of roads they must vote interest-bearing bonds and pay in interest as much or more than they pay for the construction of the roads.

Gentlemen of the committee, I want you to know what kind of company I am keeping in my position on the money question. That you may know, I quote from an interview with the great Thomas Edison given by him and published in the New York Times December 6, 1921.

This is not the first committee hearing that I appeared before and put this in the record; I expect to continue to do it throughout this entire session of Congress and you ought to get it and study it.

Now, here is Ford proposing to finance Muscle Shoals by an issue of currency. Very well, let us suppose for a moment that Congress follows his proposal. Personally, I don't think Congress has imagination enough to do it, but let us suppose that it does. The required sum is authorized, say, \$30,000,000. The bills are issued directly by the Government, as all money ought to be. When the workmen are paid off they receive these United States bills. Except that perhaps the bills may have the engraving of a water dam instead of a railroad train and a ship, as some of the Federal reserve notes have, they will be the same as any other currency put out by the Government, that is, they will be money. They will be based on the public wealth already in Muscle Shoals, and their circulation will increase that public wealth, not only the public money but the public wealth—real wealth.

When these bills have answered the purpose of building and completing Muscle Shoals, they will be retired by the earnings of the power dam. That is, the people of the United States will have all that they put into Muscle Shoals, and all that they can take for centuries—the endless wealth—making water power of that great Tennessee River—with no tax and no increase of the national debt.

“But suppose Congress does not see this, what then?” Mr. Edison was asked.

Then Congress must fall back on the old way of doing business. It must authorize an issue of bonds. That is, it must go out to the money brokers and borrow enough of our own national currency to complete great national resources, and we then must pay interest to the money brokers for the use of our own money.

That is to say, under the old way any time we wish to add to the national wealth we are compelled to add to the national debt.

Now, that is what Henry Ford wants to prevent. He thinks it is stupid, and so do I, that for the loan of \$30,000,000 of their own money the people of the

United States should be compelled to pay \$66,000,000—that is what it amounts to, with interest. People will not turn a shovelful of dirt nor contribute a pound of material will collect more money from the United States than will the people who supply the material and do the work. That is the terrible thing about interest. In all our great bond issues the interest is always greater than the principal. All of the great public works cost more than twice the actual cost on that account. Under the present system of doing business we simply add 120 to 150 per cent to the stated cost.

Gentlemen of the committee, it is my opinion that you will have the vision and the courage to establish a money system in this country in the interest of the 120,000,000 common people instead of continuing the system that forces the 120,000,000 common people to pay tribute to the greed and avarice of a few ultrarich. I hope you will establish a money system that does not depend on the Nation being perpetually in debt.

Some time in the future we might have an administration that would eliminate fraud and graft to the extent that the Nation's debts would be paid. If such a thing should happen, under the present money system, it would retire practically all the money we know have in circulation.

If the present money system is right, it is the duty of every citizen to pray night and morning that this Government may never be able to pay its debts.

As for the Farmer's Union, we oppose such a system at all times and in all places, and we do it unashamed and unafraid.

The money question is one of the things that must be settled; it has got to be settled by an increased volume of money. We must have something that takes the place of credit. You have increased the volume of money in the last three or four months, yet prices are going down. Why? Because credit is not available. A farmer may have a good farm, free of debt, that will produce 60 bushels of corn per acre, but he can not borrow a dollar on it. So you have got to furnish something that will take the place of credits, and not let the other fellow control everything through credits. Under the present credit system you might double, treble, the volume of money, and we would be in the same fix.

A system that places gold and silver as our international money, our basic money, on which we do business with the world, and paper money, based on public improvements, which is new wealth, will solve the problem. The Farmers' Union advocates such a system.

Mr. GOLDSBOROUGH. We thank you very much, gentlemen.

Mr. PRALL. Mr. Chairman, I move we adjourn until 10.30 to-morrow morning.

Mr. GOLDSBOROUGH. If there is no objection, we will adjourn, and I want to say to the members of the committee that Senator Owen will again appear before the committee at 10.30 to-morrow morning.

(Whereupon the committee adjourned to meet at 10.30 o'clock a. m., on Friday, March 18, 1932.)

STABILIZATION OF COMMODITY PRICES

FRIDAY, MARCH 18, 1932

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON BANKING AND CURRENCY,
Washington, D. C.

The committee met, pursuant to adjournment, at 10.30 o'clock a. m., in the committee room, Capitol Building, Hon. T. Alan Goldsborough presiding.

Present: Messrs Goldsborough (chairman), Busby, and Prall.

Also present: Congressman McFadden.

Mr. GOLDSBOROUGH. The committee will come to order, please.

Senator Owen, you will kindly proceed in your own way, and when you get to the point where you would like to insert your charts, if you will just announce it, the subcommittee, I am sure, will order them inserted.

STATEMENT OF HON. ROBERT L. OWEN, FORMER UNITED STATES SENATOR FROM OKLAHOMA, ON H. R. 10517; H. R. 128; H. R. 8246; ETC., PROPOSING CURRENCY EXPANSION BY RESERVE BANKS THROUGH BOND PURCHASE

Mr. OWEN. Mr. Chairman and gentlemen of the committee, your request that I appear I regard as imposing a public duty. The country is profoundly interested in what you are doing. In my humble opinion, you are attacking now a most vital question, which deeply affects both the present and future prosperity of the United States. It should be perfectly obvious that, with a dollar that has no stability of value or purchasing power, manufacturers can not forecast their future, merchants can not know the value of their inventories; no business man in the country can rely on his own integrity, intelligence, and industry to safeguard the future of his family and no contract has any dependable foundation. Nothing could be more destructive of the prosperity of the Nation, or of the people, than a dollar fluctuating up and down, and down and up, when that dollar, of necessity, measures the value of every contract and the relationship between every debtor and creditor.

Therefore, your objective of stabilizing the dollar and bringing it back to what might be called the normal of 1926, is a step of supreme importance, in which the country is deeply concerned.

In order to realize the value of this proposed remedy appearing in House bill 10517, and other bills which are under consideration by the committee, I think it is advisable to demonstrate what caused the present depression with its destabilization of all commodity values and the suddenly increased purchasing power of the dollar in stocks, bonds, real estate, and so forth.

We have been given all sorts of confusing theories; some thirty or more have been exploited in the press, but there is but one obvious adequate reason for this depression and it should be made to clearly

appear in the record. It is most fully disclosed by the many charts and tables gathered together by the Federal Reserve Board's statistical bureau, by the Bureau of Statistics of the Department of Labor, and other similar organizations. I wish to point out, if I may be permitted to take the time to do so, what the cause is, and how it relates directly to the value of your proposed remedy.

Mr. GOLDSBOROUGH. Take your own time, please, Senator.

Mr. OWEN. I entered the United States Senate in 1907, and was there 18 years. For 12 years, I was the chairman of the United States Senate Committee on Banking and Currency. When I first entered the Senate, I made an address on the 25th of February, 1908, on the Vreeland-Aldrich bill in which I pointed out what had taken place in 1907, the cause which resulted in the disastrous panic of 1907, when call money went to 125 per cent on the New York Stock Exchange in October, 1907. I carefully analyzed that panic in the Record, and I commend that Record now to you and to the country, because it fully discloses what took place then, and it fully discloses also the same principle which we subsequently discovered and confirmed when we had again observed the panic and ruin following the contraction of credit and currency in 1920-1921 and in 1929-1931.

The panic of 1907 was caused by the deliberate contraction of credit; the panics of 1920-1921 and 1929-1931 were due to the same identical cause. There can be no doubt about that; the record fully shows it; and those behind it went so far that they openly disclosed to the country the plan and purpose in a manner which forever put the plan upon the indelible public records. It can never be erased.

In May, 1920, Mr. Medill McCormick, a United States Senator from Illinois, on the floor of the Senate, introduced and passed a resolution asking for "information"—a resolution which—ordinarily, is passed as a matter of courtesy—but this extraordinary resolution wanted "information" as to "what the Federal Reserve Board was going to do about the undue inflation of credit and currency." It committed the Senate to a false policy. This resolution was instigated by those great financial forces behind the Federal Reserve Advisory Committee and the Federal Reserve Board. At a secret meeting this principle was approved by the Advisory Committee and the Federal Reserve Board.

Mr. GOLDSBOROUGH. That was in 1920, you say?

Mr. OWEN. That was in May, 1920, I think May 20. (There is available a public document giving these details.) I was not on the floor at the moment. I was then the chairman of the Committee on Banking and Currency of the United States Senate and was not consulted. When I came in, I immediately protested against it, because it had committed the Senate of the United States to the unsound doctrine that we had had an "inflation" of credit and currency. It is of supreme importance that this committee, meeting here, and the country, should get clearly in mind what "inflation" means, and what "deflation" means. We can only have "deflation" as the consequence of "inflation," and "inflation" means an undue issuing of currency or credit, against an inadequate foundation, and as an unjustified expansion of credit. The word is now frequently used in the press with a different significance, as if it meant merely contraction or expansion, and as if there were no difference between

inflation and deflation and contraction and expansion. This misuse of terms probably arose from those who wished to confuse the public. There is a vast difference. I told the Reserve Board then that when credit and currency had been expanded, for the purpose of protecting the life of the Government of the United States and protecting its interests as a nation, that that was justified expansion and not inflation; and that commodity values (which at that time had gone far above normal), was due only in part to the expansion of credit and currency; that it was also much more largely due to other factors that entered in, such as the World War, when there was an extraordinary demand for the machinery and materials of war at a time when the treasuries of all of the warring nations were wide open, with purchasing agents told to "go get it."

Then, of course, prices went up, due to urgent demand for goods and abundant supply of credit. And of course, when that war was over, and there was no longer this urgency of demand for war materials, when the treasuries were then closed, when the accumulated inventories of supplies which had been bought at high prices were being sold at very low prices, when men who had been withdrawn from productive purposes and thrown into destructive purposes, were withdrawn from destructive purposes and put back into production, it was obvious that the condition would adjust itself, if they had only let things alone for a little while. That was the prayer I strenuously made, but in vain.

In July, 1919, W. P. G. Harding, the Governor of the Federal Reserve Board, went to New York and got around the table the presidents of the Chase National Bank, of the City National Bank, of the First National Bank, of the Guarantee Trust Co., and of the other great banking houses there, he told them they were borrowing too much money from the Federal reserve system, that the system was down to the point of 40 per cent gold reserve—[as if that were a serious matter—we should have recognized the fact that the empire of Great Britain went through the war with 10 per cent, and less, of gold as reserve against currency and did it safely]—but we, poor people, were in such alleged jeopardy after the war, when we were approaching 40 per cent gold reserve that it was necessary to contract the credit and currency of this country, and paralyze every industry as was done by the imbecile and deadly deflation policy of 1920 and 1921. I made strenuous opposition on the floor of the United States Senate to this destructive policy. Four times I addressed the Senate against that evil policy; on four different occasions I inserted in the Congressional Record elaborate letters addressed by me—three of them to the Federal Reserve Board, and one to the President of the United States. The President, Woodrow Wilson, was very ill, too ill to fully exercise his normal powers. I sought his support, but was unable to obtain it, because he was not sufficiently well for me to tax him, under the conditions of his physical health. I appeal now to that record, and again call the attention of the country to it. The McCormick resolution was followed by one of the great parties writing into its platform a demand for "the courageous and intelligent deflation of the overexpanded credit and currency." (Republican platform, June, 1920.)

I hope that no one will imagine that, in addressing this committee and referring to that record, that I am doing so with any wish to reflect on the Republican Party at that time. I am not now disposed to do that for the reason that I do not think enough of the leaders of either party understood it sufficiently to establish moral responsibility for it or for its prevention; I do not think the Democratic leaders understood it clearly, because they made no adequate party protest although a few did do so; I went in 1924 to New York and personally wrote a plank adopted as part of the platform of the Democratic Party, a protest against the Republican policy of "deflation of credit and currency," in 1920 and its consequences, but the Democrats did not pay any very serious attention to the issue in 1924. As Republican citizens and Democratic citizens suffer alike they should now cooperate to help your bill.

I am calling attention to this because I want the committee to understand that I wish merely to be of service, if possible, to an intelligent comprehension of what has taken place, and what the remedy is, and how to make the remedy safe and secure. After the election was over in November, 1920, there was a contraction of currency of one and a half billion dollars and more (see Exhibit 2a), supporting a credit structure of about \$15,000,000,000; there was a withdrawal of credit on behalf of the Federal reserve banks, and the member banks, of about \$6,000,000,000. There was however a duplication there. The withdrawal of credit from the reserve banks was supplemented by the withdrawal of credit from the member banks, so the matter should be regarded as about \$4,000,000,000, net, but the contraction had the most drastic effect upon the farmers and stockmen of the country; whose properties had increased in value because of the increased demand of the war.

Their property then worth (1920) \$79,000,000,000, went immediately down (1922) to \$58,500,000,000. That destructive contraction of credit had the effect of bankrupting the farmers of the country, because, in the meantime, they had bought land in addition to what they had, had incurred debts in the war basis; then they found that the value of their existing farms, and cattle which were used as part security, had gone off in value \$20,500,000,000. They found that the war debts remained; they found that the commodities which they produced on their farms had gone down to one-half or one-third of what they had been getting before, leaving no margin of value with which to pay their war-incurred debts.

From that staggering blow they did not recover until 1929 came, and they had a repetition of this disaster to their complete ruin.

From 1920 the dollar rose in value nearly 75 per cent in 1922, and about 50 per cent from 1929 to 1931.

I do not think it is advisable to blame individuals for what has taken place in these matters. I do not think we should turn aside from consideration of the economic questions to attempt to stigmatize individuals for having contributed to these panics or depressions. I hardly think that that will serve a useful purpose. They were trying to serve their own interests as they understand them, and to make money, "playing the game as the game is played." What are you going to do about it?

Mr. McFadden made a very important statement in the morning record, calling attention to the surpluses which had been built up by

the industrial companies, huge sums, \$60,000,000,000 surplus \$20,000,000,000 of cash \$10,000,000,000 of tax exempt United States bonds, and so forth. I think they were wise to build them up. They had some hard experience in 1920 from lack of cash reserves and naturally they did not want to repeat the experience in 1929 they had in 1921, when they found themselves short of capital; so, between 1923 and 1929, they sold to some 15,000,000 stockholders their stocks for some \$50,000,000,000 in cash credit (not counting the refinancing of stocks and bonds) and piled up such surpluses of cash and credits. Out of \$20,000,000,000 of cash or what is called cash there was loaned on call to the brokers in Wall Street billions of dollars under the title "On account of others." There are three of those accounts kept for public information: "On account of New York banks," "On account of outside banks," "On account of others." The New York banks normally supply about \$1,000,000,000 in call loans to brokers carrying stocks for distribution or sale. I call your attention to the record of the brokers' loans, (Exhibit 15 and 10) which are in very small type, but they ought to be put in very large letters on one end of this room to tell the world whence came panic, credit collapse, bankruptcy, depression, and unemployment. There should be a box-car letter record, giving the brokers' loans for the week of October 23, 1929, then you would know whence came a cessation of normal credit, pessimism, loss of property, stringent economy, diminished consumption, production, and unemployment.

What happened that week? The stock market had been skyrocketing by modern methods of high-powered salesmanship, skilled advertising, 10 to 30 per cent of the columns of the press employed, regiments of trained youths organized in groups, sent out over the country to sell stocks to the people. These sales withdrew \$50,000,000,000 of capital from 15,000,000 stockholders and from the savings of the Nation for stocks.

Such stocks went higher and higher in price from 1924 to 1929 until they were selling, in very many cases, twenty, thirty, forty, fifty times their net income. Many were selling at high figures which had no income at all, like Radio, which went up to 550, having no dividends, and having been subdivided five times such shares are down to about \$7 a share. International Combustion Engineering, selling for \$103 in 1929, with great enthusiasm on the market and its future value declared unlimited, is now selling at \$1 a share or less. The effect of this thing that happened in the latter part of October, 1929, was to bring down values of all stocks and bonds of this country, to from a third to a hundredth part of their previous market price.

What took place on the last week of October, 1929, was this: There was withdrawn in six days from October 23 to October 30, \$2,300,000,000 of brokers' loans on account of out-of-town banks and on account of others; within three months, \$4,500,000,000 of net credits were pulled out from under that market; and over \$8,000,000,000 of call loans have been withdrawn down to date. There followed a shrinkage of some \$60,000,000,000 of values in the stocks listed on the New York Stock Exchange alone, distributed among 15,000,000 stockholders (not to mention many other exchanges: Boston, Chicago, Frisco, and a hundred more), which caused a spirit of profound pessimism to sweep the country, caused a cessation of consumption, stringent

economy, and necessarily a like cessation of production, and resulted in the unemployment of 8,300,000 people.

When you do not produce, you do not employ. It necessitated a going down of "carloadings," railroad revenue, State revenue, city revenue, United States revenue, and of individual and corporate incomes; and of course interfered with the "balancing of the budget." The effect was that the people of this country lost, in what they thought they had, somewhere around \$150,000,000,000; and yet, strangely enough, all of our lands, our forests, our fisheries, our factories, our skilled workmen, our industries, our intelligent people, are all here.

Only one thing has happened: The stability of our credit system has been smashed by the operations on the New York Stock Market, entailing every economic evil.

Until you control the power to pile up billions of stock-market loans, subject to call in 24 hours, you will never have permanent stability in the purchasing power of the dollar or in the value of commodities or of human employment. Here is the weak spot. Here must be an adequate remedy. I urge you to give it attention. I beg you to study the tables and charts submitted herewith.

Gentlemen, to restore the price level, as this bill proposes to do, is a matter of supreme importance. Nothing could be more important. We are going to have difficulty in doing that. To get money out in circulation, although you provide a way, is not so easily done.

My good friend, Mr. John Simpson, gave you a very quick way to do it, and a very practical way, if it were not for well-known human weaknesses of Government. The remedy is as simple and easy as taking a drink of strong liquor; but there is great danger of wanting another drink soon afterwards, and then another, and your friends must take you to the hospital for convalescence. If we had dependable self-control the remedy would be perfect.

I was in Switzerland the day the death of our former President Harding was announced (1923) on the way to Germany. I bought German marks at the rate of 500,000 per dollar. They had been issued in just about the way some now want to issue money, to wit, to pay for Government debts. The next day in Stuttgart I bought a million German marks per dollar; in Berlin a week or two later 6,000,000 marks per dollar; and three weeks later, at Cologne, 120,000,000 marks per dollar. Before the year was out (1923) the rate was a billion and more marks per dollar. When the point came that the paper and ink was worth more than the money they quit printing such money and established the renten-mark on a gold basis of 23.8 cents per mark. There it stands to-day. That is an illustration of what can take place, if money be emitted without adequate control. There was some control in what Mr. Simpson said, because he was proposing to issue it only against actual work done, work looking to the service of the people of the country and creating real value, but it would open a door to inflate the currency and a door without adequate control, a door hard to close.

I want to call your attention, gentlemen, that in stabilizing the dollar you must be thoroughly well apprised as to what you mean by the dollar.

We have had much talk about the gold dollar. I want to put in this record something on the question of the gold dollar, which I

approve, a statement made by Gustave Cassell, who is one of the best authorities in the world on this question.

After pointing out that the American dollar, the Federal reserve note, is issued against commodity bills, only using gold for redemption purposes, he justly holds that this system changes the old gold standard (where gold was used as pocket money) and speaking of the old gold standard says (Postwar Monetary Stabilization, p. 70):

All this has disappeared. We now know that the value of gold can be controlled by suitable regulation of the world's monetary demand for gold. This alters the whole relation between currency and gold. Our ultimate purpose is now to give our currency a fixed value in terms of commodities. We regulate the value of gold with a view to making it correspond to that fixed value of our currency.

On page 73 he says:

Thus gold exports need not cause a fall in the American price level, nor need gold imports cause it to rise. Under such circumstances the United States are in a position to exercise an independent control over the value of their currency; the value of the dollar is simply the result of the way in which the monetary authorities of the United States choose to regulate the general supply of means of payment in the country. As the United States, in the way I have explained, is always able to buy and sell gold at fixed prices in the dollar so determined, the value of gold is bound to adjust itself to that of the dollar. The result is that the monetary policy of the United States determines the value of the currency of every other gold-standard country.

The Federal reserve authorities therefore control not only the general level of prices in the United States, but also the price level of all other gold-standard countries in the world.

You are not legislating for the United States alone, gentlemen; you are legislating to fix the prices of commodities throughout the world. The United States is leading in finance throughout the world. It shocked the whole world by the debacle of October, 1929, and deeply wounded the stability of credit all over the world. It drove many Nations from the gold standard in self-defense—You can and should make speedy amends.

There has been a great hoarding of gold in the world for monetary purposes above the demand and use for industrial purposes.

Men talk about gold being taken away from the United States to our injury. The outside world owes us \$20,000,000,000, and we could demand payment, and get additional gold, if we should need it, but we do not need to take gold from any source. What we have was in large part because of the productive power of the United States, which in times of war, sent to Europe unlimited supplies at war prices, and was compelled to give them credit when the world's surplus of available gold was exhausted. The total supply of gold in the world is about \$11,000,000,000 of which we hold about \$5,000,000,000 and France about \$3,000,000,000. The amounts required for industrial purposes are about \$2 a thousand on the entire volume of gold or about \$22,000,000 per annum for the world. The annual average production of gold in the world is about \$28 a thousand on the volume of gold or \$289,000,000 absorbed for monetary and industrial purposes.

Mr. GOLDSBOROUGH. Are you referring to annual production.

Mr. OWEN. Annual, yes. The demand for monetary purposes is what gives value to the additional gold which is being produced now above industrial uses. For industrial purposes, it is only about one-fourteenth of what is annually produced now; and to the extent that we can do away with the monetary demand for gold, we will increase

the prices of commodities, and we will also increase the prestige and power of the United States. I am not speaking from the standpoint of the United States alone, when I suggest limiting the monetary demand for gold.

For that reason we should take the gold certificates out of circulation and put them in the vaults as gold. That can be easily done. All you have to do is instruct the Federal reserve banks to exchange Federal reserve notes for gold certificates as they pass over the counter and redeem them. They can soon take them all up. There is about \$1,000,000,000 of them.

Mr. GOLDSBOROUGH. \$900,000,000, as I am told.

Mr. OWEN. The last statistics I saw was about \$1,000,000,000, but that is immaterial.

I am speaking to the bill. I am not speaking outside of the purposes of the bill under consideration when I say a provision should go into the bill that these certificates should be taken up by the Federal reserve banks and put into the United States Treasury as gold bullion, to the credit of the Federal reserve banks, as security to the United States for the one billion, more or less, of Federal reserve notes that would be furnished to the reserve banks for such exchange purposes.

Another way in which the monetary demand on gold can be diminished is to strike out gold as a part of the 35 per cent reserve against about \$2,000,000,000 of reserve deposits now secured by "gold or lawful money." I suggest that the word "gold" be stricken from this provision of the reserve act so the reserve shall be limited to lawful money, which is perfectly good for the depositing banks, and just as stable as the Government itself. These reserve deposits do not change substantially because they are on percentages fixed by law, and there is no real need of any gold reserve against deposits, which do not change in volume. These deposits can be safeguarded by 35 per cent of "lawful money," and that would release a monetary demand on gold of about \$700,000,000.

On the bookkeeping side of the Federal reserve banks the country was under the impression there was only about \$400,000,000 of gold in the Federal reserve banks now available as a basis of new credits or new reserve notes. The bookkeeping was correctly done, but it had the effect on the country of not enabling the country to clearly perceive that the reserve banks really had \$1,000,000,000 more of gold available for reserve credit or reserve notes than the country thought. I mean the uninformed country, and I do not mean those who knew about it. There was nothing presumably intentionally misleading about it and I do not wish to imply that.

However, there was available for credit and reserve notes \$1,400,000,000 of gold; add to that another \$900,000,000, for gold certificates obtainable and add another \$700,000,000 not needed as deposit reserve and there is about \$3,000,000,000, of available free gold less 40 per cent of the gold certificates already used against the reserve notes exchanged. If you take the \$3,000,000,000 of gold, you see what can be done, under the authority of the law as it exists, that you can use that \$3,000,000,000 on the 35 per cent basis to increase the reserve approximately three times, or increase the reserves of the banks to over \$8,000,000,000 additional, against which

the banks, under their normal practice of emitting credits of 10 to 1, could emit credits of \$80,000,000,000, which is of course twenty times any probable need.

Mr. GOLDSBOROUGH. May I interrupt you right at that point?

Mr. OWEN. Yes, sir.

Mr. GOLDSBOROUGH. On January the 19th I introduced a bill, H. R. 8026, for the purpose of taking care of the situation which you have just described. Will you read those two sections, sections 2 and 3, and see if they about approach what you have in mind? I want to make this suggestion before you continue: This bill was sent to the Secretary of the Treasury, and the Comptroller of Currency, and each member of the Federal Reserve Board, with a covering letter, and, as I understand it, it was from sections 2 and 3 of this bill that the Glass-Steagall bill was finally framed. Now, the purpose of the Glass-Steagall bill was to do the very thing that you have been discussing.

Mr. OWEN. Yes.

Mr. GOLDSBOROUGH. And it does do it, in part.

Mr. OWEN. Yes.

Mr. GOLDSBOROUGH. Now, will you proceed?

Mr. OWEN. The reason why the Glass-Steagall bill, perhaps, has not yet functioned as efficiently as the country had hoped or expected, although it has the power, is that unless member banks want to borrow the power is not used and the Reserve Banks are not using their independent power to buy United States bonds and expand credit and currency as they should do by order of Federal Reserve Board.

But I want to go back to "the dollar" and its true meaning in finance. I was speaking of the "gold dollar" a minute ago. Nobody carries gold in their pockets any longer. Gold is no longer a pocket money. People are perfectly satisfied with Federal Reserve notes, or national bank notes, or with any of the various kinds of money which are being circulated now. It is very important for this Committee and for Congress to realize what the dollar is that they are trying to stabilize. It is not gold, and it is not the pocket money, either, although they would be included. We have got about \$5,500,000,000 of currency, of which \$4,500,000,000 are pocket money, with from a third or more of it in hoarding. All of the banks combined have in their vaults less than \$1,000,000,000 of cash, against which they have a credit structure of about \$50,000,000,000 of deposits. Fifty times, as much deposits due as the cash they have in their vaults in their banks. It is any wonder that they feel apprehensive, when the dear people come in and say: "I want my money." It does not take but 2 per cent of them to get "my money" out and leave the balance of "our money" invisible and unavailable.

What is it that is actually functioning in this country as the "dollar"? It is the check, which was made current at par by the Federal Reserve act, and the check that passes as money in this country. I give a check for \$100 to my hotel; they treat it as money, they put it in the bank, and it goes through as money, and it functions as money; "it is money." It is a "means of payment." As Gustave Cassell says, "it is a means of payment", in effect money. It is a check upon deposits subject to check. Make no mistake about that.

What was the volume of these checks or exchanges in 1929? Seven hundred and thirteen billion dollars. In other words these checks exceeded the cash in every bank in the United States, more than

twice, on every average working day. That is the "dollar" you are stabilizing. The dollar of the check against the bank deposit. When you stabilize that dollar the deposit dollar, the check dollar and keep it stabilized, you will have rendered a service equal to that of any men that ever occupied a public place. This brilliant accomplishment will give this country its place in the world as the leader in finance and commerce, and the stabilizer of world commodity values.

In order to stabilize this "dollar," you have got to stabilize credit, and you have got to deal with and prevent those who know how to destabilize credit for profit, and you do not need to treat them as anything else except your own thoughtless or selfish children.

They who inflate or wrongfully contract have destabilized credit; those who are hoarding are destabilizing credit, although they do not realize it at all, much less do they realize that they are doing any harm or any wrong.

But the people go to the bank and say, "John, I have come for my money. Here is my check for \$275 of my savings, and I want it." John says, "Of course, Charlie; here it is." And he keeps on doing that, unable to protect the other depositors until John has no more money for his other depositors and poor John goes into bankruptcy, and may be a suicide.

We have had about 4,000 banks going into bankruptcy since 1929 from this cause largely. There is one banker down in Mississippi, a Mr. Clark, at Tupelo, who had the fine courage to tell "Charlie," "No, Charlie, I am not going to pay you your money. I am not going to pay any depositors any money, except for the transactions of his daily ordinary routine business. If he wants to pay his taxes, here it is; if he wants to pay for groceries, here it is; if he wants to pay for his current bills, here it is; but to take out our common reserve of currency and lock it up and thus deprive every single one of my other depositors of their equal right of participation in the use of this currency, and leave this bank broken, and my name discredited, no, I won't do it," said Mr. Clark, of Tupelo. Mr. Clark, of Tupelo, was a man of splendid courage, of sound character, and of very high common sense. He appealed to the people and his depositors through the public press and they sustained him fully. The bankers of New York showed equal sense when they issued clearing-house certificates, and cashiers' checks and other tokens for money in grave emergencies. These devices worked all right. So far as these deposits are checked on for business exchange or for current expenditures, they are within the implied contract. You must always realize that you are dealing with the "dollar" as credit, and you must realize that those who destabilize credit by overexpansion or by over-contraction are destabilizing the value of the (credit) dollar and of all commodities, which is surely against a wise public policy and ruinous to the social welfare.

In order to accomplish your real objective fully, I think you will finally come to the point where you will need to restrict the interest rates of call loans on the New York Stock Exchange, so that that great market place may not, against its will or purposes, be used as an instrumentality for breaking down the credit structure of the United States, bringing on a huge industrial depression, causing untold millions to be unemployed and miserable.

Mr. GOLDSBOROUGH. That is intended to be covered by the Glass bill.

Mr. OWEN. Yes; I understand there is some provision there for it, and I hope it may be effectively drawn with as little interruption as possible to liberty. The New York Stock Exchange is a wonderful market place, whose great benefits should be carefully conserved and safeguarded; they are efficient in the highest possible degree. It is a great machine, but a market place not charged with any lawful duty of stabilizing the credit of this country. That is not their business. That, if I may say so, I think is your business.

Now, a number of these bills which are here—they are of like purport—direct the Federal Reserve Board and the Federal reserve banks to use all of their powers to bring back the purchasing power of the dollar to normal, or bring back the commodity values to the general commodity index levels of 1926. I think that the general commodity index levels of 1926 should be estimated on 550 commodities. I think you should require the 784 commodities to be stricken out as a matter of law, and prohibit the Labor Department from using 784 commodities, because using 784 is against the public interest, because it wastes the public's money and is not a whit better than 550 commodities.

Mr. Stewart is in charge of that bureau. Nobody in this country is better advised than he, and if you want the last word in expert advice on the general commodity index of the purchasing power of the dollar, he is the man. Those records disclose what has taken place in this country with absolute precision and clearness.

We are told, and our own honored President has been misled into believing, that our disastrous condition in this country is due, in far larger part, to the conditions in Europe. Mussolini, I think, was quite within his rights and the truth when he said that the distress in Italy was due to the New York Stock Exchange smash. The violent credit contraction on this stock exchange was a credit shock to Europe and to the world and the records prove it.

I remind you that the raising of the discount rate of interest of the reserve bank for the purpose of controlling speculation on the New York Stock Exchange, did not control it at all. It merely laid a foundation for serious reaction. Your attention is called to the study made by Owens and Hardy on the influence of interest rates over speculation on the stock exchange. This is a very able work done under the auspices of the Brookings Institute, established under the Carnegie Foundation, available to anybody who wants to study it. They say and they clearly and fully prove that high interest rates do not stop speculations, and low interest rates do not restore life to a broken down market. You have recently, yourselves, seen that a very low interest rate has had no effect on the restoration of the price of stocks or commodities in two years. The value of a low rate on call is to prevent a high rate attracting into this market money needed elsewhere.

I call attention to the importance of considering this matter from the standpoint of credit, because there is the "dollar" which you have to stabilize; in this bill, I suggest certain additions which I will give to the reporter, as a suggested bill.

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

That the Federal reserve act, approved December 23, 1913, as amended, be further amended, as follows:

Add to section 14 the following paragraphs:

"(g) The Federal Reserve Board, the Federal reserve banks, the Comptroller of the Currency, and all persons under their supervision or control, shall use all their lawful powers and authority to restore the purchasing power of the dollar to the normal of 100, as established by the Bureau of Labor Statistics for the United States Department of Labor for the year 1926; and thereafter maintain it at that approximate level. In the accomplishment of this objective, the Federal reserve banks are authorized to receive, and the Federal reserve agents are authorized to deliver, Federal reserve notes against the obligations of the United States at par in amounts from time to time designated by the Federal Reserve Board, and to discount the notes of member banks for periods of sixty days when secured by the obligations of the United States, or by bonds of good repute and readily marketable, issued by any county, city, or State of the United States. The Federal reserve banks are instructed to exchange Federal reserve notes for gold certificates passing over their counters, to redeem all gold certificates held by them and to have such gold placed to their credit in the United States Treasury. They shall hereafter use lawful money in lieu of gold as a reserve against their deposits.

"(h) It is hereby declared the public policy of the United States that the banks chartered or operating in the United States and using its facilities, or charged with the duty of using the resources arising from the deposits of the people to stabilize credit and commodity values, to promote economic justice, to steady industry, agriculture, commerce, and employment, and in such services are entitled to the full cooperation and assistance of the United States Government."

When you give certain of these powers to the Federal Reserve Board, it seems better to make them not merely permissive, but mandatory, because the board is of a conservative view, and may not think it wise to act on your permission. I called the attention of the administration on May 27, 1929 to what was going on before that panic took place, five months before it took place, and pointed out 10 different ways in which credit and currency were being contracted under the reserve board and the reserve banks and how such policies would make the unavoidable bear reaction worse instead of less drastic.

Gov. W. P. G. Harding (former governor of the Federal Reserve Board) confessed some years after the panic of 1920-21 that the Federal Reserve Board and the Federal reserve banks put on a "drastic" deflation (contraction) in 1920-21.

The memorandum submitted by me May 27, 1929, as to the methods employed by the reserve system in contracting credit currency at that time was as follows:

(1) By refusing or failing to replace the \$500,000,000 of gold released to Europe in 1927 by substituting therefor Federal reserve notes as Gov. Roy A. Young very honestly stated on March 16 last at Cincinnati, Ohio.

(2) By selling Government securities and thus withholding money from the open market where it would be normally used for commerce, as Governor Young also stated.

(3) By ceasing to buy open market paper and thus absorbing money from the market by allowing these bills to be paid to the bank without reinvesting, as Governor Young also stated.

(4) By passing out gold certificates as a circulating medium in lieu of Federal reserve notes and thus diminishing their own powers of emission of reserve notes (money).

(5) It retired \$214,000,000 of reserve bank notes issued against bonds.

(6) It is now interfering with the rights of commerce and business to sell corporate stocks as a means of getting money and doing this by obstructing the credits required by members of the stock exchange for the orderly selling of stocks and bonds.

(7) They raised the rate of interest on rediscounts in 1928 three separate times, knowing that raising such rates of interest would exercise, did exercise, and does

exercise a dominating influence on acceptance rates, on prime commercial paper, on time collateral loans and on call rates to the serious injury of business throughout the country, compelling business men to pay artificial rates without cause, and submit to very excessive reorganization charges and commissions.

(8) By a 5 per cent rate for rediscounts, they well know that banks borrowing at 5 per cent have an overhead charge of \$1.35 per \$100 for handling loans, and that banks lending money at the legal rate of 6 per cent must suffer loss and are thus denied the accommodation the law intended.

(9) They are freezing national credit by a vast publicity of the unsound claim of a great stringency of credit, when there is no stringency.

We are actually extending foreign credits to the extent of \$2,000,000,000 per annum, while the Reserve Board makes this unreasonable claim.

The reserve banks having nearly three billions of gold could expand their gold holdings six hundred millions in a few months by the simple process of exchanging reserve notes for gold certificates passed over their counters and against three and one-half billions of gold they could emit reserve notes to the extent of two and one-half times, without going below the 40 per cent gold reserve, thus creating an available primary credit of over eight billions, and a secondary credit based on such currency very much larger. The fiction of the sellers of credit that there is a credit stringency in this enormously rich country, and with a banking system capable of extending all the credit commerce could possibly require, should deceive nobody.

(10) The reserve banks are brow-beating the member banks and interfering with their right to make call loans or time loans on New York stock collateral which is a usurpation of power not authorized by the reserve act.

The circulation of the country should have increased 4 per cent per annum from 1920 to 1929 at the rate of the increasing volume of production in order to maintain the commodity prices. This was not done, but the circulation went slightly down from 1926 to 1931.

The effect of this was neutralized by the public inflation of credit and bank deposits during this period up to 1929—by the member banks, public building programs, and high-pressure stock and bond selling campaigns. The conservatism of the reserve system was in part useful but not to the extent of penalizing legitimate business. They were fully justified in trying to stop the unwise speculation; I sympathize with the purpose but the remedies were worse than the disease. It did not serve the Nation or its producers to raise the rates of interest upon those who were creating values in this country; because it discouraged them, and it weakened their productive power, and in a measure it threatened to diminish the values of all inventories. The reserve banks kept raising the Federal reserve discount rate until they raised it to 6 per cent, a ruinous rate. When a banker borrows such 6 per cent money and uses it (he has an overhead charge of \$1.35), he has got to lend that money at 7.35 to break even. When you put an 8 per cent rate on those who are producing, you are taxing them with severity, and some of them out of existence, and you are laying such a foundation of business depression as to compel a severe bear reaction.

They allowed \$500,000,000 to go to Europe and did not replace it with Federal reserve notes. They retired the Federal reserve bank notes of \$214,000,000 to practically zero. By selling Government securities, they withdrew money from circulation, and their market operations served in the same way of withdrawing circulation; they cut down credits being extended by the reserve banks; they passed out gold certificates, and diminished their own powers of credit, in that way. They advised the country that stock market collateral even the choicest securities should not be taken by any of the banks as security, when that bank was borrowing anything from the Federal Reserve Bank.

Now, they were quite right in saying the reserve banks should not be used as a medium for speculation; but to announce a new sweeping rule, that impressed itself upon everyone of the member banks, that they ought not to recognize stock-market collateral as security, when such a system had been built up under the law, obviously left no place of escape when the collapse came, for those "in the market" and made the collapse just that much worse.

My great respect for the patriotism and high purposes of the Reserve Board makes it distasteful to publicly differ with their policy, but such public questions should be discussed with openness and sincerity.

I have been only speaking of what would naturally ensue under such policies. If you do not allow the banks to extend credit against the best stock-market collateral, that would leave no place of escape for those who have been buying on margin, on call loans held by foreigners or by companies not in the banking business, and whose managers might have had an adverse interest as large bear operators or affiliates, who profited by the calling of loans in 1929. In this matter you are dealing with "credit dollars," with deposits and checks, and that is the thought that I wish to impress on the committee. Your invitation to appear, I appreciate, and thank you for the courtesy.

I want to put into the record the tables and charts from which the statements that I have made are drawn, so as to show the committee that I have endeavored to speak accurately and that my statements are based upon actual statistical facts.

All of the evils which flowed to this country ensued immediately after the stock-market crash. That is a case of cause and effect, both as to time and place and reason; and when you clearly understand what has destabilized this credit system of ours, and what has caused this depression, I am quite sure that public opinion will support you in any wise steps that you may take to safeguard the future direct system of the United States.

The powers of the Federal Reserve Board and of the Federal reserve banks were abundantly great to have checked the collapse of values if they had had the vision to employ the authority given by law.

Instead of expanding their credit when credit was being contracted and correcting the dangerous evil they contracted their own credits from December, 1929, to June, 1930, about \$700,000,000 and only expanded it by Federal reserve notes when the depositors in banks were driven by fear to wholesale hoarding in August, 1930. Since January, 1932, they are again contracting credit (see chart, Exhibit 25).

Clearly what the authorities of the Federal reserve system should have done was to buy United States bonds and bills in the open market and emit Federal reserve notes to the extent necessary to stop the depression as far as it was due to the contraction of credit and currency. They were so advised by the experts of the Royal Bank of Canada and by others. They should have needed no advice for a remedy so self-evident. Unfortunately the existence of the depression, and its own speedy self-determination was asserted by high authorities in the administration and so we went from bad to worse until the whole country was led to the very edge of bankruptcy

and over 8,000,000 were unemployed and in misery. I call your special attention to the great meeting of the industrial leaders called by our honored President (p. 1, New York Times, December 5, 1927) when the country was given the assurances referred to and which proved so utterly unsound.

Now, I shall be glad to answer any questions that any of you gentlemen care to ask me.

Mr. GOLDSBOROUGH. First, Senator, without objection, you may insert the charts and tables that you have in the record. I would suggest that you try to get them to the clerk of the committee as soon as possible.

Mr. OWEN. I will give them to him immediately, and will place the exhibits as an appendix to my remarks.

Mr. GOLDSBOROUGH. Mr. Prall, any questions?

Mr. PRALL. I have no questions.

Mr. GOLDSBOROUGH. Mr. Busby?

Mr. BUSBY. I hesitate to ask you any questions after the fine exposition on the subject that you have made. You speak of the regulation of the power of the dollar being based on the regulation of the credit of the country, and that that is the primary point to which the legislation should point when dealing with the emergency situation facing us now, or a like situation that might recur.

Mr. OWEN. Yes, sir.

Mr. BUSBY. Of course, whatever credits are outstanding are assumed to be reckoned in regard to the true values back of those credits, or the credits could not exist, and that was the answer that I had in mind in directing your attention. In regulating the credit used in trade, or outstanding in this country, what relation would the credits bear to the true values, or to the commodities on which it might be based?

Mr. OWEN. We speak of the exchanges (that is interbank checks) being \$731,000,000,000 in 1929. They are now about \$400,000,000,000, and they have been cut down about one-half because of the diminishing demands of business. About four-fifths of the exchanges were due to stock-market transactions, and about one-fifth of it was due to industrial transactions; so that we would have a great abundance of credit, if the depositors and banks had the sense of perfect security and safety.

I think bank deposits and credits may be fairly assumed to be based on actual value though not always liquid, but credits in brokers' loans in September, 1929, had three-fourths of the market value suddenly destroyed and a market value of all property impaired by about \$150,000,000,000 as a result of credit contraction. You should note this.

You have pending here a number of bills proposing to guarantee bank deposits. If you had a guarantee of bank deposits, you would give great additional stability to credit. I do not speak of that from the standpoint merely of depositors, or of the bankers; I am speaking of it from the standpoint of employment in the United States, and from the standpoint of our national interest, and the happiness of the whole country.

Mr. BUSBY. When you speak of \$713,000,000,000 of bank credit, do you speak—

Mr. OWEN. No, no; of bank checks; of so-called exchanges.

Mr. BUSBY. Of the clearings?

Mr. OWEN. Yes.

Mr. BUSBY. I remember it to be \$702,000,000,000, with a correction made the next year, reducing it to \$691,000,000,000, which is immaterial.

Mr. OWEN. Quite immaterial.

Mr. BUSBY. But the bank clearings—

Mr. OWEN. Taken altogether, they were probably near a thousand billion in 1919, including intrabank checks and obviated checks.

Mr. BUSBY. Not the substantial long-term or outstanding credits that might have some relation to stabilizing my debt, or my contract, or my obligation—

Mr. OWEN. The outstanding long-term credits are quite stable in terms of dollars but not in value. You will notice, in the table which I will exhibit here (Exhibit 2), that time deposits did not fluctuate very much; they were more in 1930-31 than in 1929. The violent fluctuation was in the demand deposits, which fell off over \$3,000,000,000 from 1929-31.

Mr. BUSBY. Well, now, the action on those clearances that had to do with transactions on the stock exchange, the economic actions that took place with regard to them, also undermined the long-term credits?

Mr. OWEN. Well, the collapse of credit, and especially in so far as it affected values, as it affected the values of all stocks, property, mortgages, and real estate of the country, which means that it touched the pocketbooks of every individual in the country; and you are also touching the citizen's value as a borrower, his solvency as a borrower, and it therefore affects every bank in the country, and affects their depositors, directly and indirectly.

Mr. BUSBY. The reason I am asking you these questions is because the farm credits are usually of comparatively longer term than a great many types of credits; and through the upheaval that has come about, and the sinking of price levels, the farmers have been very greatly affected, so much that they are unable to meet their obligations, and are being sold out of house and home by the thousands, all of them; and the other type of credit that you mentioned, while interesting, would not concern me so much as the type of credit which would call for the sale of all of this type of substantial properties to meet a long term type of obligation.

Mr. OWEN. I know that the Stock Exchange panic and its consequences did hit the farmer, whether he had short time or long time obligations when farm products fell 50 per cent and many farm lands to zero. There is no doubt about that.

Mr. BUSBY. They began with the trouble with these immediate transactions, and have blasted every means of credit that relates back to the type which I am calling to your attention just now, did they not? What is your opinion as to that?

Mr. OWEN. My opinion is, the ordinary source of credit available for the farmer, and is the demand deposits of the banks of the United States, from which alone he can get loans from the bank, or from some depositor out of the moneys held by the bank, if the banks were not frightened, and if the depositors were not frightened; but the banks and the depositors are now more or less disturbed by fear, for the reason that the banks have only a small amount of

currency to meet a large amount of demand deposits, or time deposits which may be converted into demand deposits, if the people are sufficiently disturbed. Moreover their quick assets if sold would cause them loss on the present market.

Mr. BUSBY. Now, one other phase all credit, of course, must have: The situation being related to the true value of things, or the values that are placed on things men desire to own and possess, by reason of an impelling desire of the individual to buy, possess, or control those things; and so credit being based on substantial things, what would you have to say with regard to the control of this situation through the control of credit, independent of the relation of the currency system to the value of the intrinsic commodity?

Mr. OWEN. In the early days of Utah, Brigham Young used little slips of paper issued by the Mormon Church as trade tokens, and he kept the scrip at par with gold, simply by not making an over-issue. He would give them so many dollars in scrip for their butter and eggs and wool or gold dust or whatever they brought in, and they would use that scrip for the purpose of buying from the stores. It served a better purpose than bartering, it served the purpose of money; and since they did not issue it, except against actual value just as you say, they were based on value, it served the purpose, although they did not have any practical United States money circulation at that time. They would buy gold dust with this scrip of paper. The slips of paper were just as good as the gold dust, because the paper could be converted into merchandise. Our currency system is well founded; it is all right. The only thing weak about it has been, that we have conditions prevailing under our complex banking system that have destabilized credit at times and have frightened the people who hold the volume of available credit for lending purposes, that is, the banks. The banks have been frightened, they have been really frightened so they did not want to make any loans, for they did not know where this market was going, or when contraction and hoarding would end. They were afraid it would get worse.

Mr. BUSBY. I do not quite get my question over to you. What I have in mind is that, in order to issue credit, whether between individuals or by the Government, to its people generally, you must have value.

Mr. OWEN. That is right.

Mr. BUSBY. And when the system of evaluation of commodities causes the prices of those commodities to so drop that credit is out of proportion to them, you have the condition we have now, and gold which is the basis——

Mr. OWEN. You mean the measure of commodities is the means of payment?

Mr. BUSBY. That is what I am coming to.

Mr. OWEN. Whether it is with gold, or silver, or paper money, or barter, it comes back at last to value——

Mr. BUSBY. And credits is a means of payment, as long as the credits will stand up.

Mr. OWEN. We have built up that structure in this country by establishing over 20,000 banks, and these banks have \$21,000,000,000 of demand deposits and \$29,000,000,000 of time deposits, and they have all been issuing credit against value. You see, a bank starts out with a certain amount of money, and it makes a loan, and it is entered as a deposit.

Mr. BUSBY. What constitutes value, Senator?

Mr. OWEN. Value is necessarily controlled by supply and demand, and when we have a sudden stringency, usually a change in the supply of "means of payment," by the paralysis of the banking system and the credit system, and by the fear of the banks and the fear of depositors, you have a paralysis of business, because these values, upon which you originally relied, are no longer available, since the measure of those values, through the lack of supply of credit, has changed because of credit stringency artificially created, or created by any other means.

Mr. BUSBY. The plan you have in mind for legislation—

Mr. OWEN. You have got the plan in mind before you in your own bills.

Mr. BUSBY. We are considering it for legislation looking to some remedy for this situation; would you say that it would tend very largely to cure this recurring cycle of inflation and depression that has been experienced?

Mr. OWEN. Yes; but I would go further. I think that Congress should stabilize the exchange and provide security of bank deposits; I think that could be done with ease.

Mr. BUSBY. You spoke of your idea of a commodity basis, relating currency to it, instead of to something else.

Mr. OWEN. The dollar ought to be measured by its purchasing power in commodities, and you need not have any gold, at all, besides the currency we have, when you have \$14,000,000,000 of annual demand for the dollar through fixed charges now existing for taxes. That demand would take the dollar and keep it at a current figure where you have such demand, and you have also an enormous consumers' demand. Checks now run into \$400,000,000,000 that are recorded as exchanges and intrabanks checks are not recorded—a vast number of checks are abbreviated by bookkeeping. The obviating system of the internal structure of the New York Stock Exchange clearing house obviates checks going into the billions of dollars. These checks represent demand for dollars. The demand for dollars will sustain the value.

Mr. GOLDSBOROUGH. Senator Owen, I gather from what you have said, that you consider the 1926 price level as being the fair level to which we should return?

Mr. OWEN. Yes.

Mr. GOLDSBOROUGH. Well, now, it is going to be testified to before the committee, I am certain, that we should not go back to the 1926 level, that it is too far and unjust to the creditor. My own judgment entirely agrees with you, but in view of the fact that we are going to have this testimony, I would like for you to give your belief or reason for saying that 1926 level is, in your judgment, the fair level.

Mr. OWEN. I would say this, Mr. Chairman: That the levels preceding that, caused by war condition, when commodities went up to two and one-half times what they were before, was obviously unjust to creditors in the main, although I remind you that the huge estates and values which were built up in this country, were built up in dollars of that nature at that time (1917-1920). Do not forget *that* when these gentlemen offer you plans to bring this down below 1926. Another thing that is perfectly obvious and we might as well see it above the table as below the table is that here is a conflict between

those who owe money and those who have money owing them; that is where there is this conflict, between the debtor and creditor.

I have great respect for the magnanimity of the very wealthy men who gave away \$2,000,000,000 or more last year and \$2,000,000,000 or more the year before, because they are very generous in that respect, and they are also wise, because they can not carry it with them when they leave this mundane sphere, and they had better use it for the sake of their fellowmen when they have the opportunity. I commend and admire their generosity; but when you come to this standard of 1926, let us look at it. Here were commodity values selling in 1919-20 for approximately two and one-half times what they sold for in 1913, due to war conditions and to the increased credit facilities of the Federal reserve act but the new credit system justified a change to the level of 1926 of about 140 as compared to 1913.

Mr. GOLDSBOROUGH. One hundred and forty-six I think, would be accurate.

Mr. OWEN. One hundred and forty-six, and this price level was established after a crucial experience in the form of contracting credit and currency, to the extreme extent that the country could bear it. Then, from that condition, the country slowly rose back under normal conditions, until the condition of 1926 was the average between 1922 and 1928. Why should not that be the standard? There is no good answer that I can conceive.

Mr. GOLDSBOROUGH. The answer that will be attempted to be made will be this: That most of the contracts between the debtor and creditor have been made, based on lower levels than 1926; and, therefore, it would be unfair to the creditor class to have the level go back to 1926. I do not disagree with you; I want you to understand that; but I want to anticipate that kind of argument or reasoning.

Mr. OWEN. It is true that contracts made now might be affected by going back to 1926 level, but you have got to balance all the accounts in these matters, and the volume of debts are not new.

You have got to take into consideration also the general welfare, although constantly being renewed, the standards of living. The people of this country have got to get enough for their labor and for their supplies upon which to live; and the measure of value of 1926 appears to have afforded that and to have enabled the people to live fairly well, except the farmer. The farmer did not get enough even at that time to give him a fair standard of living, and for his sake it ought to be still higher, instead of lower. The country probably would be content to compromise on 100, but I think it should be on the basis of 550 commodities as a measure of value; because that means, relative to 784 commodities an index of 103 instead of 100.

Mr. GOLDSBOROUGH. Now, Senator, do you not think also that one reason for reestablishing this 1926 level, as soon as it can be done, is that there is a process of disintegration, wages are being lowered, standards of living are being changed? Do you not think, if we could get a reestablishment of the 1926 levels, and stabilize it right at that point, we would stop this very unfortunate reorganization among the masses of the people?

Mr. OWEN. To be sure. It would be better for the folks who have great wealth that the masses of men should be employed, much

better for them, and better for the stability of securities and better for the safety of capital as well as the employment of capital. Capital is unemployed as labor is unemployed in a period like this, except where capital is squeezing weak debtors. They get a very low rate of interest, and are not making money. Take the New York banks, and since the panic took place, they are not making any money, and many have lost money.

Mr. BUSBY. Along that line, I have some questions, but I think Professor Fisher wants to ask a question.

Doctor FISHER. Yes; because I want to hear the whole statement. I agree with practically everything Senator Owen has said, with the exception of this particular point in regard to what is the normal price level.

Mr. GOLDSBOROUGH. Professor Fisher, if you have a question, we can interrupt the regular order long enough for you to ask the question; but if you desire to make a statement, I am afraid that would disturb the committee.

Doctor FISHER. I wanted to ask a question, and inasmuch as you were referring to what you expected me to say——

Mr. GOLDSBOROUGH. The others will say the same thing, I have no doubt.

Doctor FISHER. I wondered whether you would have me make part of my statement while the Senator was here?

Mr. GOLDSBOROUGH. Well, suppose you do that, if Senator Owen has no objection.

Mr. OWEN. Not at all.

Doctor FISHER. If not out of order.

Mr. GOLDSBOROUGH. You can do it, all right.

Doctor FISHER. It seems to me, on the basis of such fragmentary knowledge as I have of the existing situation, that 1926 would, on the whole, be going back too far. From the standpoint of the farmer, I take it that it would not; that, perhaps from the standpoint of the farmer, we ought to go back still further. The farmers' debts are on a long-time basis, and they have been frozen, and there has been very little liquidation, except through bankruptcy, since 1922 or thereabouts; but we have to consider many other classes in this country besides the farmer. We do not want to go on the principle that two wrongs make a right, and we must not go too far back. The creditor is to be considered, just as much as the debtor. There is a question in my mind what the true, fair average is. I do not want to be dogmatic about it, and it may be that the ideas of the Senator are entirely right; but while he is here, if I may be permitted, I would like to bring up the question and see what he has to say. So after all, it is a sort of a question, rather than a statement, that I am making.

First, as to principle, it seems to me the principle on which we want to select the price level, if we are going to select one, at all, which we regard as just, as the average, or the center of gravity of debts, with respect both to the creditor and debtor, debts which are now outstanding, and those debts, those mortgages, that have been contracted since the crash of 1929, when we begin to fall from the level of 1926 in any substantial degree, those debts must be considered exactly as much, and they bulk very large. The debts prior to 1929 had been largely liquidated, whether in the normal due

course, or by bankruptcy. We can not consider the debts of 1920 on the same basis as the debts of 1930, because there are very few now surviving. We can not resurrect and can not help the losses that have already occurred, after liquidation, because it is impossible to reach them; any law would affect only the outstanding debts.

I tried, some years ago, to make an average, to get that center of gravity, and concluded at that time, which was before the war, the average outstanding debt was about one year old. There are so many phases you have got to take into account now, when we have so many Liberty bonds outstanding, starting in 1918, the average would go back further; and the frozen loans of the farmers and others now still outstanding, having been carried on a sort of moratorium, you would perhaps carry it back still further, perhaps two or three years. I am not a dogmatist, because I have made no calculation; but I would like to ask Senator Owen whether he has tried, through any statistical apparatus, to find out what is the average. My impression is different from his; and if the facts should show that he is right, of course I would favor 1926; but if 1926 was right before 1929, it is certainly not right now, because there has been a drop. His answer, perhaps, is that it was not right, and that it should have been higher. Maybe that is true, but it seems to me that it is possible, instead of our sitting here using offhand figures as to what is the average—it might be possible to have a real expert study, which would get the results correctly.

Mr. GOLDSBOROUGH. Professor Fisher, do you not think there are other elements to be considered, in addition to the arbitrary elements of debtor and creditor? Do you not think that this is a very necessary consideration, the fact that our people have not yet readjusted themselves to this changed condition. Do you not think that this is a very serious consideration, that this price level should be raised, in order that this complete readjustment may not be necessary, the complete readjustment of wages and standards of living? It seems to me that is really more important than any technical relation between debtor and creditor, which, as a matter of fact, the creditor class does not perceptibly feel. Do you care to comment on that?

Doctor FISHER. Yes. The creditor class, of course, does not mean simply the rich; because, in fact, the rich are generally in the debtor class; it means, among others, the savings banks depositors. So I do not think, we should consider the debtor entirely; I do not think we should consider the creditor less worthy of attention than the debtor.

Mr. GOLDSBOROUGH. I certainly had no such intention.

Doctor FISHER. I just wanted to make that clear, in view of what you have said; but in answer to the question as to the effect of this on industry and employment, it seems to me it should go right back, Mr. Chairman, to the very same thing; for, if we should stabilize at the present level, what would be the reason why it would not be just for business? Simply because it has debts—

Mr. GOLDSBOROUGH. It would take 20 years to readjust the country to the present price levels, and then it would be all right; but what is the use of going through all of that deadly period?

Doctor FISHER. Exactly; but I think it is clear that a rising price level is absolutely necessary. I am just as strong for that as yourself, or the ex-Senator. It is only a question of how far to raise it. But,

taking an hypothesis, suppose we did do the unjust thing of stabilizing at the price level just where it is now, I ask you what would be the reason that that would be unjust to business? It would be just the very same reason I have been discussing, because it would go right back to the debt proposition, the business proposition; and I say the reason that it would take 20 years, as you say, is that so many business men now have that tremendous millstone of debt around their neck. If you can wipe out the debt, and consider just the future, if there were no debts carried over from the past, the proper place to stabilize is just where we are; but because of these left-over debts of the business men and the farmer and everybody else, you have got to go back; and in going back you have got to take account of all of the debts.

Mr. GOLDSBOROUGH. We will be glad if you will comment on Professor Fisher's statement.

Mr. OWEN. My answer is this: That it is true that the creditor is often the debtor also, so that one account would balance the other. It is true that the interest of the savings account, in mutual savings banks, might be affected by this; but since it is on both sides of the account, and on the security against which it is held, obviously it would not do any harm because they are on both sides of the ledger; but this is not merely a question of individual debtors, or individual creditors, but it is a question of restoring the purchasing power of the people of the United States to the point where we can have normal conditions of living; and the best standard we have got is what actually occurred when 550 commodities were measured, one by one, for 365 days a year, through 1922, 1923, 1924, 1925, 1926, 1927, 1928, and 1929. It was at 98 in July, 1929. You can raise the technical question against anything which involves a large number of people, and show that policy would be unjust to some particular case. You have got to deal with this in a national aspect, and from national figures, nationally collected, and give the answer; and I regard that as more dependable than my own opinion could possibly be, or even the opinion of one who is as highly esteemed and valuable in this field as Doctor Fisher is. Even if there were an error the creditor would not be so greatly harmed as the weaker debtor. The case is more than a question of statistical data by experts. It deals with flesh and blood and life. That is my answer.

Are there any more questions?

Mr. GOLDSBOROUGH. Now, Senator Owen, I have advocated in this committee, and in speeches, and in the press that in this period of terrible fear and stress that the Federal reserve system, the Federal Reserve Board would be justified in announcing to the country its tremendous resources, as were available before the Glass-Steagall bill was passed, and which have been made available by that measure, and that they proposed to go into the market and purchase securities until the price level was raised to a given point.

Mr. OWEN. Yes.

Mr. GOLDSBOROUGH. Is not that justifiable?

Mr. OWEN. That is what they ought to do. I can not believe you will get them to do it unless you command them to do it; because the board is of a "conservative" temper, and they would probably think such action would be "radical." They would probably be told it

was "radical" by advisors in whom they have confidence, so that nothing but a legislative mandate could secure such action.

In dealing with legislative mandates, it ought to be cautiously used, because, after all, we must depend upon administrative integrity and the wisdom of those whom we engage to carry out our policies. When you have laid down a policy, as in this bill, it is assumed they would carry it out in substance; but if they were to use all of the enormous powers they have got, which are unlimited to all intents and purposes, and against the \$1,400,000,000 of gold, which they have now, they could establish over \$4,000,000,000 of reserves and enable the banks to support a credit structure of over \$40,000,000,000. They could buy United States obligations and pay for them with Federal reserve notes to \$7,500,000,000 when \$2,000,000,000 would be more than enough; \$1,000,000,000 I believe might suffice. The general commodity index would prove what was enough. There is no lack of available means of credit in any sense except fear. Regardless of member banks the reserve banks could buy bonds of the United States and correct conditions.

I think what is troubling the country is that the local banker does not want to ask any credit from the reserve bank, and the individuals who want credit, locally, are unable to get it, because the bankers are afraid they might get a run on their banks by their depositors, and for that reason they hesitate to make loans. That is a difficulty that is psychological, for the larger part because the banks with mutual support could pay off deposits in any probable run. The run never seems to exceed 35 per cent of the deposits.

Mr. GOLDSBOROUGH. If this statement of fact and statement of policy were made by the Federal Reserve Board, that they were going into the market, and were going to buy \$25,000,000 worth of Government securities each business day until the price level reached a certain point, do you not believe that the effect of that positive statement of what they were going to do, would be almost magical?

Mr. OWEN. I think it would have a powerful beneficial effect.

Mr. GOLDSBOROUGH. A very prompt effect, would it not?

Mr. OWEN. It would have an immediate effect, in my opinion, and they should do that very thing. That is precisely what I have been urging. Professor Fisher has told you he agrees with my contention.

Doctor FISHER. May I ask a question? This time it is a real question.

Mr. GOLDSBOROUGH. Yes.

Doctor FISHER. I would like to know what Senator Owen's answer would be to an objection of a friend of mine who talked with me recently. I have my own answer, which I will give at length, later, but I would like to know what his answer is, while he is here. He says that the powers of the Federal reserve system are great enough to do this. I think that many of them would deny it, as this friend denied, who said they only had the right, to this extent: That the powers of the Federal reserve system would not suffice, without the cooperation of the member banks, and that you have got to get thousands of banks in the United States to cooperate, to get any result. You said, yourself, a moment ago, that they would have psychological difficulties.

Mr. OWEN. I have just explained that.

Doctor FISHER. Can those powers be exercised, despite that difficulty, in your opinion, and how?

Mr. OWEN. Their powers of lending are open to be exercised upon demand and can be exercised in buying bonds and bills regardless of member banks. I have already explained that the member banks must make demand, and I have explained this morning why they were not making demands; so the question has already been fully answered, but in buying bonds with reserve notes you are adding directly to the circulating medium which would favorably affect commodity prices.

Mr. GOLDSBOROUGH. Senator Owen, it is also going to be contended before this subcommittee that, if we raise the price level in this country, it will immediately let in cheap foreign goods, and thereby tend to lower the price level, and then that more money will have to be put into the banks by the Federal reserve system, in order to raise the price level again, and that it will be a continuous process, until the price level is raised in foreign countries. I want to say first that I do not agree with that at all, but I want to get your reaction to that kind of question.

Mr. OWEN. The extract that I read from Gustave Cassell answered that fully; I opened my remarks with that quotation.

Mr. GOLDSBOROUGH. I want you to go more into detail.

Mr. OWEN. You will fix the commodity values of the world, is what you will do. Of course, other people will benefit by it, who are on the gold standard or gold basis. You are not on the old gold basis. The gold basis that we were formerly acquainted with was when gold was pocket money. The situation to-day is a totally different thing. You are now on a basis in which the volume and activity of checking accounts measures the means of payment." Of course, we can redeem in gold, yes; but you are making or confirming a commodity dollar under this bill. We have already got a commodity dollar; we have already substituted for gold a commodity value. That was done by the Federal reserve act, validly, distinctly, and intentionally. We emit these Federal reserve notes against commodity bills, and we can emit enough of them to supply all the needs of commerce, and measure the value of all commodities in process of manufacture and distribution.

Mr. Reginald McKenna, formerly Chancellor of the Exchequer of Great Britain, and for a long time chairman of one of the London banks, the London City and Midland Bank, having over \$2,000,000,000 of deposits, and one of the biggest banks in the world with over 3,000 branches, said, not long ago, that the world no longer is on the gold basis, but it was on the Federal reserve dollar basis. What he meant by that was that we have got a dollar which is measured 100 per cent by commodities. That is what it is measured by, and you will fix the standards of the world for commodities. Of course, the commodities abroad will have higher values when you do this, and ought to have. I would like to see the United States furnish them with enough money, enough gold, to give them the currency stability that they may require.

Mr. GOLDSBOROUGH. We would be benefited equally with them, would we not?

Mr. OWEN. Of course we would. The idea that trade is a one-sided matter is perfectly false. When I sell 1,000 bales of cotton to

Liverpool, I get its equivalent to my satisfaction, and if you multiply that transaction a million times, you do not change the principle. Our so-called balance of trade is merely an economic or arithmetical term that does not mean what it seems to say. The reason I say that, is this: When I sell a thousand bales of cotton to Liverpool, I get the equivalent to my satisfaction. Any balance of trade there? Two and two makes four. It balances itself. I bring back my equivalent of the cotton in one form or another; it may be in merchandise, it may be in gold, it may be in diamond earrings, but whatever it is, it is to my satisfaction, and there is no balance about it. This transaction multiplied a million times leaves no real balance. The balance of trade is merely an arithmetical calculation, to describe the relative condition between the recorded exports and recorded imports of merchandise. There are certain invisible factors which will enter, which will make the accounts a genuine balance; for instance, there is \$500,000,000 or \$600,000,000 invested by Americans abroad in exchange for service in hotels and agreeable entertainment. Marine freights, insurance, interest charges, and so forth. You can not enumerate it in statistics, but it is an equivalent return. You will fix the commodity values throughout the world, when you fix the dollar as measured by commodities, and commodities as measured by the dollar. When you have done that, you could abolish gold and silver, too, which are mere commodities, at last, but which have been given an special status by the worlds monetary demand.

As I said a few moments ago, the industrial demand for gold is about one-fourteenth part of the annual production. Besides the industrial demand for gold, there is no other demand for gold, except to transfer it as international balances. We have no pocket money demand for gold. We should diminish our own monetary demand for gold by taking the gold certificates out of circulation and striking out the use of it as a reserve against member bank deposits.

Our excessive accumulation of gold (with France also following suit) is causing many countries to go off the gold basis—Chile was the last announced to-day. It is a good thing to let up on the demand for monetary gold, and as it is done commodities will be favorably affected—that is, commodity values will rise.

Mr. McFADDEN. Mr. Chairman, may I ask a question?

Mr. GOLDSBOROUGH. Yes.

Mr. McFADDEN. I would like to ask a question to clarify my own mind and perhaps the point at issue here, in connection with gold. The statement was made earlier that there was \$900,000,000 of gold. The Treasury statement shows there is issued and outstanding of gold certificates \$1,600,000,000. The difference between the \$900,000,000 that was referred to the chairman and the \$1,600,000,000, I am assuming is held now by the Federal reserve; is that true?

Mr. OWEN. Yes; about \$700,000,000 by the Federal reserve agents and about a billion in general circulation.

Mr. McFADDEN. They are holding it as part of their legal reserve?

Mr. OWEN. Yes, sir.

Mr. McFADDEN. Now, did I understand you to suggest that the Federal reserve system buy the present free gold of the Treasury—

Mr. OWEN. No, sir.

Mr. McFADDEN. With Federal reserve notes?

Mr. OWEN. No, sir.

Mr. McFADDEN. What was your suggestion?

Mr. OWEN. My suggestion was that they should sequester the gold certificates as they passed over their counters, and replace them with reserve notes, and then redeem the certificates and have that gold put to the credit of the reserve banks in the Treasury of the United States.

Mr. McFADDEN. That would mean that the Federal reserve would acquire the \$1,600,000,000 of gold certificates and hold them?

Mr. OWEN. Yes, sir; in lieu of Federal reserve notes.

Mr. McFADDEN. I notice, in the past few months, that the Treasury has received between \$200,000,000 and \$300,000,000 of gold certificates. What effect has that had?

Mr. OWEN. It has had the effect of retiring this gold from circulation, and ultimately, expanding commodity values.

Mr. McFADDEN. What is the purpose or aim of the Treasury in doing that?

Mr. OWEN. I would not venture to say what the purpose of anybody is; I would simply say what would seem to be the effect of the transaction.

Mr. McFADDEN. Is not that quite in conflict with the present hoarding program?

Mr. OWEN. Yes.

Mr. McFADDEN. To get the people to stop hoarding, and the Treasury operation is taking gold certificates out of circulation.

Mr. OWEN. No; they are taking the gold certificates out of circulation, but what they are doing is diminishing the monetary demand on gold, and leaving the gold in the Treasury.

Mr. McFADDEN. I recognize that.

Mr. OWEN. Yes, sir.

Mr. McFADDEN. Increasing the free gold supply.

Mr. OWEN. It will have the ultimate effect of increasing the commodity values, which I am sure the administration would like to do, because it has its economic value, as well as a political value.

Mr. McFADDEN. If I may ask you one other question, I was interested in your reference to the fact that we are issuing a commodity dollar now. Have not we changed the plan a bit by the Glass-Steagall bill, and did not we change the plan—

Mr. OWEN. Slightly, yes.

Mr. McFADDEN. By permitting the Federal Reserve Board, itself, to go into the open market and buy paper, and issue money, rather than have money going up and down, and the notes of the Federal reserve going up and down?

Mr. OWEN. It would be much better to have a system based upon the flow of commodities; but when you have your credit system paralyzed, as at present, it is worth while to use the credit powers of the Government to correct what has been done, temporarily, at least.

Mr. McFADDEN. With the increased use of Government bonds to secure the issuance of Federal reserve notes.

Mr. OWEN. The Glass-Steagall bill authorized a limited use of Government obligations for the issuance of reserve notes.

Mr. McFADDEN. The point I was making was that their commodity prices are not the controlling factor entirely in the issue of Federal reserve notes to-day.

Mr. OWEN. No, not entirely but the reserve notes are now contracting.

Mr. McFADDEN. To the extent that we place Government securities back of the Federal reserve notes, are we increasing or diminishing the value of the dollar?

Mr. OWEN. To the extent that we emit notes and put them in circulation, it would have a tendency to increase commodity values.

Mr. McFADDEN. And decrease the value of the dollar?

Mr. OWEN. Yes, unless hoarded.

Mr. GOLDSBOROUGH. Now, I want to make this statement for the record: The \$900,000,000 of gold certificates that I referred to were \$900,000,000 which were in circulation, and not now in the vaults of the Federal reserve banks.

Mr. OWEN. Yes; I understood the statement, I understood distinctly.

Mr. GOLDSBOROUGH. Now, Senator Owen, have you any further statement?

Mr. OWEN. No; I think I have nothing further.

Mr. GOLDSBOROUGH. The subcommittee, Senator Owen, has been very much inspired and helped by the wonderful explanation that you have made of the Federal reserve system and the present condition in which we find ourselves, and on behalf of the subcommittee I extend to you our most profound thanks.

Mr. OWEN. I am deeply obliged to the committee for its courteous invitation to comment on the bill. I wish to say, in this connection, that I have done so as an American citizen exclusively, and as a friend, a true friend, of all of our interests, the biggest banks in the country as well as the smaller banks in the country, and for our people, and whether they are Democrats or Republicans, because we are all suffering alike from the economic condition, although comparatively only a few thousands know how it was brought about, and about which there has been very general confusion in the public press. As I say, I have seen the enumeration of thirty different reasons given, but there is only one substantial great reason, and that was the excessive expansion of credit in the stock market (1927-1929) and the tragic "smashing" of credit on the stock market, by calling broker's loans by the billions of dollars, the violent shrinking in the values of stocks, bonds, and all property throughout the country, which imposed its devastating effect everywhere as between debtors and creditors. Many creditors have suffered greatly as well as the debtors. Most business men are both debtors and creditors.

Mr. GOLDSBOROUGH. Do you not, as a matter of fact, think that, if the 1926 level of prices was resumed, that the creditors of this country, taken as a whole, would be just as much relieved as the debtors would?

Mr. OWEN. Possibly more so. You can look at the values of the securities held by the savings banks, and by the insurance companies, our great insurance companies, wonderful institutions as they are; look at their bonds, look at the farm mortgages and mortgages on real estate; look at the effect upon our great banks, magnificent institutions, but look at the effect upon their securities, look at the effect upon their stocks; look at the effect upon the value of the stock of the National City Bank, for example, diminished to one-tenth of what it was. It was overvalued, in the first place, of course, and now undervalued; but they have suffered too, and they are only human beings like the farmers, of course; and the thing to do is try, seriously and

earnestly, to understand what it is that has happened, and take the needed steps to make sure that it can not happen again.

Think of the future. This country ought to have complete stability in credit at low rates, and when it has, our manufacturers in this country, with their mass production; our industrial populations, with its skill and industry; our great railways and our farmers, will all make this country blossom like a rose and we will, indeed, lead the world in every way, financially, commercially, and spiritually; but you can not have spiritual progress in the face of deadly misery. It is enough to turn a heart of stone to tears, to see what is transpiring in this country.

(The charts and tables referred to are as follows:)

1. Resources and liabilities of all banks reporting, June 30, 1931.
2. Resources in comparison for 1927-1931.
- 2a. Specified resources Federal reserve banks.
3. Circulation statement United States money.
- 3a. Gold and silver in United States and in Europe.
4. Imports and exports, 1914-1931 merchandise.
5. Purchasing power of the dollar, 1913-1931.
- Exchanges by checks.
- 5a. Chart showing purchasing power of the dollar, 1914-1931.
6. Paper currency of United States by denominations, new issues.
7. Stock and bond averages, 1929-1931.
8. Stock price index chart, 1922-1931.
9. Wholesale prices chart, 1924-1931.
10. Brokers' loans, 1926-1931. Chart.
11. Volume of manufacturing production, 1927-1931.
12. Factory employment and pay rolls, 1920-1931.
13. Comparative earnings, 550 industrial companies, 1927-1931.
14. Freight car loadings, 1924-1931.
15. Brokers' loans in detail—Table, 1926-1931.
16. Brokers' loans in detail—Table, 1926-1931.
17. Reserve bank credits and factors, 1917-1932.
18. Building contracts, 1919-1931.
19. New corporate issues, 1919-1931.
20. Transactions daily New York Stock Exchange October, November, 1929.
21. Loans reporting member banks and investments, 1919-1931.
24. Gold surplus chart.
25. Reserve bank credit chart.
26. Physical volume of Industrial Production.
27. Price level chart.

These tables show by chart (Exhibit 10) and in detail (Exhibit 15) the brokers' loans on call and how they were contracted October, 1929. The fact that coincidentally with the calling of these brokers' loans, bank credits, deposits, and discounts went down in billions (Exhibit 2), stock prices violently fell (Exhibit 8), and within two years fell 75 per cent (Exhibit 7), that wholesale prices then steadily declined (Exhibits 9 and 27), that the volume of production then fell (Exhibits 11 and 26), that factory employment and pay rolls then fell (Exhibit 12), that corporation incomes fell to one-third (Exhibit 13), that freight-car loadings then fell (Exhibit 14), that building contracts then fell heavily (Exhibit 18). That then the purchasing power of the dollar violently rose in terms of stocks (Exhibit 7) and in terms of commodities (Exhibit 5 and 27) proves the cause and effects of credit contraction.

The gold surplus appears, chart 24, and the reserve bank resources are shown (Exhibit 25; 2a, 17).

EXHIBITS TO THE REMARKS OF ROBERT L. OWEN BEFORE SUBCOMMITTEE OF
BANKING AND CURRENCY COMMITTEE ON STABILIZATION BILLS MARCH 18,
1932

EXHIBIT 1

Principal items of resources and liabilities of all reporting banks in continental United States as compared with similar data for member banks of the Federal reserve system, on or about June 30, 1931

[P. 140, Report of the Comptroller of the Currency]

| Items | All reporting banks: ¹ 22,007 banks (000 omitted) | Member banks | | | Mutual savings banks: ² 600 banks (000 omitted) | Private banks: ³ 284 banks (000 omitted) |
|------------------------------------|---|---------------------------------|---|---|---|---|
| | | 7,782 banks (000 omitted) | Per cent to all reporting banks ¹ | Per cent to all reporting banks, ¹ except mutual savings and private | | |
| Loans ³ | 35,006,019 | 21,816,243 | 62.32 | 75.46 | 6,051,133 | 44,581 |
| Investments..... | 20,006,732 | 12,106,279 | 60.51 | 78.03 | 4,475,169 | 16,934 |
| Cash..... | 864,434 | 519,135 | 60.05 | 62.96 | 38,229 | 1,656 |
| Capital..... | 3,637,826 | 2,620,606 | 72.04 | 72.17 | ----- | 6,842 |
| Surplus and undivided profits..... | 5,783,884 | 3,545,550 | 61.30 | 76.35 | 1,133,533 | 6,429 |
| Deposits (demand and time)..... | 50,260,409 | 30,137,692 | 59.96 | 75.03 | 10,034,842 | 59,083 |
| Aggregate resources..... | 69,853,483 | 45,288,588 | 64.83 | 77.31 | 11,191,788 | 82,145 |

¹ Exclusive of banks in Alaska and insular possessions.

² Included in all reporting banks in column 1.

³ Including overdrafts.

EXHIBIT 2

Resources and liabilities of all reporting banks on or about June 30, 1927-1931

[P. 139, Report of the Comptroller of the Currency]

[In thousands of dollars]

| | 1927 (27,061 banks) | 1928 (26,213 banks) | 1929 (25,330 banks) | 1930 (24,079 banks) | 1931 (22,071 banks) |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|
| RESOURCES | | | | | |
| Loans and discounts (including rediscounts)..... | 37,270,378 | 39,542,067 | 41,376,269 | 40,460,670 | 35,164,850 |
| Overdrafts..... | 43,450 | 50,407 | 56,857 | 49,438 | 45,650 |
| Investments..... | 17,255,093 | 18,771,814 | 17,348,738 | 17,944,728 | 20,060,153 |
| Banking house, furniture and fixtures..... | 1,580,105 | 1,663,696 | 1,754,454 | 1,810,357 | 1,808,254 |
| Real estate owned other than banking house..... | 399,473 | 403,967 | 390,816 | 425,151 | 446,488 |
| Cash in vault..... | 1,007,896 | 887,845 | 819,928 | 865,970 | 884,327 |
| Reserve with Federal reserve banks or other reserve agents..... | 2,932,954 | 3,105,840 | 3,192,200 | 3,433,102 | 3,402,189 |
| Due from banks..... | 3,967,448 | 3,616,408 | 3,567,525 | 3,994,325 | 4,133,720 |
| Exchanging for clearing house and other cash items..... | 2,181,167 | 1,753,098 | 1,691,772 | 2,884,635 | 1,946,709 |
| Other resources..... | 1,494,594 | 1,779,186 | 1,973,946 | 2,151,748 | 2,316,809 |
| Total..... | 68,132,558 | 71,574,328 | 72,172,505 | 74,020,124 | 70,209,149 |

Resources and liabilities of all reporting banks on or about June 30, 1927-1931—Con.

| | 1927 (27,061 banks) | 1928 (26,213 banks) | 1929 (25,330 banks) | 1930 (24,079 banks) | 1931 (22,071 banks) |
|--|-------------------------|-------------------------|------------------------|------------------------|------------------------|
| LIABILITIES | | | | | |
| Capital stock paid in..... | 3,376,498 | 3,525,522 | 3,796,978 | 3,889,419 | 3,669,998 |
| Surplus..... | 3,764,527 | 4,145,529 | 4,611,698 | 4,968,999 | 4,792,851 |
| Undivided profits—net..... | 1,131,206 | 1,226,361 | 1,097,386 | 1,154,804 | 1,010,128 |
| Reserves for dividends, contingencies, etc... (¹) | (¹) | (¹) | 161,483 | 268,276 | 358,102 |
| Reserves for interest, taxes, and other ex- penses accrued and unpaid..... | ² 70,326 | ² 83,753 | 142,776 | 122,737 | 97,839 |
| National-bank circulation..... | 650,946 | 649,095 | 649,452 | 652,339 | 639,304 |
| Due to banks..... | 4,289,337 | 4,081,028 | 3,629,197 | 4,337,120 | 4,828,741 |
| Certified and cashiers' checks and cash letters of credit and travelers' checks outstanding..... | ³ 1,205,821 | ³ 882,519 | 837,430 | 1,615,277 | 1,083,003 |
| Demand deposits..... | 23,784,702 | 24,306,651 | 24,350,164 | 24,098,516 | 21,326,210 |
| Time deposits (including postal savings).... | 26,381,693 | 28,538,109 | 28,787,617 | 29,465,361 | 29,159,361 |
| United States deposits..... | 194,024 | 222,816 | 286,112 | 213,722 | 448,189 |
| Deposits not classified ⁴ | 895,730 | 399,938 | 20,121 | 117,199 | 19,240 |
| <i>Total deposits</i> | ⁵ 56,751,307 | ⁵ 58,431,061 | 57,910,641 | 59,847,195 | 56,864,744 |
| Bills payable and rediscounts..... | 829,508 | 1,566,146 | 1,630,703 | 665,817 | 457,620 |
| Agreements to repurchase securities sold.... | ² 3,529 | ² 7,217 | 55,523 | 47,678 | 312,335 |
| Acceptances executed for customers..... | ² 248,184 | ² 411,763 | 449,917 | 585,969 | 938,407 |
| Other liabilities..... | ⁵ 1,306,527 | ⁵ 1,527,881 | 1,665,948 | 1,816,891 | 1,067,821 |
| Total | 68,132,558 | 71,574,328 | 72,172,505 | 74,020,124 | 70,209,149 |

¹ Included in undivided profits.² For national banks only; figures for banks other than national included in undivided profits.³ Revised to include cash letters of credit sold by national banks and outstanding.⁴ For banks other than national.⁵ Includes cash letters of credit sold by banks other than national and outstanding.

In addition there are:

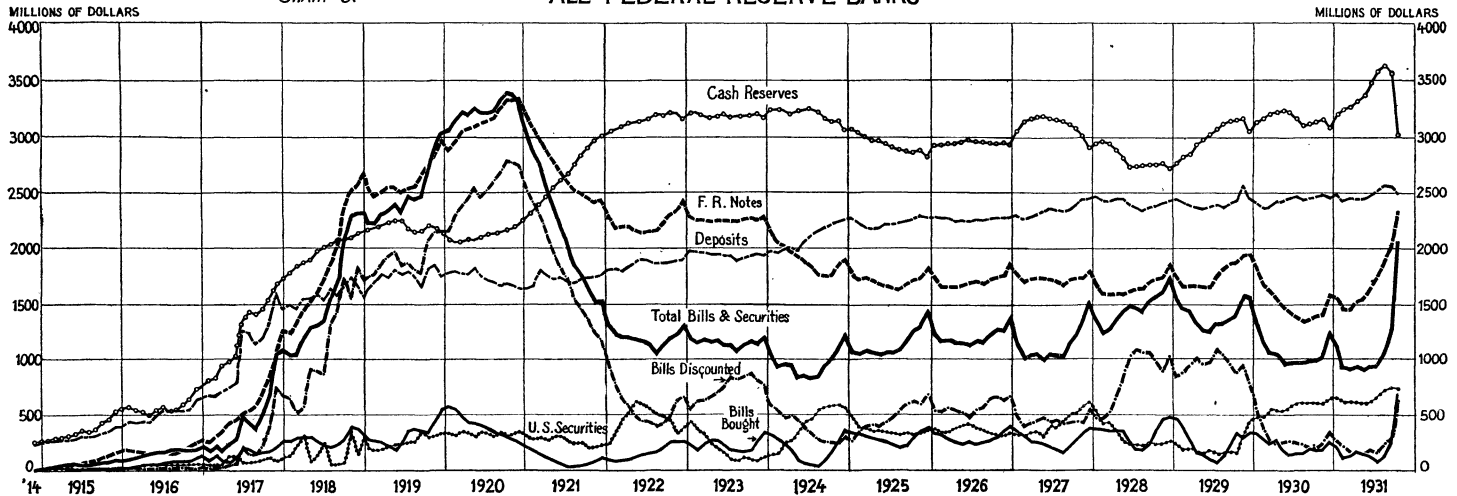
| | |
|---|-----------------------|
| Bank resources above cited..... | \$70,209,140,000 |
| The Federal land bank resources..... | 1,286,988,000 |
| The joint stock and bank resources..... | 616,620,000 |
| The Federal intermediate credit resources..... | 170,220,000 |
| | 72,282,971,000 |
| Building and loan association resources (number, 11,767; members, 12,336,754)..... | 8,828,611,000 |
| Total | 81,111,582,000 |

It will be observed that loans from 1929 to 1931 fell over \$6,200,000,000 and that demand deposits fell over \$3,000,000,000 following the stock-market panic.

EXHIBIT 2A

ALL FEDERAL RESERVE BANKS

CHART J.



Figures for 1914-1918 are for last report date of each month; beginning with 1919 they are daily averages. Deposits are net through February, 1921, total after that month.

Reserve notes and bills and securities fell after stock market panic of October, 1929.

STABILIZATION OF COMMODITY PRICES

EXHIBIT 3

Circulation statement of United States money June 30, 1931

[P. 146, Report of the Comptroller of the Currency, 1931]

| Kind of money | Total amount | Money held in the Treasury | | | | | Money outside of the Treasury | | | | |
|----------------------------|----------------------|----------------------------|--|--|---|-------------------|-------------------------------|--|----------------------|-------------------------|---|
| | | Total | Amount held in trust against gold and silver certificates (and Treasury notes of 1890) | Reserve against United States notes (and Treasury notes of 1890) | Held for Federal reserve banks and agents | All other money | Total | Held by Federal reserve banks and agents | In circulation | | Population of continental United States (estimated) |
| | | | | | | | | | Amount | Per capita ¹ | |
| Gold coin and bullion | \$4,955,921,258 | \$3,696,078,099 | \$1,701,514,389 | \$156,039,088 | \$1,776,690,378 | \$61,835,014 | \$1,259,842,230 | \$896,822,030 | \$363,020,200 | \$2.93 | |
| Gold certificates | (1,701,514,389) | | | | | | 1,701,514,389 | 705,004,841 | 996,509,548 | 8.03 | |
| Standard silver dollars | 539,958,327 | 498,497,281 | 494,588,776 | | | 3,908,505 | 41,461,046 | 7,135,008 | 34,326,038 | .28 | |
| Silver certificates | (493,349,026) | | | | | | 493,349,026 | 116,200,102 | 377,148,924 | 3.04 | |
| Treasury notes of 1890 | (1,239,750) | | | | | | 1,239,750 | | 1,239,750 | .01 | |
| Subsidiary silver | 308,619,365 | 5,692,865 | | | | 5,692,865 | 302,926,500 | 29,779,482 | 273,147,018 | 2.20 | |
| Minor coin | 126,837,033 | 4,607,053 | | | | 4,607,053 | 122,279,980 | 4,886,964 | 117,393,016 | .95 | |
| United States notes | 346,681,016 | 3,523,480 | | | | 3,523,480 | 343,157,536 | 43,730,245 | 299,427,291 | 2.41 | |
| Federal reserve notes | 2,101,578,450 | 1,402,130 | | | | 1,402,130 | 2,100,176,320 | 391,747,538 | 1,708,428,782 | 13.77 | |
| Federal reserve bank notes | 2,973,962 | 42,487 | | | | 42,487 | 2,931,475 | 2,097 | 2,929,378 | .02 | |
| National bank notes | 697,004,446 | 17,890,685 | | | | 17,890,685 | 679,113,761 | 30,750,408 | 648,363,353 | 5.22 | |
| Total June 30, 1931 | 9,079,623,698 | 4,227,734,850 | 2,196,103,165 | 156,039,088 | 1,776,690,378 | 98,902,219 | 7,047,992,013 | 2,226,058,715 | 4,821,933,898 | 38.86 | 124,076,000 |
| Comparative totals: | | | | | | | | | | | |
| May 31, 1931 | 8,782,098,264 | 4,199,237,014 | 2,192,766,980 | 156,039,088 | 1,760,532,278 | 89,898,668 | 6,775,628,230 | 2,073,352,798 | 4,702,275,432 | 37.92 | 124,002,250 |
| June 30, 1930 | 8,306,564,064 | 4,021,936,763 | 1,978,447,640 | 156,039,088 | 1,796,239,235 | 91,210,800 | 6,263,074,941 | 1,741,086,979 | 4,521,987,962 | 36.71 | 123,191,000 |
| Oct. 31, 1920 | 8,479,620,824 | 2,436,864,530 | 718,674,378 | 152,979,026 | 1,212,360,791 | 352,850,336 | 6,761,430,672 | 1,063,216,060 | 5,698,214,612 | 53.21 | 107,096,005 |
| Mar. 31, 1917 | 5,396,596,677 | 2,952,020,313 | 2,681,691,072 | 152,979,026 | | 117,350,216 | 5,126,267,436 | 953,221,522 | 4,172,045,914 | 40.23 | 103,716,000 |
| June 30, 1914 | 3,797,825,099 | 1,845,569,804 | 1,507,178,879 | 150,000,000 | | 188,390,925 | 3,459,434,174 | | 3,459,434,174 | 34.93 | 99,027,000 |
| Jan. 1, 1879 | 1,007,084,483 | 1,212,420,402 | 21,602,640 | 100,000,000 | | 90,817,762 | 816,266,721 | | 816,266,721 | 16.92 | 48,231,000 |

¹ Per capita Oct. 31, 1920, was \$52.21.

EXHIBIT 3A

Amount of gold and silver held by the United States and various European countries

| | Gold | Silver |
|---|--------------------|-----------------|
| In 1929, the United States (total)..... | \$4, 283, 923, 000 | \$855, 498, 000 |
| In 1930, the United States (total)..... | 4, 593, 488, 000 | 851, 665, 000 |
| In 1929— | | |
| France..... | 1, 633, 402, 000 | 8, 675, 000 |
| Germany..... | 559, 533, 000 | 218, 064, 000 |
| Great Britian..... | 711, 303, 000 | 260, 000, 000 |
| Russia..... | 147, 019, 000 | 17, 810 |
| In 1930— | | |
| France..... | 2, 105, 363, 000 | 23, 034, 000 |
| Germany..... | 543, 494, 000 | 229, 843, 000 |
| Great Britian..... | 718, 422, 000 | 259, 722, 000 |
| Russia..... | 248, 883, 000 | 11, 454, 000 |

The per capita circulation in paper currency backed by gold, silver and/or credit is approximately as follows, in terms of dollars:

| | |
|------------------------|----------|
| The United States..... | \$33. 39 |
| France..... | 64. 90 |
| Germany..... | 20. 35 |
| Great Britian..... | 40. 62 |
| Russia..... | 1. 31 |
| China..... | 1. 18 |

Total gold and silver in world and United States imported net gold over exports from 1914 to 1931.

| | |
|--|---------------------|
| Total gold in world..... | \$11, 522, 579, 000 |
| Total silver in world..... | 4, 781, 741, 000 |
| From 1914 to 1931, United States imported net gold over exports..... | 3, 600, 744, 275 |

EXHIBIT 4

Imports and exports of merchandise, calendar years 1914 to 1930, inclusive, and from January 1 to September, 30, 1931

[P. 148, Report of the Comptroller of the Currency, 1931]

| | Imports of merchandise | Exports of merchandise | Excess of exports over imports |
|-----------------------------------|-------------------------------|-------------------------------|--------------------------------|
| 1914..... | \$1, 789, 276, 001 | \$3, 113, 624, 050 | \$1, 324, 348, 049 |
| 1915..... | 1, 778, 596, 695 | 3, 554, 670, 847 | 1, 776, 074, 152 |
| 1916..... | 2, 391, 635, 335 | 5, 482, 641, 101 | 3, 091, 005, 766 |
| 1917..... | 2, 952, 465, 955 | 6, 226, 255, 654 | 3, 273, 789, 699 |
| 1918..... | 3, 031, 304, 721 | 6, 149, 241, 951 | 3, 117, 937, 230 |
| 1919..... | 3, 904, 364, 932 | 7, 920, 425, 990 | 4, 016, 061, 058 |
| 1920..... | 5, 278, 481, 490 | 8, 228, 016, 307 | 2, 949, 534, 817 |
| 1921..... | 2, 509, 147, 570 | 4, 485, 031, 356 | 1, 975, 883, 786 |
| 1922..... | 3, 112, 746, 833 | 3, 831, 777, 469 | 719, 030, 636 |
| 1923..... | 3, 792, 065, 963 | 4, 167, 494, 080 | 375, 427, 117 |
| 1924..... | 3, 609, 962, 579 | 4, 590, 983, 845 | 981, 021, 266 |
| 1925..... | 4, 226, 589, 263 | 4, 909, 847, 511 | 683, 258, 248 |
| 1926..... | 4, 430, 888, 000 | 4, 808, 660, 000 | 377, 772, 000 |
| 1927..... | 4, 184, 742, 000 | 4, 865, 375, 000 | 680, 633, 000 |
| 1928..... | 4, 091, 444, 000 | 5, 128, 356, 000 | 1, 036, 912, 000 |
| 1929..... | 4, 399, 361, 000 | 5, 240, 995, 000 | 841, 634, 000 |
| 1930..... | 3, 060, 908, 000 | 3, 843, 181, 000 | 782, 273, 000 |
| 1931 (9 months)..... | ¹ 1, 619, 281, 000 | ¹ 1, 842, 509, 000 | ¹ 223, 228, 000 |
| Total, 17 years and 9 months..... | 60, 163, 261, 337 | 88, 389, 085, 161 | 28, 225, 823, 824 |

¹ Preliminary, subject to correction.

Following the panic October, 1929, exports fell off about \$3,000,000,000; imports fell off over \$2,000,000,000 from 1929 to 1931.

EXHIBIT 5

Purchasing power of the dollar expressed in terms of wholesale prices

[1926=\$1.000]

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Average for year |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------------|
| 1913 | \$1.422 | \$1.433 | \$1.431 | \$1.435 | \$1.451 | \$1.449 | \$1.439 | \$1.435 | \$1.416 | \$1.420 | \$1.427 | \$1.447 | \$1.433 |
| 1914 | 1.458 | 1.464 | 1.471 | 1.479 | 1.484 | 1.484 | 1.486 | 1.437 | 1.425 | 1.471 | 1.481 | 1.486 | 1.468 |
| 1915 | 1.458 | 1.458 | 1.466 | 1.456 | 1.499 | 1.464 | 1.443 | 1.458 | 1.464 | 1.425 | 1.395 | 1.351 | 1.439 |
| 1916 | 1.299 | 1.274 | 1.244 | 1.224 | 1.212 | 1.206 | 1.199 | 1.175 | 1.151 | 1.098 | 1.027 | 1.008 | 1.170 |
| 1917 | .979 | .957 | .929 | .876 | .829 | .820 | .813 | .801 | .810 | .818 | .814 | .814 | .851 |
| 1918 | .800 | .815 | .791 | .779 | .781 | .775 | .758 | .745 | .727 | .734 | .734 | .734 | .762 |
| 1919 | .744 | .770 | .762 | .752 | .739 | .737 | .709 | .693 | .709 | .706 | .692 | .664 | .722 |
| 1920 | .634 | .637 | .631 | .604 | .598 | .601 | .603 | .620 | .644 | .693 | .750 | .829 | .648 |
| 1921 | .877 | .953 | .977 | 1.011 | 1.040 | 1.071 | 1.071 | 1.070 | 1.071 | 1.063 | 1.062 | 1.076 | 1.025 |
| 1922 | 1.094 | 1.076 | 1.078 | 1.073 | 1.041 | 1.038 | 1.006 | 1.014 | 1.007 | 1.004 | .995 | .993 | 1.034 |
| 1923 | .980 | .968 | .957 | .962 | .981 | .997 | 1.016 | 1.022 | 1.003 | 1.006 | 1.016 | 1.019 | .994 |
| 1924 | 1.004 | 1.003 | 1.015 | 1.028 | 1.043 | 1.054 | 1.046 | 1.031 | 1.030 | 1.018 | 1.009 | .985 | 1.019 |
| 1925 | .972 | .962 | .960 | .981 | .984 | .971 | .959 | .962 | .967 | .965 | .957 | .967 | .966 |
| 1926 | .965 | .979 | .996 | .999 | .995 | .995 | 1.055 | 1.010 | 1.003 | 1.006 | 1.016 | 1.021 | 1.000 |
| 1927 | 1.035 | 1.043 | 1.058 | 1.067 | 1.067 | 1.066 | 1.063 | 1.050 | 1.036 | 1.031 | 1.034 | 1.033 | 1.048 |
| 1928 | 1.038 | 1.037 | 1.042 | 1.027 | 1.014 | 1.025 | 1.017 | 1.011 | .999 | 1.022 | 1.034 | 1.034 | 1.024 |
| 1929 | 1.029 | 1.034 | 1.026 | 1.033 | 1.044 | 1.037 | 1.020 | 1.024 | 1.026 | 1.038 | 1.059 | 1.062 | 1.036 |
| 1930 | 1.071 | 1.086 | 1.101 | 1.103 | 1.122 | 1.152 | 1.190 | 1.190 | 1.188 | 1.211 | 1.244 | 1.276 | 1.159 |
| 1931 | 1.299 | 1.325 | 1.342 | 1.364 | 1.403 | 1.429 | 1.429 | ----- | ----- | ----- | ----- | ----- | ----- |

EXCHANGES

The total exchanges of interbank checks as shown by reports of clearing houses were: In 1929, \$713,000,000,000; in 1930, \$628,000,000,000; in 1931, \$462,000,000,000—over 40 times all the gold in the world.

The velocity of the dollar and the efficiency of the banking system and the use of checks is thus exhibited.

It will be observed that these transactions fell off from 1929 to 1931 by \$250,000,000,000, or over 35 per cent.

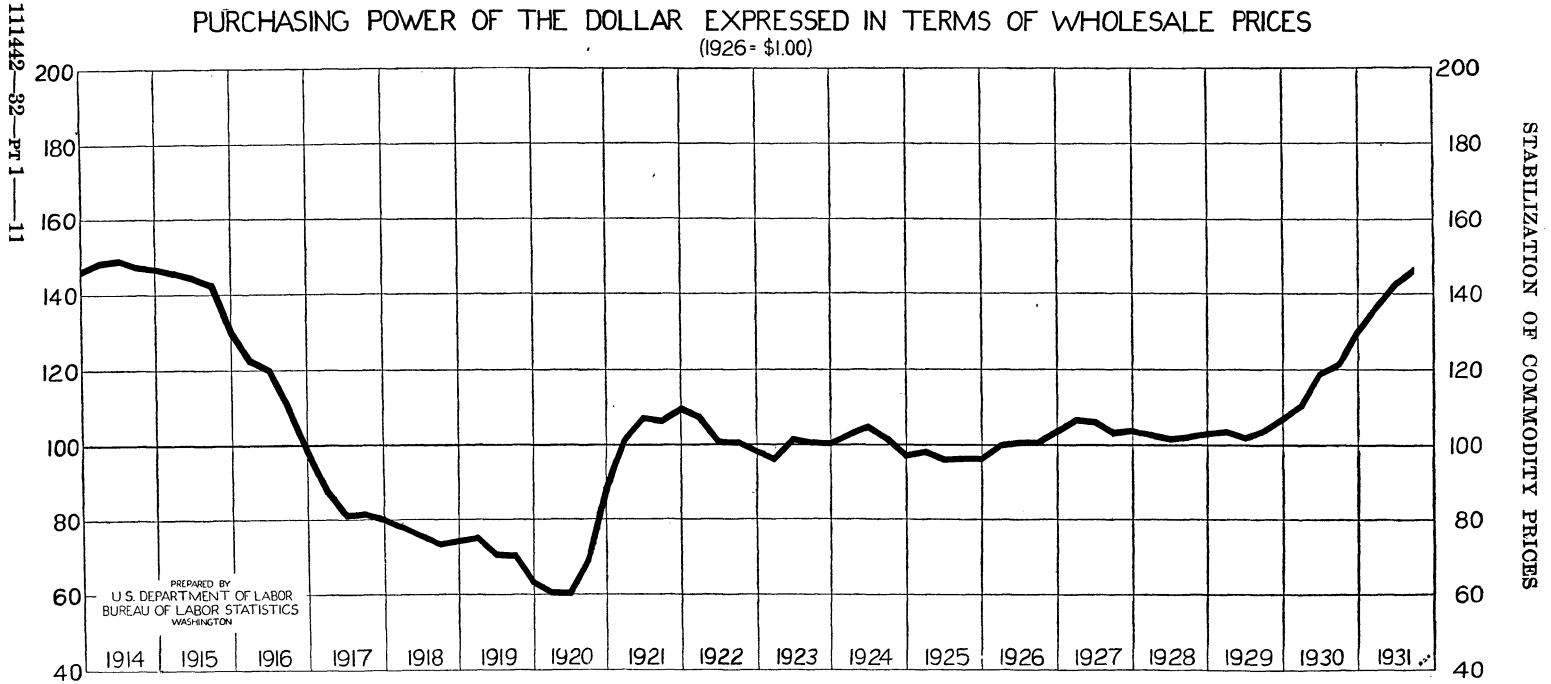
There was an adequate cause.

The following chart shows the fluctuations in the purchasing power of the dollar in the wholesale markets, based on the general commodity index of the daily wholesale prices of 550 commodities, each one weighted in accordance with its relation, volume, and importance.

This table is the exact reverse of the chart of the general-commodity index.

EXHIBIT 5A

PURCHASING POWER OF THE DOLLAR EXPRESSED IN TERMS OF WHOLESALE PRICES
(1926 = \$1.00)



The dollar fell from over 140 to 60 following the expansion of credit during the war and rose again to 140 plus following contraction of credit in 1929-1931.

EXHIBIT 6

Total paper currency issued 1930-31

| Denominations | Outstanding November— | | Change (in millions) |
|-----------------------|-----------------------|---------------|----------------------|
| | 1931 | 1930 | |
| \$1..... | \$487,779,136 | \$481,647,105 | +6 |
| \$2..... | 49,704,228 | 56,794,080 | -7 |
| \$5..... | 778,794,053 | 824,197,726 | -45 |
| \$10..... | 1,465,588,737 | 1,364,167,637 | +101 |
| \$20..... | 1,691,836,616 | 1,434,504,186 | +257 |
| \$50..... | 466,398,390 | 290,371,940 | +176 |
| \$100..... | 652,178,120 | 347,466,120 | +305 |
| \$500..... | 171,613,500 | 78,624,000 | +93 |
| \$1,000..... | 320,707,500 | 158,670,500 | +162 |
| \$5,000..... | 38,485,000 | 26,495,000 | +12 |
| \$10,000..... | 85,460,000 | 91,010,000 | -6 |
| Fractional parts..... | 61,709 | 61,561 | 0 |
| Total..... | 6,208,606,989 | 5,154,009,855 | +1,055 |

It will be noticed that the new issues are in large denominations suitable for hoarding.

EXHIBIT 7

Stock and bond averages, December 17, 1931—1929—1930

STOCKS

| | 50 Indus- trials | 20 rails | 20 utilities | Total (90) |
|-------------------|---------------------|----------|--------------|------------|
| To-day..... | 1 61.6 | 1 32.2 | 95.0 | 1 63.0 |
| Previous day..... | 63.3 | 33.2 | 96.4 | 64.5 |
| Week ago..... | 67.8 | 35.2 | 107.1 | 69.7 |
| Month ago..... | 80.7 | 46.4 | 122.6 | 82.8 |
| Year ago..... | 112.9 | 86.4 | 146.5 | 114.7 |
| 3 years ago..... | 190.4 | 128.4 | 182.0 | 178.8 |
| 5 years ago..... | 106.8 | 105.8 | 104.4 | 106.2 |
| High, 1931..... | 140.2 | 106.2 | 203.9 | 144.3 |
| Low, 1931..... | 61.6 | 32.2 | 94.9 | 63.0 |
| High, 1930..... | 202.4 | 141.6 | 231.3 | 205.8 |
| Low, 1930..... | 112.9 | 86.4 | 146.5 | 114.7 |
| High, 1929..... | 252.8 | 167.8 | 353.1 | 253.5 |
| Low, 1929..... | 141.3 | 117.7 | 156.3 | 140.2 |

BONDS

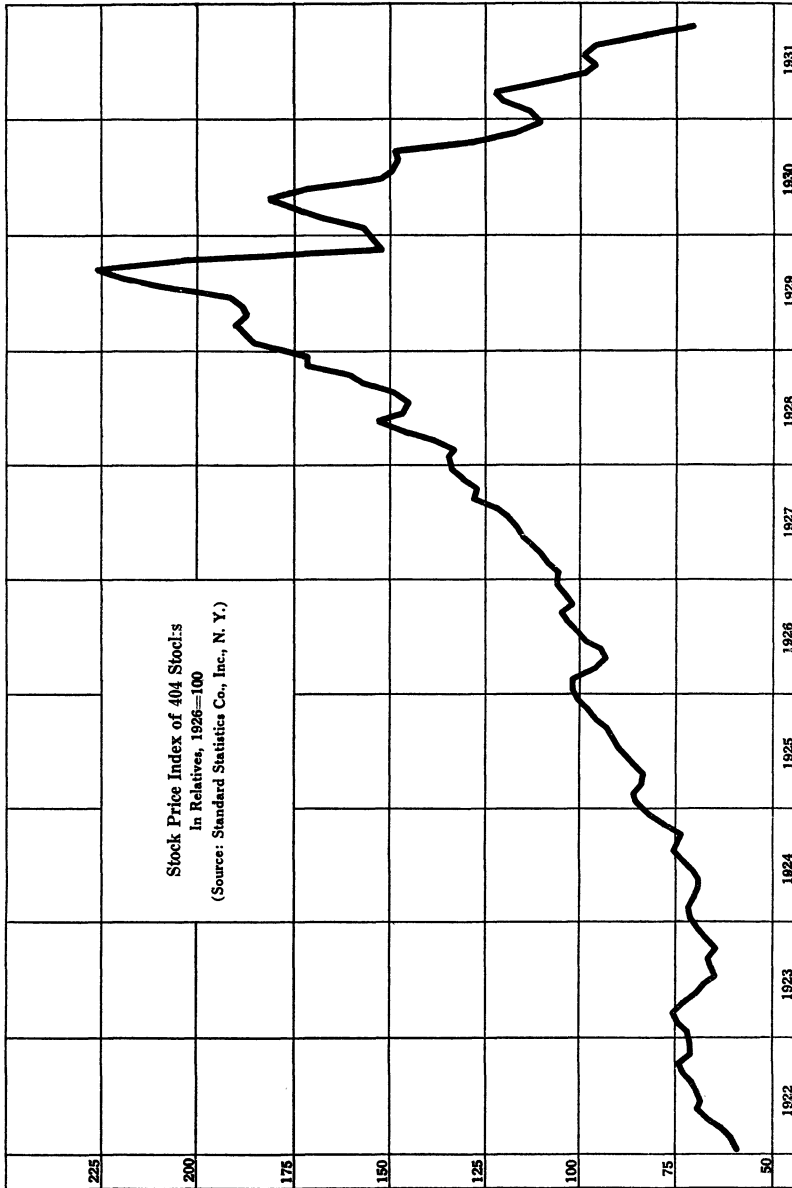
| | 20 Indus- trials | 20 rails | 20 utilities | Total (60) |
|-------------------|---------------------|----------|--------------|------------|
| To-day..... | 1 63.6 | 1 62.3 | 1 81.2 | 1 69.0 |
| Previous day..... | 64.2 | 63.6 | 82.1 | 70.0 |
| Week ago..... | 69.2 | 70.3 | 86.5 | 75.3 |
| Month ago..... | 76.4 | 83.5 | 91.7 | 83.9 |
| Year ago..... | 84.3 | 97.6 | 96.9 | 92.9 |
| 2 years ago..... | 92.2 | 105.2 | 98.4 | 98.6 |
| 3 years ago..... | 94.8 | 104.9 | 99.7 | 99.8 |
| High, 1931..... | 90.4 | 105.7 | 101.5 | 98.7 |
| Low, 1931..... | 64.2 | 62.3 | 81.2 | 69.0 |
| High, 1930..... | 94.9 | 109.8 | 101.4 | 101.9 |
| Low, 1930..... | 83.3 | 97.3 | 96.6 | 92.6 |
| High, 1929..... | 95.3 | 106.0 | 99.8 | 99.9 |
| Low, 1929..... | 90.4 | 100.8 | 96.0 | 96.3 |

¹ New 1931 low.

Here appears the evidence that dealing with the leading industrial stocks, rails and utilities, the average high in 1929 was 253.5 and the price to-day, December 17, 1931, was 63, a fall in market price in two years of 75 per cent to one-fourth of the high value in 1929.

In other stocks, the fall was still greater, going down to 90 per cent, 95 per cent, and zero.

EXHIBIT 8



Notice the violent decline when the brokers' loans were called in October, 1929.

Notice of New York bank loans went up a billion dollars when the brokers loans were called by others.

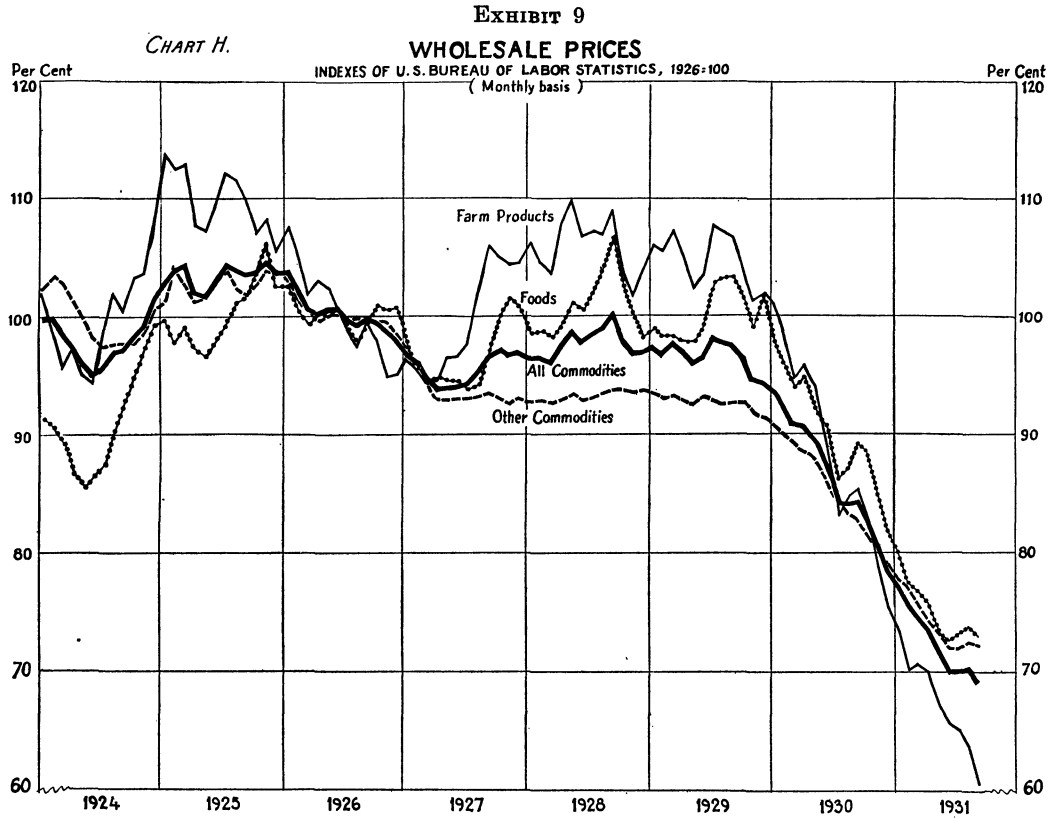


EXHIBIT 10

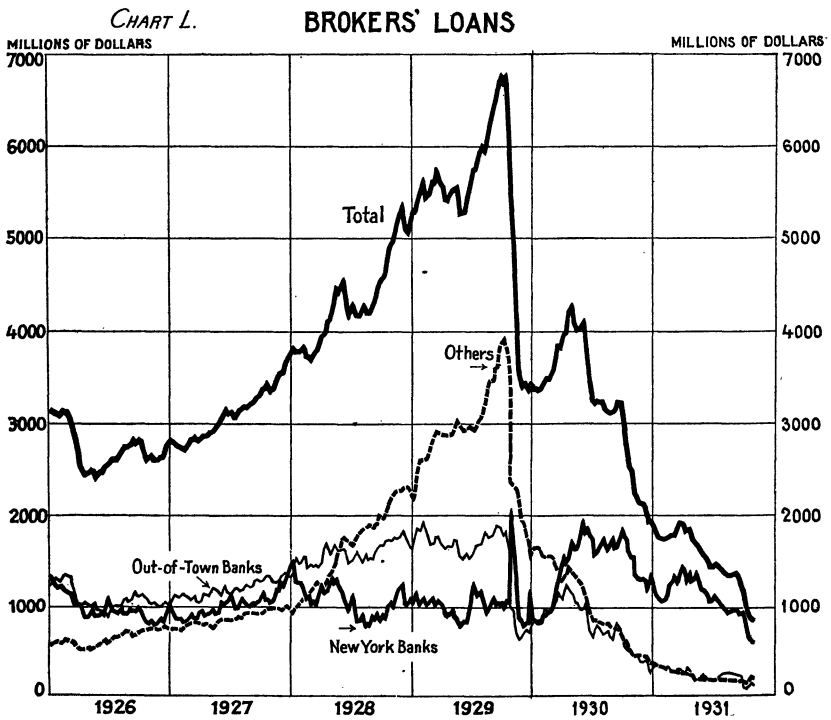


EXHIBIT 11

VOLUME OF MANUFACTURING PRODUCTION

CHART E.

DAILY AVERAGE AGGREGATES IN F. R. BOARD INDEX
ADJUSTED FOR SEASONAL VARIATION

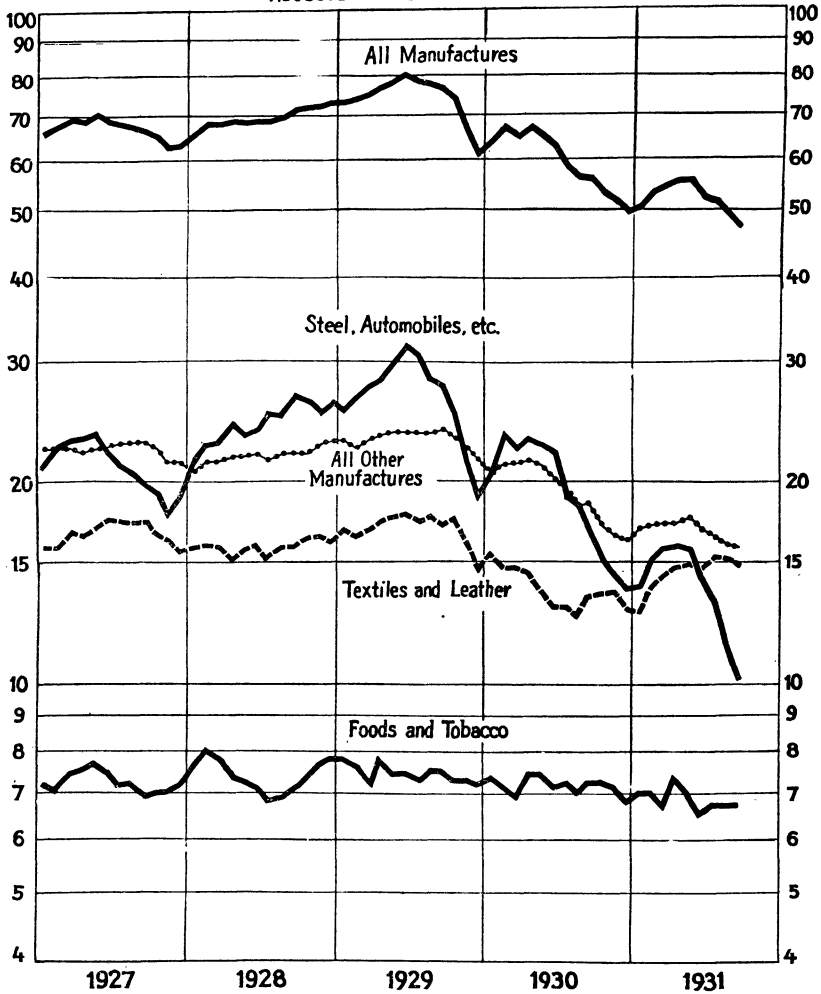


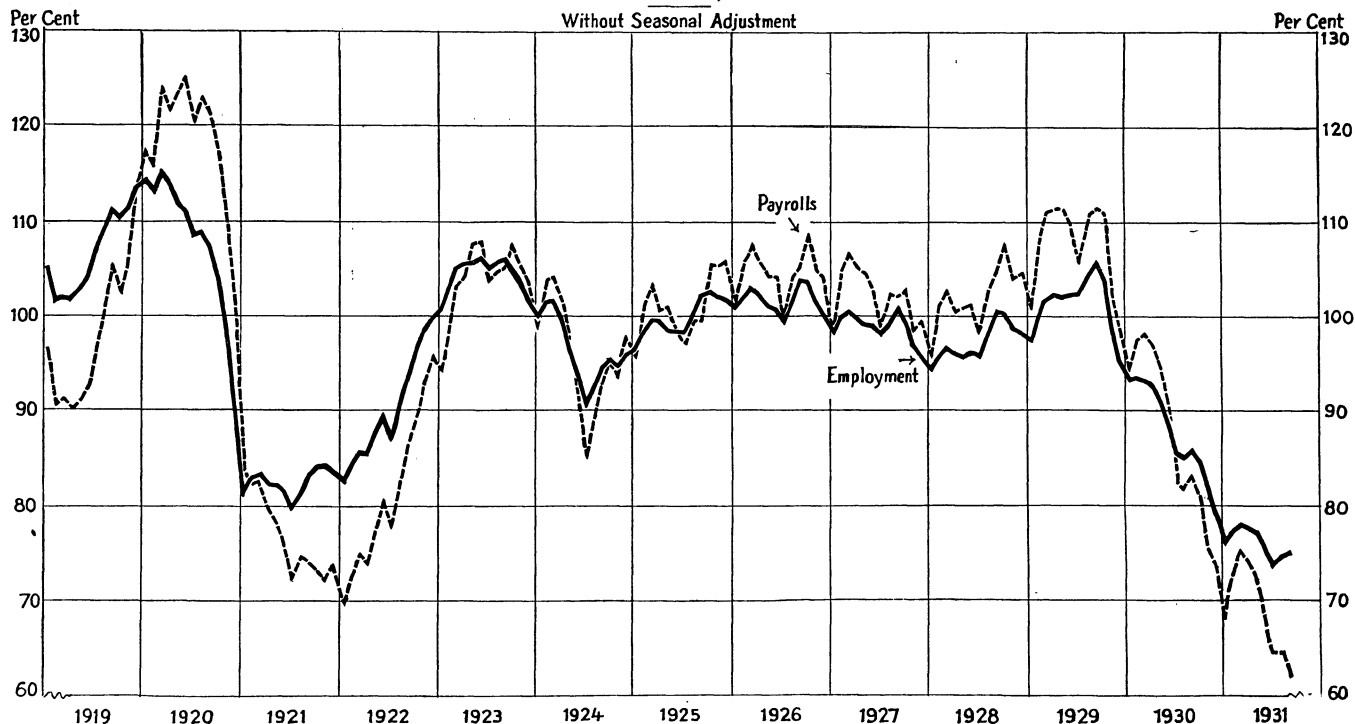
EXHIBIT 12

CHART D.

FACTORY EMPLOYMENT AND PAYROLLS

INDEXES OF F. R. BOARD, 1923-25 = 100

Without Seasonal Adjustment



The fall of pay rolls and employment followed immediately the contraction of credit and currency in 1920 and 1929.

EXHIBIT 13

Comparable data available on 550 corporations (industrials)

[Source: Standard Statistics Co. (Inc.), New York City]

[In millions of dollars]

| | 1927 | 1928 | 1929 | 1930 | 1931 (estimated) |
|------------------------------|-------|-------|-------|------------------|------------------|
| Net profit..... | 2,559 | 3,227 | 3,683 | 2,112 | 1,365 |
| Fixed charges..... | 257 | 259 | 225 | 240 | 260 |
| Net income..... | 2,302 | 2,968 | 3,458 | 1,872 | 1,105 |
| Preferred dividends..... | 260 | 254 | 273 | 277 | 244 |
| Common dividends..... | 1,383 | 1,519 | 1,870 | 1,754 | 1,382 |
| Balance after dividends..... | 659 | 1,195 | 1,315 | ¹ 159 | ¹ 521 |

[In relatives (1929=100)]

| | 1927 | 1928 | 1929 | 1930 | 1931 |
|------------------------------|------|------|------|-------|-------|
| Net profit..... | 69 | 88 | 100 | 57 | 37 |
| Fixed charges..... | 114 | 115 | 100 | 107 | 115 |
| Net income..... | 66 | 86 | 100 | 54 | 32 |
| Preferred dividends..... | 95 | 93 | 100 | 104 | 89 |
| Common dividends..... | 74 | 81 | 100 | 93 | 74 |
| Balance after dividends..... | 50 | 91 | 100 | ----- | ----- |

¹ Decrease.

[Senate Hearing, National Economic Council]

The CHAIRMAN. How much of a fall is that from 1929?

Mr. SLOAN. The net income of those corporations was just about divided by three. They will make about a third this year of what they made in 1929.

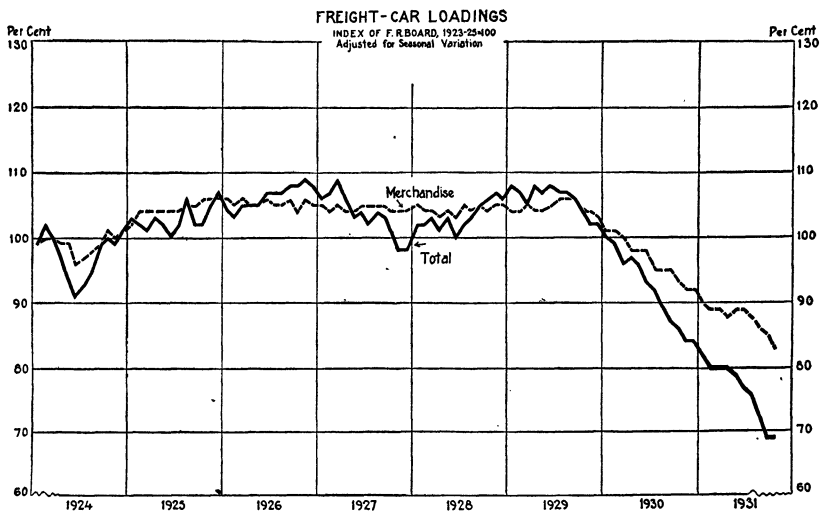
Senator SHEPPARD. Normally the price decline would cause an increased demand under the operation of economic law, would it not?

Mr. SLOAN. Yes; it would; and that is one thing that has been relied upon to put an end to this depression, but it just has not worked that way.

Senator SHEPPARD. What is the difficulty from your standpoint?

Mr. SLOAN. People are still in such a state of fear that they are holding their purchases down to the absolute minimum."

EXHIBIT 14



Car loadings immediately fell in 1929 with the contraction of credit and the calling of brokers' loans.

EXHIBIT 15

Brokers' borrowings, 1926-1929

[Net borrowing on collateral in New York City as reported by members of the New York Stock Exchange]

[In millions of dollars]

| Date | On demand and on time | | | On demand | | | On time | | |
|---------------|-----------------------|---|---|-----------|---|---|---------|--|--|
| | Total | From New York banks and trust companies | From private banks, brokers, foreign banking agencies, etc. | Total | From New York banks and trust companies | From private banks, brokers, foreign banking agencies, etc. | Total | From New York banks, trust companies, etc. | From private banks, foreign banking agencies, etc. |
| 1926 | | | | | | | | | |
| Jan. 30..... | 3, 513 | 3, 043 | 470 | 2, 517 | 2, 123 | 394 | 996 | 920 | 76 |
| Feb. 27..... | 3, 536 | 3, 080 | 455 | 2, 495 | 2, 123 | 372 | 1, 041 | 958 | 83 |
| Mar. 31..... | 3, 000 | 2, 553 | 447 | 2, 033 | 1, 678 | 355 | 967 | 875 | 92 |
| Apr. 30..... | 2, 836 | 2, 468 | 367 | 1, 970 | 1, 699 | 271 | 866 | 770 | 96 |
| May 31..... | 2, 767 | 2, 392 | 375 | 1, 987 | 1, 703 | 285 | 780 | 690 | 90 |
| June 30..... | 2, 926 | 2, 509 | 417 | 2, 225 | 1, 852 | 374 | 701 | 657 | 43 |
| July 31..... | 2, 998 | 2, 583 | 415 | 2, 283 | 1, 918 | 365 | 715 | 665 | 50 |
| Aug. 31..... | 3, 142 | 2, 698 | 444 | 2, 364 | 1, 984 | 379 | 778 | 713 | 65 |
| Sept. 30..... | 3, 219 | 2, 745 | 474 | 2, 419 | 2, 021 | 398 | 800 | 724 | 76 |
| Oct. 30..... | 3, 111 | 2, 668 | 444 | 2, 289 | 1, 924 | 365 | 822 | 743 | 78 |
| Nov. 30..... | 3, 129 | 2, 636 | 493 | 2, 330 | 1, 932 | 397 | 800 | 704 | 96 |
| Dec. 31..... | 3, 293 | 2, 804 | 489 | 2, 542 | 2, 128 | 414 | 751 | 676 | 76 |
| 1927 | | | | | | | | | |
| Jan. 31..... | 3, 139 | 2, 670 | 469 | 2, 328 | 1, 964 | 365 | 810 | 707 | 104 |
| Feb. 28..... | 3, 256 | 2, 757 | 499 | 2, 475 | 2, 085 | 391 | 781 | 673 | 108 |
| Mar. 31..... | 3, 290 | 2, 790 | 500 | 2, 505 | 2, 112 | 393 | 785 | 679 | 107 |
| Apr. 30..... | 3, 341 | 2, 865 | 476 | 2, 541 | 2, 146 | 395 | 800 | 719 | 81 |
| May 31..... | 3, 458 | 2, 968 | 490 | 2, 674 | 2, 254 | 420 | 784 | 713 | 70 |
| June 30..... | 3, 569 | 3, 065 | 504 | 2, 757 | 2, 316 | 441 | 812 | 749 | 63 |
| July 30..... | 3, 642 | 3, 145 | 497 | 2, 765 | 2, 343 | 421 | 877 | 802 | 76 |
| Aug. 31..... | 3, 674 | 3, 170 | 504 | 2, 746 | 2, 330 | 415 | 928 | 840 | 89 |
| Sept. 30..... | 3, 915 | 3, 340 | 575 | 3, 018 | 2, 539 | 479 | 897 | 801 | 96 |
| Oct. 31..... | 3, 946 | 3, 363 | 583 | 3, 023 | 2, 549 | 475 | 923 | 814 | 108 |
| Nov. 30..... | 4, 092 | 3, 519 | 573 | 3, 134 | 2, 675 | 459 | 958 | 844 | 113 |
| Dec. 31..... | 4, 433 | 3, 812 | 621 | 3, 481 | 2, 963 | 518 | 952 | 849 | 103 |
| 1928 | | | | | | | | | |
| Jan. 31..... | 4, 420 | 3, 805 | 615 | 3, 393 | 2, 882 | 511 | 1, 027 | 923 | 104 |
| Feb. 29..... | 4, 323 | 3, 737 | 585 | 3, 294 | 2, 807 | 488 | 1, 028 | 931 | 98 |
| Mar. 31..... | 4, 640 | 3, 947 | 693 | 3, 580 | 3, 016 | 564 | 1, 060 | 931 | 129 |
| Apr. 30..... | 4, 908 | 4, 246 | 662 | 3, 739 | 3, 201 | 537 | 1, 169 | 1, 045 | 124 |
| May 31..... | 5, 274 | 4, 568 | 707 | 4, 070 | 3, 455 | 616 | 1, 204 | 1, 113 | 91 |
| June 30..... | 4, 898 | 4, 169 | 730 | 3, 742 | 3, 122 | 619 | 1, 157 | 1, 046 | 110 |
| July 31..... | 4, 837 | 4, 150 | 687 | 3, 768 | 3, 183 | 585 | 1, 070 | 967 | 102 |
| Aug. 31..... | 5, 051 | 4, 260 | 791 | 4, 094 | 3, 420 | 674 | 958 | 840 | 117 |
| Sept. 29..... | 5, 514 | 4, 647 | 866 | 4, 690 | 3, 939 | 751 | 824 | 709 | 116 |
| Oct. 31..... | 5, 880 | 4, 994 | 886 | 5, 116 | 4, 360 | 756 | 764 | 634 | 130 |
| Nov. 30..... | 6, 392 | 5, 412 | 979 | 5, 614 | 4, 771 | 843 | 777 | 641 | 136 |
| Dec. 31..... | 6, 440 | 5, 401 | 1, 039 | 5, 722 | 4, 810 | 913 | 717 | 591 | 126 |
| 1929 | | | | | | | | | |
| Jan. 31..... | 6, 735 | 5, 664 | 1, 071 | 5, 983 | 5, 043 | 939 | 752 | 621 | 132 |
| Feb. 28..... | 6, 679 | 5, 619 | 1, 060 | 5, 948 | 5, 034 | 914 | 730 | 584 | 146 |
| Mar. 30..... | 6, 804 | 5, 713 | 1, 091 | 6, 210 | 5, 231 | 979 | 594 | 482 | 112 |
| Apr. 30..... | 6, 775 | 5, 580 | 1, 194 | 6, 204 | 5, 154 | 1, 050 | 571 | 427 | 144 |
| May 31..... | 6, 665 | 5, 482 | 1, 183 | 6, 100 | 5, 061 | 1, 039 | 565 | 422 | 144 |
| June 29..... | 7, 071 | 5, 797 | 1, 275 | 6, 444 | 5, 333 | 1, 111 | 627 | 464 | 163 |
| July 31..... | 7, 474 | 6, 154 | 1, 320 | 6, 870 | 5, 705 | 1, 165 | 604 | 449 | 155 |
| Aug. 31..... | 7, 882 | 6, 942 | 1, 390 | 7, 162 | 5, 962 | 1, 200 | 720 | 530 | 190 |
| Sept. 30..... | 8, 549 | 7, 077 | 1, 472 | 7, 832 | 6, 543 | 1, 289 | 717 | 534 | 183 |
| Oct. 31..... | 6, 109 | 5, 313 | 796 | 5, 238 | 4, 639 | 599 | 871 | 674 | 197 |
| Nov. 30..... | 4, 017 | 3, 432 | 585 | 3, 297 | 2, 873 | 424 | 719 | 559 | 161 |
| Dec. 31..... | 3, 990 | 3, 370 | 620 | 3, 376 | 2, 883 | 494 | 613 | 487 | 126 |

Back figures.—See Annual Report for 1927 (Table 47) for figures for 1918-1922; figures for 1923-1925 not available.

A fall of \$4,559,000,000 in these loans from Oct. 1 to Dec. 31, 1929.

These exhibits show that in October, 1929, and months following, there was a sudden fall.

1. In security prices, down from 70 to 90 per cent.
2. In wholesale prices, down to 68 per cent from 98 per cent.
3. In the volume of production, down from 80 to 48.
4. In factory employment, down from 105 to 75.
5. In factory wages, pay rolls, down from 112 to 62.
6. In car loadings, down from 108 to 68.
7. In brokers' loans, over 7,000,000,000 credit withdrawn.
8. Net earnings corporate fell over 60 per cent.

The dollar rose to 45 per cent additional purchasing power in the wholesale markets, and in taking over collateral or mortgaged property rose still higher in settling many debts.

Wholesale bank failures followed as in the panic of 1920-21, when 6,000 banks were closed.

The charts and tables all show that the country was prosperous from January to October, 1929.

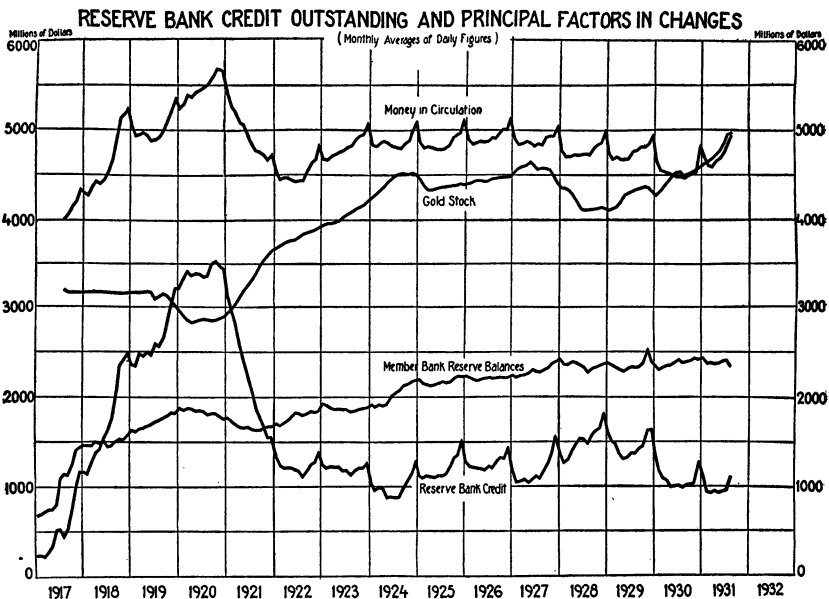
Commodity prices were stable at 98 in July, 1929.

Factory employment and wages above normal, volume of production high, car loadings above normal.

The cause could not have been any sudden contraction of currency or of Federal Reserve credit for the tables submitted show there was no serious contraction at that moment.

The following chart of the reserve bank operations show there was no sudden contraction of reserve credit or currency:

EXHIBIT 17



The stock of gold was increasing and continuing to increase and has continued to increase. The Federal reserve had all power necessary to expand the currency or legitimate banking credit.

There must have been other factors that destabilized credit and caused the collapse that took place. The available evidence to show what occurred is above set forth.

Exhibit 17 shows that it was not the fall of reserve bank credit in the crisis of 1929 that caused the panic for it was rising.

EXHIBIT 18

*Building contracts awarded, by groups, adjusted for seasonal variations*¹

| Year and month | Total | Residential | All other |
|-------------------|--------------------------|-------------------------|--------------------------|
| 1919..... | \$3,102,000,000 | \$970,000,000 | \$2,132,000,000 |
| 1920..... | 3,108,000,000 | 651,000,000 | 2,457,000,000 |
| 1921..... | 2,756,000,000 | 991,000,000 | 1,765,000,000 |
| 1922..... | 3,875,000,000 | 1,506,000,000 | 2,368,000,000 |
| 1923..... | 4,130,000,000 | 1,788,000,000 | 2,343,000,000 |
| 1924..... | 4,656,000,000 | 2,116,000,000 | 2,540,000,000 |
| 1925..... | 6,006,000,000 | 2,748,000,000 | 3,259,000,000 |
| 1926..... | 6,381,000,000 | 2,671,000,000 | 3,710,000,000 |
| 1927..... | 6,303,000,000 | 2,573,000,000 | 3,730,000,000 |
| 1928..... | 6,628,000,000 | 2,788,000,000 | 3,840,000,000 |
| 1929..... | 5,751,000,000 | 1,916,000,000 | 3,835,000,000 |
| 1930..... | 4,523,000,000 | 1,101,000,000 | 3,422,000,000 |
| 1931—January..... | 291,000,000 | 82,000,000 | 210,000,000 |
| February..... | 323,000,000 | 87,000,000 | 235,000,000 |
| March..... | 314,000,000 | 87,000,000 | 227,000,000 |
| April..... | 298,000,000 | 81,000,000 | 216,000,000 |
| May..... | 265,00,0000 | 73,000,000 | 192,000,000 |
| June..... | 259,000,000 | 68,000,000 | 190,000,000 |
| July..... | 251,000,000 | 65,000,000 | 186,000,000 |
| August..... | 243,000,000 | 60,000,000 | 183,000,000 |
| September..... | ² 240,000,000 | ² 58,000,000 | ² 182,000,000 |

¹ Annual figures, actual yearly totals in 37 eastern States as reported by F. W. Dodge Corporation; figures for 1919 to 1924 partly estimated by Federal Reserve Board. Monthly figures are 3 months moving averages adjusted for seasonal variation by Federal Reserve Board. For description, see Federal Reserve Bulletin for July, 1931.

² Preliminary.

Exhibit 18 shows that a vast building program was in progress when the calling of brokers' loans reduced it by half and almost destroyed residential building.

EXHIBIT 19

Corporate issues in United States, exclusive of refunding

[Source: Commercial and Financial Chronicle]

| Year | Total | Bonds and notes | Stocks |
|-----------|----------------------------|----------------------------|--------------------------|
| 1919..... | \$2,303,000,000 | \$848,000,000 | \$1,445,000,000 |
| 1920..... | 2,709,000,000 | 1,674,000,000 | 1,035,000,000 |
| 1921..... | 1,824,000,000 | 1,554,000,000 | 270,000,000 |
| 1922..... | 2,336,000,000 | 1,761,000,000 | 575,000,000 |
| 1923..... | 2,703,000,000 | 1,955,000,000 | 748,000,000 |
| 1924..... | 3,322,000,000 | 2,492,000,000 | 830,000,000 |
| 1925..... | 4,099,000,000 | 2,888,000,000 | 1,211,000,000 |
| 1926..... | 4,358,000,000 | 3,177,000,000 | 1,181,000,000 |
| 1927..... | 5,393,000,000 | 3,884,000,000 | 1,509,000,000 |
| 1928..... | 6,080,000,000 | 3,009,000,000 | 3,071,000,000 |
| 1929..... | 8,640,000,000 | 2,551,000,000 | 6,089,000,000 |
| 1930..... | 4,945,000,000 | 3,400,000,000 | 1,545,000,000 |
| 1931..... | ¹ 1,946,000,000 | ¹ 1,675,000,000 | ¹ 271,000,000 |

¹ Estimated by Federal Reserve Board on basis of 9 months' figures.

The CHAIRMAN. Could you give me the total figures for the period of new corporate security issues?

Doctor GOLDENWEISER. It is \$50,658,000,000.

Here we have over fifty billions of new stocks and bonds sold to the public.

These stocks were sold to some 16,000,000 American citizens.

The total shares listed on the New York Stock Exchange alone rose from 220,753,423 shares in 1920 to 433,448,561 shares in 1925, to 757,301,677 shares in 1929, to 1,296,794,480 shares in 1931. (See New York Stock Exchange Bulletin of August, 1931.)

These vast issues required larger and larger supplies of money to carry the undigested or unsold stock and stocks carried on margin for the infatuated public. To get this money the call rates were raised up as high as 20 per cent, and the

high call rates attracted the money from domestic banks and from foreign banks and from private individuals, who had made millions on the bull market.

By October the brokers' loans had reached eight and one-half billions, subject to call (mostly).

By this time there had grown up a grave distrust of the actual value of these stocks. Many of them were selling at 20, 30, and 50 times their net incomes.

These issues absorbed all the available free capital the country could supply even by the free use of credit.

The Reserve Board had for a year or more been advising against any use of reserve bank credit for speculative loans and using its influence to keep the member banks from lending on New York Stock Exchange collateral stocks while borrowing from the reserve banks.

To deprive the stock exchange brokers of this credit, they attempted in vain to check the orgy of speculation by raising the rate of interest.

This penalized business, compelled Europe to follow suit to protect the gold underlying its currency, and penalized business throughout the world and became a major factor in the unavoidable reaction and in the major bear movement that ensued.

The inflated credit which the public had thus reposed in the preposterous values of these stocks and bonds exploded in the last week of October, 1929, with a violence that reached the end of the financial world.

During the week of October 23 to October 31, credit was withdrawn from the brokers by calling about \$2,300,000,000 on "a/c of others" and out-of-town banks and the New York City banks were compelled to suddenly advance about \$992,000,000 to prevent a collapse of the exchange.

During October, November, and December the brokers' loans were reduced from \$8,549,000,000 to \$3,999,000,000, a net cancellation of credit in 90 days of \$4,559,000,000.

The total of brokers' loans have now been reduced to less than a billion, a cancellation of credit of over seven and one-half billions.

The effect of calling these brokers' loans was the forced sales of the stocks held on margin at a time when a wholesale calling of credit was taking place. It was selling under the conditions of panic, and afforded a great opportunity to the wise and powerful operators who knew how to sell short, cover, and sell again on the precipitous declines that were necessarily taking place.

EXHIBIT 20

Transactions on the New York Stock Exchange, 1929

| | Number of shares sold ¹ | Index of stock prices ² | | Number of shares sold ¹ | Index of stock prices ² |
|--------------|--|--|--------------|--|--|
| Oct. 14..... | 2,755,850 | 242.6 | Oct. 28..... | 9,212,800 | 180.6 |
| Oct. 15..... | 3,107,050 | 240.6 | Oct. 29..... | 16,410,030 | 162.2 |
| Oct. 16..... | 4,088,000 | 232.2 | Oct. 30..... | 10,727,320 | 182.6 |
| Oct. 17..... | 3,864,150 | 235.8 | Oct. 31..... | 7,149,390 | 191.8 |
| Oct. 18..... | 3,507,740 | 229.0 | Nov. 1..... | (³) | (³) |
| Oct. 19..... | 3,488,100 | 222.4 | Nov. 2..... | (³) | (³) |
| Oct. 21..... | 6,097,870 | 220.2 | Nov. 4..... | 6,202,930 | 181.7 |
| Oct. 22..... | 4,129,820 | 224.5 | Nov. 5..... | (³) | (³) |
| Oct. 23..... | 6,374,960 | 211.2 | Nov. 6..... | 5,914,760 | 163.7 |
| Oct. 24..... | 12,894,650 | 204.5 | Nov. 7..... | 7,184,060 | 169.7 |
| Oct. 25..... | 5,923,220 | 207.4 | Nov. 8..... | 3,214,660 | 168.2 |
| Oct. 26..... | 2,087,660 | 206.0 | Nov. 9..... | (³) | (³) |

¹ New York Herald Tribune.

² Standard Statistics Co. index of 90 stocks, 1926=100.

³ Closed.

Total value of stocks listed on New York Stock Exchange as reported by Standard Statistics Co.: Oct. 1, 1929, 87.07 billion dollars; Nov. 1, 1929, 71.75; Dec. 1, 1929, 63.59.

EXHIBIT 21

Index of factory employment, without seasonal adjustment

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 |
|-------------------|-------|-------|------|-------|-------|-------|-------|
| January..... | 105.2 | 114.0 | 81.3 | 82.6 | 100.6 | 99.9 | 96.4 |
| February..... | 101.7 | 113.1 | 82.7 | 84.4 | 102.4 | 101.1 | 98.2 |
| March..... | 102.0 | 115.2 | 83.1 | 85.6 | 104.9 | 101.4 | 99.5 |
| April..... | 102.0 | 113.9 | 82.1 | 85.4 | 105.2 | 99.7 | 99.3 |
| May..... | 102.8 | 111.7 | 82.2 | 87.6 | 105.3 | 96.3 | 98.4 |
| June..... | 104.0 | 110.9 | 81.3 | 89.5 | 105.9 | 93.4 | 98.2 |
| July..... | 106.6 | 108.4 | 79.9 | 87.0 | 104.8 | 90.5 | 98.1 |
| August..... | 109.0 | 108.6 | 81.4 | 90.3 | 105.5 | 91.8 | 99.8 |
| September..... | 111.2 | 107.1 | 83.3 | 93.6 | 105.9 | 94.3 | 102.0 |
| October..... | 110.4 | 103.5 | 84.0 | 96.4 | 104.8 | 95.1 | 102.4 |
| November..... | 111.5 | 97.5 | 84.2 | 98.5 | 103.4 | 94.6 | 101.9 |
| December..... | 113.4 | 90.3 | 83.3 | 100.0 | 101.3 | 95.9 | 101.6 |
| Annual index..... | 106.7 | 107.9 | 82.4 | 90.1 | 104.2 | 96.2 | 99.6 |

| | 1926 | 1927 | 1928 | 1929 ¹ | 1930 ² | 1931 |
|-------------------|-------|-------|-------|-------------------|-------------------|-------|
| January..... | 100.8 | 98.1 | 94.2 | 97.4 | 93.2 | 76.4 |
| February..... | 101.9 | 99.7 | 95.7 | 99.8 | 93.3 | 77.3 |
| March..... | 102.6 | 100.4 | 96.6 | 101.4 | 93.1 | 78.1 |
| April..... | 101.9 | 99.8 | 96.0 | 102.1 | 92.6 | 77.9 |
| May..... | 100.9 | 99.1 | 95.7 | 101.9 | 90.9 | 77.1 |
| June..... | 100.7 | 99.0 | 96.2 | 102.0 | 88.8 | 75.0 |
| July..... | 99.3 | 98.0 | 95.7 | 102.1 | 85.5 | 73.8 |
| August..... | 101.1 | 99.2 | 98.3 | 104.0 | 85.1 | 74.2 |
| September..... | 103.4 | 100.6 | 100.3 | 105.4 | 86.4 | 74.6 |
| October..... | 103.2 | 99.3 | 100.2 | 103.3 | 84.3 | ----- |
| November..... | 101.2 | 96.9 | 98.8 | 98.9 | 81.0 | ----- |
| December..... | 100.0 | 95.4 | 98.1 | 95.2 | 78.8 | ----- |
| Annual index..... | 101.4 | 98.8 | 97.2 | 101.1 | 87.8 | ----- |

¹ For description see Federal Reserve Bulletin, November, 1930, and November, 1929.
² Figures for 1929 and January-August, 1930, revised slightly October, 1930.

EXHIBIT 22

Indexes of freight-car loadings

[Federal Reserve Board indexes based on average number of cars loaded per day. Source of original data, American Railway Association. Monthly average 1923-1925=100]

TOTAL ALL CLASSES

| Month | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 |
|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <i>Without seasonal adjustment</i> | | | | | | | | | | | | | |
| January..... | 75 | 84 | 72 | 74 | 90 | 91 | 94 | 94 | 96 | 92 | 95 | 89 | 74 |
| February..... | 72 | 81 | 72 | 79 | 88 | 95 | 95 | 96 | 99 | 94 | 99 | 91 | 74 |
| March..... | 71 | 87 | 71 | 84 | 94 | 94 | 95 | 99 | 102 | 97 | 98 | 90 | 75 |
| April..... | 73 | 76 | 72 | 77 | 96 | 90 | 96 | 98 | 99 | 96 | 102 | 93 | 77 |
| May..... | 80 | 88 | 78 | 77 | 102 | 95 | 103 | 106 | 105 | 105 | 109 | 97 | 79 |
| June..... | 83 | 95 | 80 | 88 | 104 | 93 | 102 | 109 | 105 | 101 | 110 | 95 | 77 |
| July..... | 90 | 96 | 83 | 87 | 105 | 94 | 104 | 110 | 104 | 105 | 111 | 95 | 78 |
| August..... | 91 | 99 | 80 | 88 | 106 | 99 | 110 | 112 | 109 | 109 | 115 | 96 | 76 |
| September..... | 102 | 103 | 89 | 98 | 111 | 111 | 115 | 121 | 116 | 119 | 121 | 99 | 78 |
| October..... | 99 | 103 | 95 | 100 | 110 | 112 | 113 | 122 | 114 | 119 | 118 | 97 | ----- |
| November..... | 86 | 94 | 81 | 100 | 104 | 104 | 109 | 113 | 101 | 109 | 102 | 86 | ----- |
| December..... | 82 | 82 | 72 | 88 | 88 | 93 | 97 | 98 | 88 | 94 | 89 | 74 | ----- |
| Year..... | 84 | 91 | 79 | 87 | 100 | 97 | 103 | 106 | 103 | 103 | 106 | 92 | ----- |
| <i>With seasonal adjustment</i> | | | | | | | | | | | | | |
| January..... | 87 | 94 | 79 | 80 | 99 | 99 | 103 | 104 | 106 | 102 | 108 | 100 | 82 |
| February..... | 85 | 91 | 79 | 86 | 97 | 102 | 102 | 103 | 107 | 102 | 107 | 99 | 80 |
| March..... | 81 | 95 | 75 | 88 | 101 | 100 | 101 | 105 | 109 | 103 | 105 | 96 | 80 |
| April..... | 81 | 84 | 77 | 81 | 104 | 96 | 103 | 105 | 106 | 101 | 108 | 97 | 80 |
| May..... | 81 | 88 | 79 | 78 | 102 | 94 | 102 | 105 | 103 | 103 | 107 | 96 | 79 |
| June..... | 80 | 92 | 80 | 85 | 102 | 91 | 100 | 107 | 104 | 100 | 108 | 93 | 77 |
| July..... | 90 | 91 | 81 | 83 | 102 | 93 | 102 | 107 | 102 | 102 | 107 | 92 | 76 |
| August..... | 87 | 94 | 77 | 84 | 101 | 95 | 103 | 107 | 104 | 103 | 107 | 89 | 72 |
| September..... | 90 | 91 | 80 | 88 | 99 | 99 | 102 | 108 | 103 | 105 | 106 | 87 | 69 |
| October..... | 85 | 90 | 83 | 89 | 98 | 100 | 102 | 108 | 101 | 106 | 104 | 86 | ----- |
| November..... | 83 | 91 | 77 | 95 | 99 | 99 | 105 | 109 | 98 | 107 | 102 | 84 | ----- |
| December..... | 91 | 90 | 77 | 96 | 97 | 101 | 107 | 108 | 98 | 106 | 102 | 84 | ----- |

EXHIBIT 23

All member banks—loans and investments on call dates, 1919-1931

[Source: Federal Reserve Board]

| Call date | Total loans and investments | Loans ¹ | Investments | Call date | Total loans and investments | Loans ¹ | Investments |
|-------------------|-----------------------------|---------------------|-------------|--------------------|-----------------------------|--------------------|-------------|
| 1919—Mar. 4..... | 21,484 | ² 13,877 | 7,607 | 1925—Sept. 28..... | 30,176 | 21,285 | 8,890 |
| June 30..... | 22,242 | ² 15,414 | 6,827 | Dec. 31..... | 30,884 | 21,996 | 8,888 |
| Nov. 17..... | 24,187 | ² 17,423 | 6,765 | 1926—Apr. 12..... | 30,819 | 21,785 | 9,034 |
| Dec. 31..... | 24,778 | ² 18,149 | 6,630 | June 30..... | 31,184 | 22,060 | 9,123 |
| 1920—May 4..... | 25,418 | 19,198 | 6,220 | Dec. 31..... | 31,642 | 22,652 | 8,990 |
| June 30..... | 25,559 | 19,533 | 6,026 | 1927—Mar. 23..... | 31,949 | 22,327 | 9,622 |
| Nov. 15..... | 25,769 | 19,852 | 5,917 | June 30..... | 32,756 | 22,938 | 9,818 |
| Dec. 29..... | 25,531 | 19,555 | 5,976 | Oct. 10..... | 33,186 | 23,227 | 9,959 |
| 1921—Apr. 28..... | 24,390 | 18,487 | 5,903 | Dec. 31..... | 34,247 | 23,886 | 10,361 |
| June 30..... | 24,121 | 18,119 | 6,002 | 1928—Feb. 28..... | 33,688 | 23,099 | 10,590 |
| Dec. 31..... | 23,482 | 17,394 | 6,088 | June 30..... | 35,061 | 24,303 | 10,758 |
| 1922—Mar. 10..... | 23,278 | 17,080 | 6,198 | Oct. 3..... | 34,929 | 24,325 | 10,604 |
| June 30..... | 24,182 | 17,165 | 7,017 | Dec. 31..... | 35,684 | 25,155 | 10,529 |
| Dec. 29..... | 25,579 | 17,930 | 7,649 | 1929—Mar. 27..... | 35,393 | 24,945 | 10,448 |
| 1923—Apr. 3..... | 26,141 | 18,419 | 7,722 | June 29..... | 35,711 | 25,658 | 10,052 |
| June 30..... | 26,507 | 18,750 | 7,757 | Oct. 4..... | 35,914 | 26,165 | 9,749 |
| Sept. 14..... | 26,319 | 18,719 | 7,600 | Dec. 31..... | 35,934 | 26,150 | 9,784 |
| Dec. 31..... | 26,487 | 18,842 | 7,645 | 1930—Mar. 27..... | 35,056 | 25,119 | 9,937 |
| 1924—Mar. 31..... | 26,663 | 19,045 | 7,618 | June 30..... | 35,656 | 25,214 | 10,442 |
| June 30..... | 27,167 | 19,204 | 7,963 | Sept. 24..... | 35,472 | 24,738 | 10,734 |
| Oct. 10..... | 28,311 | 19,713 | 8,599 | Dec. 31..... | 34,860 | 23,870 | 10,989 |
| Dec. 31..... | 28,746 | 19,933 | 8,813 | 1931—Mar. 25..... | 34,729 | 22,840 | 11,889 |
| 1925—Apr. 6..... | 29,046 | 20,176 | 8,869 | June 30..... | 33,923 | 21,816 | 12,106 |
| June 30..... | 29,518 | 20,665 | 8,863 | | | | |

¹ Includes rediscounts and overdrafts; excludes acceptances of other banks and bills of exchange sold with indorsement.

² Includes small amounts of bills sold with indorsement.

Exhibit 23 shows a contraction of loans from December 31, 1929, to June 30, 1931 of over \$5,200,000,000 by the banks following the calling of brokers' loans in 1929.

Exhibit 24 which follows is a chart showing the huge stock of gold in the United States over and above the gold held as legal reserves of the Federal reserve banks.

Mr. GOLDSBOROUGH. Now, gentlemen of the committee, and those who are interested, Mr. Prall has to go to New York. He is deeply interested and he is necessary to the subcommittee. We feel that we have to have him, and we are going to close this hearing after we have had one member of the Farmers Union, whom we promised to hear to-day. We will hear him, and we are going to close the hearings until Monday morning at 10.30, when we will hear, I hope, Mr. Ethelbert Stewart—will we, Mr. Stewart?

Mr. STEWART. May I ask what you care me to speak on?

Mr. GOLDSBOROUGH. Any lines you want to speak on.

Mr. STEWART. The Secretary told me that I could come down here and at least sit in as an observer and answer any questions you might want to ask me. I did not understand that I was to make a formal statement or give formal testimony. Understand I have no objection—

Mr. GOLDSBOROUGH. Mr. Stewart, could you come back to explain to the subcommittee the way that your index number is made up?

Mr. STEWART. Yes.

Mr. GOLDSBOROUGH. That would be very interesting to the subcommittee.

Mr. STEWART. Yes; I can.

Mr. PRALL. I telephoned to Secretary Doak—I think it was to his department—requesting that he have a representative here to listen to this testimony, and, if called upon, to verify any figures that were the technical result of the gathering of them by his department, and Mr. Doak sent Mr. Stewart for that purpose, to attend all of the hearings, with the end in view that, if at any time we wanted to verify these figures or get more, Mr. Stewart would give them.

Mr. BUSBY. I would like to say this, in regard to Mr. Stewart: I have, of course, been on this committee and in touch with this proposed legislation, discussed the question of the commodity price level a great deal with members of Congress and others, and there seems to be a great lack of understanding of just what the wholesale commodity index price means, how it is arrived at, and its importance in our scheme of things, in dealing with the values of commodities, and commodities in their place in the commerce and trade; and I am specially interested in having Mr. Stewart here, in order that he can give not only this committee, but the whole country, the benefit of his testimony in connection with these hearings.

Mr. STEWART. In that connection, Congressman, I take it that you would not want me to come here and work out on a blackboard just how we do this thing?

Mr. GOLDSBOROUGH. We thought it would be informative to the subcommittee and the full committee, and especially to Congress as a whole, if you would explain broadly just what your understanding is.

Mr. BUSBY. In an easily understood way, what your understanding is, and how it works, and how it applies; that is what I had in mind.

Mr. STEWART. Very well.

Mr. GOLDSBOROUGH. Now, on Monday the subcommittee will hear Members of Congress and economists, who will be here Monday, and Tuesday perhaps, and of course, if it has to go over until Wednesday, that will be perfectly all right. Governor Harrison of the Federal Reserve Bank of New York called me over the phone this morning and said that he was anxious, very anxious, to come in accordance with the invitation that had been extended to him, and he wanted to get ready for it, so as to be of as much service as possible, and that he thought he would rather come week after next. So I have the definite engagement that the subcommittee shall hear him on next Monday week, which is the 28th of March, beginning at 10.30.

Now, we will hear the Farmers Union representative, Mr. Talbot. We will give you whatever time you desire to make your statement.

STATEMENT OF C. C. TALBOT, JAMESTOWN, N. DAK., PRESIDENT OF FARMERS UNION OF NORTH DAKOTA

Mr. TALBOT. Mr Chairman, my name is C. C. Talbot, from Jamestown, N. Dak. I am president of the Farmers Union of that State, and a lifetime farmer.

Mr. GOLDSBOROUGH. Will you proceed in your own way, and when you get through the subcommittee will question you.

Mr. TALBOT. I have been very busy and unable to prepare any statistical statement, but which probably would have been of very little value to the committee, in view of the highly technical testimony that they have already received, and will receive from the economists.

I feel that I am possibly somewhat prejudiced as a witness, because of the interchange that was had with my superior here yesterday, Mr. Chairman.

Mr. GOLDSBOROUGH. Let us forget that. Go right ahead.

Mr. TALBOT. I have been intensely interested in the testimony of Senator Owen, because of his prior connection with the financing of the country. I have also been interested in the statement of shifting the price level to the basis of 1926. I want to call the attention of the committee to the fact that the overhead on the American farmers was contracted during the war, and has not been paid off subsequent to that time, but only renewed in such cases when there was equity sufficient left out of the toil of an entire family, in most cases, to run; and that, in literally hundreds of thousands of cases, that equity has been wiped away and the family and the home gone into the channels of trade.

Mr. GOLDSBOROUGH. Right at that point, I want to say that is, in my judgment, an eminently fair statement. Proceed, sir.

Mr. TALBOT. I want to call the attention of the committee to another fact: That a basis of credit on farms in the Mississippi Valley was not allowed in banks after 1922—I mean, the real estate; that they were taken out of the banks of the Middle West as a basis of credit; and almost consistently, subsequent to that time, the farmer who did not own the real estate and who had good personal property, free of debt, was a better risk than the farmer with 160 acres of fine land, because that was a liability. Now, these are known facts to everyone who is acquainted with the agricultural situation.

I feel that we have no inconsiderable part in the scheme of things in this Nation, for one outstanding reason, and that is: That the farmer really operates a factory, and this buying power and buying means are substantially greater than any other family in America, as a unit. So, certainly, we are tremendously concerned with anything that affects this Nation as a whole.

I want to point out that my information is, that the German reparations, amount to \$500,000,000, spread over 60,000,000 people; and that the reparation of the farmers of this country, with only 27,000,000, amounts to \$600,000,000. So, there is a disparity there that is working harder on the American farm home, after the war, which was supposed to make us all rich, than affects the whole of the German people, which the war was supposed to bankrupt and make poor.

I do not want to say I am against your bill—

Mr. GOLDSBOROUGH. Well, you say it, if you feel it, because we want all of the information and help we can get from you, sir.

Mr. TALBOT. I want to make this statement, that I do not think that it goes far enough. I do not think any foundation or basis of credit structure of this country has ever been fair to all of the people, that has been built for more than 100 years in the interest of credit, rather than of the common people. I say that with profound feeling on the question. I feel that we can only patch up, in such a bill as yours, the tremendous harm that has been done to the common people of this country throughout many, many decades, because we have not lived up to the Constitution of the United States.

We have farmed out—I say this with deep feeling—we have farmed out a function that I firmly believe, and have believed for nearly a quarter of a century, should belong to the Government, to a

private bank of individuals who have been almost conscienceless, at times, in the expansion and contraction of the blood of life, which is the currency that these people exchange their commodities for.

And another outstanding thing that I want to leave with this committee, and in this record, is this fact: That in 1921 the farm commodity price began to fall, and at such a tremendous rate that, at that time, and in a period of 12 months, I will say, in just that short period, we bankrupted the total agricultural industry of this country, and they have been living on their future resources ever since that time. Now, let me point out what has happened: The manufacturing interests of this country were only induced to lower their prices, or able, I might say in all fairness, to lower the prices of their commodities since the war, only on the ratio on which they bought the cheaper raw materials from the agricultural interests of the country, cotton, wheat, everything that goes into the manufacture of these commodities, raised from the soil, and their prices have only been lowered in the ratio that they get them on a lower base from the source of supply; and, therefore, the load has been carried by 27,000,000 people, practically all of the load, since 1921 until 1929, when the average people in the East believe that the calamity first struck this country.

I am telling you, we have suffered under this load since 1921, and we have been holding on in the hope that something would happen that would relieve the situation, but our credit structure has been endangered, and frozen for more than a decade. Because of the fact, gentlemen of the committee, that the manufacturers, through getting these raw materials below cost of production from farmers, were able to keep up their price structure, that kept labor employed; and, therefore, prosperity seemed to be universal in this country; but we were sapping the foundation of prosperity in this country for 10 long years, and we have completely destroyed agriculture at this time. If we put the rich farms of the Mississippi Valley between the Rocky Mountains and the Allegheny Mountains, to-day, on the block, they would not sell for the indebtednesses against them by several hundred millions of dollars. That sounds like a radical statement.

Mr. GOLDSBOROUGH. I made the statement yesterday that I thought that the farm lands of this country would not, at this time, sell for enough to pay the indebtedness against them.

Mr. TALBOT. There is no question about that in my mind. I have driven, in my car, for practically 250,000 miles in the last seven years, and mingled with the farm population of the Mississippi Valley very intimately and closely.

Mr. BUSBY. The condition you describe is true, at the present time, and with the further effect that, if these farms should be placed on the market, it would be a tremendous disaster, because there would be no competitive demand at all.

Mr. TALBOT. That is true. There is not any buyers for them, as a matter of fact.

Mr. BUSBY. Even without them being offered, but if you threw a substantial portion of them into the market, there would be a panic.

Mr. TALBOT. Absolutely; it would break down everything, if they were offered for sale. Nobody offers there, because there is not any buyers. We have known that, for years, there were no buyers for farm lands in the richest part of the agricultural belt of this country.

My honest thought, in this discussion that I think is pertinent, is that I am convinced, gentlemen of the committee, that as long as we maintain a system of credits and finance that we have had, even though we bolster it up by such measures as yours—and I am for it—if we can not get something more radical, shall I say—

Mr. GOLDSBOROUGH. Something better, from your standpoint, as you understand it.

Mr. TALBOT. Yes, sir; certainly. I want everything done that can be done, even temporarily, to save this Nation, and that is exactly what we need. We have got to do something, and we are not going to wait 12 or 15 months or two years to save this Nation, gentlemen, that is on the verge of total collapse; and in spite of all Congress is undertaking to do, that can not be averted. The facts are, we have not the remedy, with all of the work Congress has undertaken to do in the two bills; we have not changed the position of the commodity prices, only they have gone down slightly in the meantime, and that is evidence to us that we have not restored confidence—

Mr. GOLDSBOROUGH. You think, do you not, that the Glass-Steagall bill does give the Federal reserve system the power to raise the price level?

Mr. TALBOT. There is not any question about that, not a question in the world, but I want to point out this—I think it would be a repetition of some of the testimony since I have been listening here—to expect the bankers—I am going to speak from the standpoint of the farmer in the farm areas in the Mississippi Valley, because I am only superficially acquainted with the credits and structures of the industrial centers—to expect the banker to lend to the farmer, on the collateral that he has, with the selling prices to-day, is just crazy. You can put \$100,000 of free money in any bank in my State, and you can not induce that banker to take the collateral he can get in the community and loan any money on it.

We are either going to raise the price levels of commodities—if that can be done under your bill, then I am for it—but are you going to, through the Glass-Steagall bill, induce the banker to loan me money on something that does not exist; and I can tell you that literally thousands and thousands of cases where there are farmers owning farms in the Mississippi Valley, that have renewed their paper, where the bankers have stricken off their interest and have begged the farmer to stay on those farms, because they did not dare to settle with that man, because that would affect the assets of the bank to the point of explosion of the bank.

I have the very uncomfortable position of looking every day for an assessment on my bank stock in my local bank, that lived for the last 10 years, while 15 out of our 17 banks went into bankruptcy in my home county. There are 2 left out of 17 banks, and they were not wildcat banks, they were banks that were doing substantial business, with not less than \$150,000 of substantial depositors. That was a county where they diversified, where they raised corn, hogs, alfalfa, wheat, every commodity known to that area, and my bank was, within the last six weeks, one of the last three to expire. In 1920, we had \$360,000 of deposits in two little country banks in a town of 250 people, almost equally divided. In 1927, a year after you want to stabilize commodity prices, we had to consolidate those two banks,

which, both together had less than the amount of deposits in either one of them in 1920; and, six weeks ago, the last one expired, in spite of the most conservative banking by its directorate and its cashier.

Now, that is one of the best counties in my State, rich in diversification area.

We have lost, out of 850 banks in my State, since 1920, over 675 banks, and we can not keep track of them, only from day to day, or get the record. I could not tell you how many we have got now, but less than 220 banks in the entire State, where there are 34,000,000 acres of land in farms, besides 10,000,000 acres of waste land, the second largest wheat producing State in the Union, the State that produces 60 per cent of the flax of the United States, fourth in the production of turkeys, producing 50 per cent of the Durum wheat in the United States, first in the hard spring wheat in the United States; and that is its financial condition in the year of our Lord 1932, with less than 225 banks left, and not a single one of them loaning a dollar to anybody.

So I have to say that I am for any measure that will even temporarily bolster up the situation, because I can see absolute collapse and ruin to the entire Mississippi Valley within less than 24 months. This again may sound like a radical statement, but I happen to know from Kansas and Oklahoma north to the Canadian line, the conditions of the average farmer, and when their production is higher, relatively, their taxes and their debts are higher, so the ratio runs almost identical almost straight through that entire area.

I do not think I could add anything further to my statement here. I want to say that I would prefer the Wilson bill to your bill. I believe that we ought to have a larger volume of money as the standard. I believe that the restriction of our monetary standard to such a thing as gold as the basis of credit and the volume of money is dangerous to the people in any country, other than the creditor class. I agree very thoroughly with Senator Owen in saying that the creditor, under each conditions as this, is jeopardized.

I am not going to make a confession, I am going to state a fact, that I deliberately gave away a \$40,000 farm in 1927, with over \$7,000 worth of improvements that I built myself. I gave it to the insurance company, because I knew that I could not beat the game with these kind of conditions. I might say that I was smarter than my neighbors, but I discussed it with them, and I said: "Boys, you can't stay. I am going to beat you out. I am going to start to make my earning power protect my wife in her old age." I surrendered one of the finest farms in my county to the insurance company for less than \$40 an acre, and I was called crazy and foolish by a lot of people, but I am told now in my community that I was the smartest one of them, because I got out five years ahead of the rest of them.

But I was not so smart, as I took all of the cash that I could get together, after I had settled my personal obligations, and invested it in life insurance. Now, the life-insurance company has the title to our land in the Mississippi Valley, and the land is no good; the stock market went rotten in 1929, and jeopardized their investments in stocks and bonds in the East, and now my life-insurance policy is no better than my land was; so I am just a fool, anyhow.

This is not a joke; it is a tremendously dangerous fact to my wife, in her old age. I am not a young man. I may look like it, but I

am getting up toward the sixties. My children are better equipped with the mental capacity and education than I ever was, so I do not worry so much about them, because they are getting along very well. But I say again, I was not so smart as I thought I was. I surrendered my farm, well improved, because I knew I could not beat the game, and invested in life insurance, and now I do not consider that was very much more than the farm.

Mr. STEWART. In your statement that you objected to 1926 as the basis, after all, the farm products, which of course are the lowest in February, 1932, and were 50.6 per cent of what they were in 1926—in other words, 1926 would practically double the farm prices, I mean the prices of the farm products.

Mr. TALBOT. Yes; I understand.

Mr. STEWART. Whereas all commodities are 66.3 per cent. In other words, all commodities, including the farmers', would be increased one-third and the farm products would be increased one-half on the basis of 1926.

Mr. TALBOT. I do not question that at all. My statement is that so far as one-third of the population is concerned, and that is quite a substantial amount, they would have been completely bankrupted prior to 1926, and the only way that I can see to get a fair distribution of this and give the people who have lost their property—leaving the workingman still earning and putting aside income reserves up until 1928 or 1929 and paying for his home, and so on—27,000,000 people, the farmers of this country, not only were bankrupted, but they have not received \$1 for their labor, including the wives and three or four children in each family, in the production of the foodstuffs of this country because of the fact that their indebtedness was made and their overhead was not brought down, because of the prosperity in the factories of this Nation, the high wages, to which I have no objection, of course; and because they were paying overhead that sapped their entire ability to earn on these farm units since 1926, as well as prior.

Mr. BURTNES. In view of Mr. Stewart's question, might I make one observation that I think is very pertinent?

Of course, the increase in the commodity price level would be an average increase, if you went to 1926, and would not drop the increase in the price of farm products, at all; that is, it would still be simply an increase from 66.3, at where all commodity levels stood in February of this year, back to 100, where they stood in 1926, and that substantiates what Mr. Talbot has said.

It might be well to mention, also, here, that with farm commodities arbitrarily placed at 100 in 1926, under the new plan adopted by the Bureau of Labor Statistics, if it is compared, for instance, with the price for farm commodities at its high in the latter part of 1919 or 1920, when a lot of these debts that Mr. Talbot has referred to—and he comes from my State. That is why I felt justified in interrupting him—the average for 1919 on farm commodities, for instance, was 157.6, and the high in 1920 was 169.8 in May, 1920, and the decline in farm commodities started a year earlier than you probably mentioned in your statement—

Mr. TALBOT. I know they did, but I wanted to be conservative, Mr. Burtness.

Mr. BURTNESS. Because the farm commodities dropped from the high in May, 1920, down to 104.6 by the time December of that year came around.

Mr. TALBOT. How I know it, Congressman.

I am through, unless there is some question.

Mr. BUSBY. I think you made a complete and fine statement.

Mr. GOLDSBOROUGH. You made a very interesting statement, and I must say, certainly as far as the facts are concerned, I think you are sound. I do not know of a farmer who has made anything at all in the last 10 years. I do not know that I know a farmer who has not gone back in the last 10 years.

Mr. TALBOT. That is my experience with them.

I thank you.

Mr. GOLDSBOROUGH. We will now adjourn until 10.30 o'clock Monday morning.

(Thereupon, the subcommittee adjourned to meet at 10.30 o'clock a. m., on Monday, March 21, 1932.)

STABILIZATION OF COMMODITY PRICES

MONDAY, MARCH 21, 1932

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON BANKING AND CURRENCY,
Washington, D. C.

The committee met, pursuant to adjournment, at 10.30 o'clock a. m., in the committee room, Capitol Building, Hon. T. Allen Goldsborough, presiding.

Present: Messrs. Goldsborough (chairman), Busby, Prall, Strong, and Beedy.

Mr. GOLDSBOROUGH. The committee will please come to order. I think the subcommittee has agreed to hear first this morning Professor King of the University of the City of New York.

STATEMENT OF WILLFORD I. KING, PROFESSOR OF ECONOMICS, NEW YORK UNIVERSITY

Mr. KING. My name is Willford I. King, and I am professor of economics of the New York University.

Mr. GOLDSBOROUGH. I think you told me you had not seen this particular bill we are now considering.

Mr. KING. I have not seen it yet.

Mr. GOLDSBOROUGH. Now, take your time and look at the bill, Professor King.

Mr. KING. Yes, sir.

Mr. GOLDSBOROUGH. Now, will you not just make any statement that you think will be of assistance to the subcommittee in any way, and when you get through the subcommittee will probably want to ask you some questions, Professor King.

Mr. KING. Yes, sir. I have just read over the bill, but have not gone into the minutiae of it; but in general, it seems to me that the idea is absolutely sound.

I feel that we have suffered, during the last two years, primarily, from the deflation of currency, and the fall in price levels; but I do not believe that was where the trouble started, or that that caused the difficulty.

Back in 1929 we had gone into debt too much as a nation; we had been too optimistic, and when people are optimistic they are inclined to go in debt; they buy things on time—radios, houses, and automobiles, and other things; and whenever a nation buys more commodities, or places orders for more commodities, than the income of the nation as a whole, it is getting in debt deeper and deeper.

That, as I see it, was what happened during the period preceding 1929.

Now, a nation is made up of individuals, and these individuals are acting as individuals, or as representatives of business concerns, and

each individual or business concern has a limited amount of credit, not an unlimited amount. The result is that, if they keep on buying more than their incomes, some of the people who do so will run out of credit, not all at once, but one by one. That, I think, makes a crash inevitable, whenever you have a boom. I think that was what happened in 1929, that the people had overbought in comparison with their incomes, not only of consumers goods, such as automobiles, refrigerators, radios, houses, but also of stocks.

As we all know, stock scales were absurdly inflated. I do not believe any kind of legislation could have prevented the crash in stock prices; it was inevitable; but stocks went down before the end of 1929 to what I should say were reasonable levels; that is, they had been selling at 20 to 30 or even 40 times their earnings. By the end of 1929, aside from a few of the blue chips, they were down to 10 to 12 times their earnings, and that is not an unreasonable level for stocks. That is, that much deflation was necessary and desirable and could not be helped; the people had gotten in debt too deeply, and they had to pay off their debts.

We commonly hear it said that the Nation was suffering from overproduction at that time. I believe that Mr. Carl Snyder, of the Federal Reserve Bank of New York, and Doctor Warren and Doctor Pearson, out at Cornell, have thoroughly exploded the overproduction fallacy. There are no statistics available, so far as I am aware, that there was any overproduction, except for a few limited fields; and those limited fields were, in as many cases, advantageous to the United States. Mr. Snyder has brought out the theory very well that if we had overproduction of wheat in this country, there was also an overproduction, we will say, of rubber abroad, that is, we sell wheat and we buy rubber, and the two things sometimes balance each other; and so, with the few commodities which were overproduced, and they were very few, they were offset by the overproduction abroad of things that we wanted to buy. That was known pretty well. The result to the country was, if there was an overproduction of some of these commodities for several years before 1922, that had not hurt our prosperity noticeably. I believe that we can say that the overproduction was not the cause of the present difficulty that we are in.

We are also told, very frequently, that we were suffering greatly in 1929 from a maladjustment of business, that business was in an unsound condition. I do not believe there is anything in that theory. I think business is always, to some extent, in an unsound condition; that is, weaker businesses are continually being forced out by stronger businesses, and that goes on in good times and in bad. It is the depression that is accentuated, but I do not believe that business in 1929 was in a weaker condition than normally. I think it was in a much stronger condition than normally, because most of the big concerns had adopted very conservative policies and built up very large reserves, and they have weathered the storm surprisingly well, for that reason. I do not believe that we can say that the present unusual depression is due to the fact that business was in a weakened condition.

Most of the theories as to why this depression has been so bad, point to some slowly developing causes; but the depression did not come on slowly; it came on very, very suddenly.

If you will look at the new orders for goods as given in the survey of Current Business, you will find that, between June of 1929 and the

first of 1930, new orders in most lines had fallen off from 10 per cent to 50 per cent, a terrific drop. That must be explained by something very sudden. I think we have the explanation in the fact that a good many of the individuals and firms had run out of credit; they had used their credit, and they had to curtail purchases, and that reduced the orders to the manufacturing concerns.

As soon as orders begin to fall off, naturally the stocks, the prices of stocks begin to decline, and when the prices of stocks began to decline then a great many people wanted to get out from under. That caused the great crash in 1929. I do not believe that that necessarily should have brought business down to anything like the present level, because, as I say, business was sound.

I believe that when President Hoover called his conference along in the spring of 1930, and when the business men of the country and the economists assured him that business was essentially sound throughout the United States, and there was no reason for another depression, they were stating facts accurately and correctly. People think that was not true now, and there has been great criticism of the President for having brought out these statements. I think that was perfectly correct; but it is difficult, when you get deflation started, people become pessimists, and they became pessimistic then; and prices of securities have fallen, the prices of real estate have fallen, and the people were pessimistic. Therefore, they did not buy even up to their incomes, they bought less than their incomes, and that caused the orders to fall off of the manufacturers still more, and that caused people to be laid off at the factories; and whenever you have people laid off, that means that the income of the country is diminished, because those people do not have any incomes, and they can not proceed to buy goods.

Furthermore, the prices of stocks and real estate fell, and people were compelled to sell, and when they sold they lost money. That made them still more pessimistic than they had been before, and that caused the stocks to fall still further; and as they fell still further, that forced more people to sell that did not sell before, because they wanted to get from under, and also, they sold because the brokers compelled them to sell, or suffer very largely; so you had a decline accentuated, and you usually do.

Now, this has been accompanied by another phenomena, and that I think has a very material bearing upon the purposes for which this committee has met. That has been accompanied by a rapid decline in the prices of commodities. Now, the prices of commodities fell at the start, partly because, as I say, the people could not buy up to their incomes any more, and did not buy up to their incomes; and it was necessary to have some contraction in the prices of commodities, such as we had, for example, in 1924 and 1927; but it was entirely unnecessary to have this very large contraction in the prices of commodities which has occurred since 1929; that is, it seems to me to be entirely unnecessary. Only a moderate contraction would have been sufficient to cover the decline in business and adjust the total output of goods to the lessened purchasing power of the people. But there is a reason for this decline in the prices of commodities, and I think that is best brought out by the bulletin that has been recently published by Professor Warren and Professor Pearson out at Cornell University in the February issue, in which they show that there has

been, for a number of years now, a shortage in the gold supply; that the output of gold has not kept pace with the volume of business.

During the boom between 1925 and 1929, the fact that gold was becoming scarcer, as compared to the volume of business, was not apparent, because of the fact that we had the great wealth of bank credit. If you will look at the volume of deposits subject to check, which is the principal media of exchange in the United States, you will find that it ran up very, very rapidly, so that it became something like double as great as it had been in 1923 and 1924; that is, in creating the great volume of bank money, that obscured the fact that, from 1925 on, our gold supply was not keeping pace with the demands of business. But when the crash came, people lost confidence, and they began to pay off their debts at the banks, and this bank currency, these bank deposits, with which we do business, simply faded away; and now, in place of having twice as much as it was in 1923 or 1924, it is less than it was then. We got rid then of this banking currency, and had to fall back more upon gold; and when we fell back upon gold, we discovered that the gold supply was not what it used to be; in other words, that the units of gold had become more valuable; and when the units of gold, the ounces of gold, became more valuable, that means a decline in prices, because prices are merely the ratio of the commodities to gold, as we see it, in the United States, because we are on the gold standard.

Now, as I say, I think that business was essentially sound, and a recovery should have begun in 1930; but, as we all know, it did not begin, but we kept right on going down the hill; and it is my opinion that one of the prime reasons why we went on down the hill is that the price level of commodities was falling. In fact, it has been very often observed that business does not prosper when prices are falling. If a manufacturer, for example, buys his labor and his raw materials at a high price, and when the goods are completed he is able to sell them only for a low price, sell the finished product for a low price, he does not make any money.

Furthermore, the price of that one commodity, labor, is fixed largely by custom and contract. It is very, very difficult to lower the price of labor to correspond with the lowered prices of raw materials, as we all know. Labor does not wish any wages cut, because they fear then it would be very difficult to get them up again. Salaries add to the relative stability. So, you have this very important commodity, labor, which is an extremely large factor in the prices of any of the commodities, and which is relatively fixed. With it relatively fixed, the manufacturer can not cut the prices of his product readily and mark them down to the new price levels. We have seen that painful process that has been going on during the last two years. If the manufacturers could have cut all of their costs rapidly, especially their labor cost, they might have been adjusted to this new price level, but they could not do that, and they have been selling them in very reduced amounts on the old price level. The automobile industry, for example, of course, somewhat reduced the prices, but not so very much, and they are only selling one-third as many as they did before of this device; and in most of the other industries they have workers being laid off, and the workmen being laid off has tremendously reduced the purchasing power of the commodity.

The fall in the price level, then, to my mind, has been responsible, in the main, for the continued decline of business since the middle of 1930. I do not think it was responsible before that time, but I think it was responsible since then. Now, a fall in price level brings with it not only unemployment but also other evils. When the prices of commodities fall, when the earnings of corporations fall, obviously the prices of land will fall, and the prices of other commodities will fall. We have seen that throughout the United States, the great shrinkage in the value of real estate and real-estate mortgages, and we have seen the great shrinkage in the value of bonds, railway bonds, for example.

Now, it is a well-known fact that the banks of the country have been encouraged to invest in such securities, railway bonds and mortgages on real estate have been the backbone of the portfolios of the savings banks of the country and the life-insurance companies, and we have seen these shrink in value tremendously, because of this increased value of gold, because of the amount of bank deposits, subject to check, falling away, in other words, because of the fall in the price level; and so we have seen bank failures all over the United States, not because the banks were unsound, not because the bankers were not wise, but because this price level had fallen, something over which they had no control, and which they could not foresee. Bank failures, of course, have accentuated your difficulty.

Now, if the price level keeps on falling we shall undoubtedly see not only more bank failures, but we shall also see life insurance companies going to the wall, one by one. It can hardly be otherwise, because they have entered into contracts to pay certain amounts of dollars, and if this price level keeps on falling they will be unable to fulfill these contracts; and, one by one, they will fall. In fact, all concerns that have agreed to pay a fixed number of dollars will eventually be driven out of business, forced to the wall, if the price levels should continue to go on down.

I am not predicting, understand, that if nothing is done, the price level will go on down indefinitely, because I do not think that is true; but I am merely pointing out how we have come to the situation we are in now, where we have had failures; and I understand that a great many of the banks which are, nominally, solvent are only solvent because of the fact that the examiners do not rate the securities upon real estate at the present time at their present value; but if that were done, many of the other institutions, banks and insurance companies, would be hopelessly insolvent.

So we have been brought to a very serious pass by the fact that we have this falling price level, that that has fallen too far. Now, it seems to me that we should recognize that our price-control system in the United States is very antiquated. We are still operating on very much the same type of currency that they had in ancient Rome; that is, we depend upon gold and silver, gold primarily, and the value of our money is dependent entirely upon the chance fluctuations of the value of gold. If we discover a lot more gold mines in some other part of the world, then the value of our money falls, and prices rise. If we do not, the other thing happens. That is, we have no regulation for our currency, no regulation for the value of our money. Congress was given the power to regulate all the weights and measures, and they have regulated such things as the length of the yard. We have a

very accurate measure of that kind, so we can always tell how much a yard is.

As Professor Fisher has often pointed out, originally the yard was the girth of the king, and if we had a fat king the yard got longer, a slim king, it got smaller. A foot was the length of the king's foot, and that varied with the size of the foot of the king. We think that is rather crude, but, after all, the variation in the yard and the foot, at that time, was probably considerably less than the variation in the value of our dollar at the present time; and, after all, we do not ordinarily measure everything in yards, because some things we measure in tons and some things in other weights. It would not be as bad to have a variable yard as it is to have variable money, because we measure everything that we buy and sell in money, and that affects all of our transactions; so that variable money is worse than a variable yard.

My opinion would be, therefore, that long since the time has come when we should have regulated the value of our money, fixed it at a definite price in terms of commodities; that is, we should have a commodity standard of value, rather than this chance standard of one commodity. As Professor Fisher has pointed out, the gold standard has not been a good standard, it has been a poor standard, but it is true that we could have worse standards than the gold standard. I would not say it was the worst one we could have, by any means, for it is much better than some things we could choose, but it is a poor standard at best. What we should have would be a fixed standard in terms of a large basketful of commodities, so we could be assured that \$1,000 at one time would be approximately the same as \$1,000 at another time.

When a man takes out a life-insurance policy, to be paid many years in advance, he should have the assurance that when his life-insurance policy is paid, it will be something like the amount of goods that he had in mind when he bought the policy. I do not think there is any possibility of making it be exactly the same amount of goods; that would not be possible; so we have frequently made inquiry among economists and statisticians as to what kind of index numbers of prices should be used. That seems to me to be relatively unimportant; you can only approximate those at best. Almost any reasonable index number would be better, as far as stabilization is concerned, than the standard we have at present.

I think the index number picked out by Mr. Snyder, the president of the Federal Reserve Bank of New York, would be an excellent index number, exactly as it stands; but the particular type chosen is not a matter of major importance. Practically every index number of commodity price has fallen sharply during the last two or three years, and I do not know of any individual commodity that would not show about the same thing as the other.

In general, retail prices are somewhat more stable than wholesale prices. If you wanted an index number that did not fluctuate much, you would use the retail prices. If you wanted one that fluctuated more with the business cycle, you would use the wholesale prices; but either one of them would give you a fair degree of stability.

Now, what we need is not inflation. What we need is stability of prices. Inflation, of course, is much worse than deflation, because, as some one has said about the stock market, there is a bottom, but no

top; and so, when currency is inflated indefinitely, as it has been in most of the countries in the world, there is something wrong, and everything runs wild. We do not want inflation, then. Deflation kills business. Inflation starts out by making business boom, but as it goes further, it also kills business. Either way will destroy business. What we want is to regulate the price level and at a definite figure.

Now, the price level has declined very sharply during the last two years, and it seems to me that it should be restored to the old level before we can stabilize.

That is a matter where there would be differences of opinion. The scientific basis for restoration should be this: It should be restored at a point which would give justice to the greatest number of people, or the greatest volume of payment. Supposing you decided on a price level at the level where we are now. If you stay there long enough, most of the debts and liabilities will have been contracted on this new level; and then to restore the level to what it was at some past time would be unjust. On the other hand, if you have had a sharp fall, then justice would be best served by restoring the price level promptly to the old level; because relatively few of the debts and obligations have been contracted at the new level; and most of them at the old level.

We have in the United States such a vast volume of life insurance and bonds of all kinds, long-time securities outstanding, that my feeling is that the maximum of justice, at the present time, would probably be secured by restoring prices, say, to the level prevailing between 1923 and 1929, when we had then prices on a plateau for a considerable period of time; but I realize that some others would prefer to restore to some other level; but I think there can be no question at all that the elevation of the price level at the present time would make for the maximum degree of justice. I also feel that it would be entirely probable that the restoration of the price level to a higher level than that now prevailing would stop this business decline and cause a prompter business recovery. It certainly would stop the bank failures; certainly it would make the savings banks and the life-insurance companies solvent, and restore confidence; and it certainly would ease the difficulties which the farmers are in who can not pay their mortgages that they have obligated themselves to pay; it would certainly help the business man; and the wage earner, who has had a steady job all of the time, might say that it would hurt him, but there are so many of the wage earners that have not had steady jobs, that I think the great majority of wage earners would be benefited, because they would get more work. Their dollars would not buy quite as much as they do now, but if you do not have a dollar it is not very advantageous to have it buy more. So, my feeling is that it would be entirely probable that business would recover promptly if the price level were restored promptly.

I have looked over the statistics of the various countries recently to see what the effect is in restoring price level upon business. I find that, in most cases, not in every case but in most cases, when prices are raised sharply, that business recovers promptly. There are a few exceptions, but in a great many of the cases that holds true.

Mr. GOLDSBOROUGH. Will you illustrate, please, the countries that you have in mind?

MR. KING. Well, I do not know that I can give you the list right now. We took the European countries, the principal European countries, in the period since 1914, and we charted our movement of prices in those countries, and the movement of employment, that being the best gage that is available in those countries, where they do not have production index, and they have slid it up and down; and in about two-thirds of the cases I should say that, when there was a sharp rise in the price level, employment rose promptly. I do not believe I could give you the dates, and so on; I have not the charts here.

Now, the question then is, If we should wish to restore the price level, which to my mind would be highly desirable, can it be done? I believe there is no difficulty at all about restoring the price level, except political difficulty; that is, I think there is no economic difficulty about it whatever. If you put more money into circulation, in sufficient quantity, prices will rise, and you can put the price level to any point you wish. There is not any doubt about that in the world.

We have also been studying European reports in that regard, and in every case where money was put into circulation in considerable amount, the price level has risen; when the money is taken out, it falls. Now, the question may be asked as to how much money will raise the price level? Well, on the statistics that we have investigated, we can not answer that question, because that raises the question of too many different factors; and to say that, if you double the amount of money in circulation, you will double the price level, does not necessarily hold, because sometimes you raise the price levels a certain amount, and sometimes more and sometimes less; but I do not feel that is a question which should bother you gentlemen one way or the other. It seems to me it is very much as I pointed out some time ago, like the problem of getting up the hill in your automobile, when you are down at the bottom of the hill and want to get to the top. Suppose you were asked, before you started up the hill, how many gallons it was going to take to get you to the top of the hill. If you are like I am, you would probably be a month before you found out; but you can step on the accelerator and you can get to the top of the hill without any difficulty, because you put in merely as much gas as was necessary to get to the top of the hill. That is exactly the situation with regard to the price level. If you want to get to any specific level, you put in as much money as necessary to get to that point; but you must have a device on it that will stop when you get to that point, that is, you must determine in advance where you are going.

The danger of putting up the price level is that when we get started we will not be able to stop; and there is very much historical evidence on that side. Once an inflation movement is started, it tends to go wild; and as I said a moment ago, there is a bottom but no top; so when inflation goes wild, it is very much worse than deflation. Deflation is stopped automatically; and in inflation there is no stopping point until the money is reduced to zero, such as happened in Germany and several European countries. So you must have an automatic curb before you start to raise the price level. If you do not have an automatic curb, you will cause more damage than you will do good. So far as I am aware, no country has ever tried to regulate its prices scientifically; so if you should decide to pass a measure of the type which we have before us, you would be blazing a new trail. If you

are unduly fearful, you should not adopt such a measure, because that will be something more. Now, that would not appeal to me as a measure for not adopting anything. Of course, the first man that ever went up in an airplane was something new; and if you never begin, you never get anywhere. Certainly we have not been getting along in a very ideal fashion in the last year or two; and I think that it is worth taking some little risk to try to improve matters.

Now, as to the methods of putting more money into circulation: If you wish to raise the price level, you must put more money into circulation, and that can be the actual coins, paper money, or it may be deposits subject to check, any one of these three things. Now, there are various ways that you can put money into circulation, and one way would be simply to print greenbacks and put them out with nothing behind them. That is, of course, not the method that is most favored, for the reason that it becomes such an easy way of paying Government expenses that it tends to go on indefinitely, and it is a dangerous method.

If you are going to regulate the price level scientifically, I feel that it is essential that any money that is put into circulation, any paper money put into circulation, that the Government should get something tangible and salable in return for that paper money; if not, it is in a bad way. What can the Government buy that would be tangible? Why, it can buy gold, that is one thing it can buy, with the paper money. It could buy Government bonds, as there are some \$18,000,000,000 or \$19,000,000,000 worth of those outstanding. If we substitute paper money for Government bonds, we would substitute circulating credit for noncirculating credit. Bonds do not circulate; bonds do not affect the price level; but paper money does circulate and does affect the price level. If the Federal reserve banks should go out and buy Government bonds with Federal reserve notes, they would have the bonds and the public would have the money, the notes; and the notes would be a circulating medium of credit and would tend to raise the price level.

Now, we have heard, over and again, that the Federal reserve banks have been doing everything possible to meet the present emergency, because they have lowered the interest rates, and nobody wants to borrow. They have lowered the interest rates and the people do not want to borrow. That is one thing that has been found, in times of depression, not to work, and that is to try to get people to borrow and expand the volume of bank currency; and if people do want to borrow, the banks will not accept their collateral. So it has not worked; and they have said, "We can't do anything about it."

I think the only way you can put money into circulation, is to buy something. If they buy Government bonds, the man that get the money does not have to worry about it. He got his money for the the bonds, he has the money, and he is going to do something with it, and he is going to buy something else with it, in most cases. Suppose that he does not buy all of the time, but he will buy in most cases; you do not have to worry about that man that sells a Government bond and buys something else. If you get enough men of that kind, you will raise the price to any place you want to it go. So it is a matter of putting out a circulating medium and taking out a normal circulating medium, if you exchange any kind of Government paper money for bonds.

Now, you could have the Secretary of the Treasury do the same thing by issuing Treasury notes and buying bonds; that is, he could convert more or less of the Government debt into circulating notes, noninterest bearing, or interest-bearing bonds; merely substitute one for the other; and by so doing, he could put these levels up and down, at will.

There is another method, a third method, which has been proposed lately, that is being advocated by the silver people, and that is to have the Government buy silver, not to establish a fixed ratio of 16 to 1, but to buy it as bullion, and then to redeem the notes in gold or silver, at the option of the Treasury Department. That would merely be a tangible commodity, a justifiable commodity. That would put the money into circulation.

I do not think it makes any particular difference which particular commodity you agree on, or take, you get something that the value is not likely to run away from, just so you get enough of the commodity that you will have enough to sell when you want to bring the prices down again, because you must be prepared to stabilize and keep the prices here. If you do not have any stability, you had better stick to the gold standard as it is, if you are not going to get stabilization.

Now, section 3 of this bill, I note, prescribes that the board is authorized to raise the official price of gold, or to lower the price of gold. Any kind of stabilization scheme should have that proviso in it. If you do not have that proviso in it, it probably will break down and everybody will say "Well, here, you tried this experiment and it would not work." That would be just like starting out to fly across the Atlantic Ocean in an airplane that you knew would not fly very well when you started. This proviso is absolutely necessary, if you are going to be assured that the scheme will work through thick and thin; because, otherwise, if you require a reserve of 40 per cent behind the Federal reserve notes and the people get a little doubtful about the currency situation, they will draw down the hold, pull down the reserve to where it will disappear, and they will not be able to keep out the amount of money that they should. You want to protect the Federal reserve banks, or whatever authority that you wish to put behind your currency system—you want to protect them against that sort of thing; so that outsiders, foreigners, or Americans, or anyone you wish, can not wreck the system by pulling out the gold from under it; and this proviso here to change the official price of gold would protect the system adequately. That is, one country could always change the price of gold. If people begin to draw out the gold too rapidly, they could lower the amount of gold they were going to give him, or raise the price, and then the people would not want it so badly. If you need more gold in the Treasury, or less gold, they could lower or raise the price. So that simple proviso, I feel should protect the Treasury and the Federal reserve banks against that difficulty.

I see no reason, except conservatism, why we should not fix the price level at any level that we think is most desirable, and keep it there indefinitely at all times, in war time and peace time. I do not think we want to make any exception. You can not conduct a war without great distress to the people, as we found out; but at least you have the price level stabilized. In other words, inflation causes

more trouble to the American people than all of the cost of the war. You want a system that will work at all times. I do not believe that there is one reason why such a system can not be made to work in war times, as well as in peace times. We also have opponents of stabilization in many cases saying: "Well, we do not want the United States to stabilize alone." I should say that is the same as saying that we do not want the United States to stabilize at all; because if you are going to go out and get an agreement with all of the nations of the world, you might just as well quit. That is, we run our affairs our own way, and we had better run our own money system and let them run their own.

Some people might wonder about the question of the foreign exchange rate. They say the foreign exchange rate will vary. Of course, they will; they will say: "Foreign exchange rates will vary." They will vary, or are varying now, most of the world being off of the gold standard. They say that variation in the exchange rate hurts trade. I do not believe that you can find a shred of evidence to show that the variation in the exchange rate hurts trade. One will say that it helps trade, another that it does one thing, and another, the other thing. You can always tell afterwards which it does. I do not believe you can tell before.

In looking over the statistics of trade between the United States and European countries during the times when there was inflation and deflation, which sometimes come rapidly; and in the 1920's I could not find a trace of evidence to indicate that either one tended to make trade better or worse; sometimes it was one way, and sometimes the other; it seemed to be a toss-up. So let us not worry about what the foreigners want to do with their money systems; but go ahead and fix our own to suit ourselves, and let them do the same, and I think that we can save a lot of worry about our being unable to restore prosperity because they have not got prosperity in some other country. They did not have prosperity in England during the time that our prosperity was at its height, and that did not hinder us at all. They were very hard up in Germany and in most of Europe during the time when our prosperity was at its height, and it did not bother us then, and should not bother us in the future. You have heard that you can not be rich and have a poor neighbor, but that seems to be without merit.

Therefore, I would say that I would be heartily in favor of the principles of the bill here which Congressman Goldsborough has introduced, and I hope that you will proceed to adopt it, or something along the same line, in the near future; and I believe that you are serving the United States better by that than by any other single measure. This will not do everything everybody wants to do, but this will probably do more good to the business and economic life of the country than any other single measure that is before Congress.

I will be glad to answer any questions.

Mr. PRALL. I would like to ask Mr. King if he thinks the bill covers the needs of the situation?

Mr. KING. I would have to think about that considerably before I would want to be very sure as to any details of that kind. As I say, I just looked at it since I came in here, but it seems to me that the

essential idea is here, that seeks to give the power to the Federal Reserve Board, and authorizes them and directs them——

Mr. PRALL. It authorizes them, but do you believe it should be mandatory?

Mr. KING. I think it should be mandatory; yes. It says, "authorize and direct," and I think it should be mandatory, undoubtedly. I think if it is not made mandatory, they will do nothing whatever about it.

Mr. GOLDSBOROUGH. You understood this to be mandatory?

Mr. KING. That would be my reading of it: "They are hereby authorized and directed," and I suppose that is mandatory.

Mr. PRALL. What would be your idea of the effect this bill might have on the unemployment situation?

Mr. KING. I would suppose that the chances would all be in favor of it improving the employment situation very rapidly. I think we now have unemployment because the lowest price of labor is above the price which an employer is able to pay; whenever you have your commodity listed at a figure that is higher than the market will pay, it remains unsold, and that is the situation at the present, when the employers are losing their employees—when the employees are holding their employers to higher levels than they can pay; and if the employers could get prices for their products, or if the consumers had more money to buy their products, the result would be that they could afford to pay labor and to pay the price labor is holding out for at the present time, and unemployment would tend to disappear. At the present time, they can not sell their products for enough to pay those prices. Labor must be cut all along the line, before they can get jobs; so I would say it would increase employment very markedly.

Mr. BUSBY. A while ago, in speaking of the United States taking care of its own monetary question and going ahead, independent of what the other nations of the world might do, you believe that it is not necessary for us to wait on them to cooperate at the same time, in regard to their money, for us to delay with ours?

Mr. KING. I do not think there is any reason why we should worry about what they do, at all.

Mr. BUSBY. Then we should go ahead and use our best efforts to scientifically stabilize the buying power of our country. Could not any system we set up be related properly to the moneys of the nations, of the other countries, through the international exchange arrangement?

Mr. KING. Well, the international exchange arrangement, if this bill were enacted into law, would go on much as they do at the present time.

Mr. BUSBY. That is what I say.

Mr. KING. Gold would settle the international balances as it does now; but the exchange rate on your pound or dollar would vary, as they do now.

Mr. BUSBY. That variation would be largely determined by the amount of gold in the dollars, and if the Federal reserve bank should change the quantity of gold in a dollar, the exchange rate would vary so as to take that change into consideration? That is all the change there would be in the present condition and the condition created then?

Mr. KING. That is all the difference there would be.

Mr. BUSBY. And there would be a natural and automatic adjustment, that would involve nobody, or any puzzling situation to adjust our currencies to the currencies of the rest of the world, even under such a set-up as this bill proposes.

Mr. KING. It would be just exactly like it is at the present time, because our currency is not on the same parity with gold that the other money currencies are at the present time, as most of the countries have gone off of the gold standard, except France, and there would be no difficulties with us.

Mr. BUSBY. Those countries which have gone off the gold standard, through this exchange arrangement, are held responsible, still, to the gold standard of that country?

Mr. KING. They may have obligations that are payable——

Mr. BUSBY. I am not speaking of contractual obligations, but the rate at which money is appraised in the national exchange arrangement is related not to the fiat declaration of their country, but to the gold standard.

Mr. KING. To the gold base, right.

Mr. BUSBY. So the few countries, if there be four or five, that are on the gold-standard basis, are still carrying the weight of the currency of all of the other countries, to this extent: That those countries are still related to this gold, and our country and France, on obligations owing to them, buy their currency at the international exchange rate, fix it?

Mr. KING. That is right.

Mr. BUSBY. Even though they have not got the gold, at all, to buy back their currency, we appraise their currency, through this arrangement, and agree to buy all of those currencies just as we agree to pay all of our money in gold, on demand.

Mr. KING. Yes; but it is a changing rate, from day to day.

Mr. BUSBY. Yes, I understand; as it is changing from day to day.

Mr. KING. Yes.

Mr. BUSBY. Really, does it not make a heavier condition for the gold that exists in our own country, in that it has the responsibility, independent of and added to that responsibility that exists in our own country?

Mr. KING. Well, the gold supply of the world flows back and forth to whichever country wishes it the most, as I see it, and all the countries of the world base their foreign exchange on gold, and we still would do it. I do not think that it casts any more particular responsibility on one country than another; it merely means that we deal in that commodity of gold as we do in other things.

Mr. BUSBY. On the basis that those rates are fixed?

Mr. KING. Yes.

Mr. BUSBY. Well now, you spoke a while ago, of a supply of gold from the mines having been controlled——

Mr. KING. Well, it has not kept pace with the amount of business that is being done; that is, in order to keep the price level constant, the supply of gold available for monetary purposes ought to keep pace with the amount of business done and that it apparently has not.

Mr. BUSBY. If the supply from the mines has not kept pace, would not the retirement from the monetary use, that we call "sterilizing gold"—would not that have the same effect as it would if it were not in existence, largely?

Mr. KING. If he used the gold for jewelry or something of that kind——

Mr. BUSBY. I am talking about that; but, for instance, if you locked it up in the Treasury and placed it back out of use and out of access for monetary purposes, as I believe France and the United States have done with practically one-third of the monetary supply of gold, does not that have the same effect as if the gold were not produced, or like when you retire wheat from the market, in order to raise the price?

Mr. KING. It would have the same exact effect, unless some arrangement was made to equalize it.

Mr. BUSBY. Which we did not do and refused to do.

Mr. KING. Otherwise, if you take it and lock it up, it is exactly the same as if you took it out of circulation.

Mr. BUSBY. That is what this country and France have done with a large portion of the gold, is it not?

Mr. KING. Apparently, we have gotten a large portion of the monetary gold of the world's available supply locked up in France and the United States.

Mr. BUSBY. To further your answer awhile ago, I understand that your opinion is it would have the same effect on the price of gold as if the gold were cut down to the supply that is used for monetary purposes?

Mr. KING. I think that I would put it this way: That France and the United States have, for certain reasons not entirely intentional, absorbed a large part of the gold supply of the world. Now, other countries of the world have tried to get on the gold standard during the last four or five years, and they really tried to get this gold, but it has gone to the United States and France, and there has been a great scarcity of monetary gold for the rest of the countries; and that has helped to raise the value of the gold in terms of commodities.

Mr. BUSBY. And necessarily that distribution comes about by reason of the trade relations among the several nations, as I understand it.

Mr. KING. Yes.

Mr. BUSBY. I notice this: That always, when there is a great use of money or credit of any type or kind, through our present monetary set-up, including, of course, our national banking arrangement, which provides for the issuance of currency, and the Federal reserve system at the later date, that the after effect, such as followed the Civil War and the World War, is exceedingly disastrous to business. I have come to the conclusion that, under our present monetary and credit set-up, that it is not capable of the extraordinary use, or extraordinary strain, without dislocating business following that time.

Mr. KING. That seems to be true.

Mr. BUSBY. I have come to the conclusion that it is not necessarily incident to war or the destruction of goods; it is incident to the using of the system out of proportion to what it reasonably can stand.

Mr. KING. I should think that you are correct in your statement. The countries that put large amounts of paper money into circulation during the war and used it to inflate price levels gradually, for a long period after the war, they tried to get back to the old gold standard, and they caused great distress to business.

Mr. BUSBY. About 1837 to 1840 there was a great inflationary period in this country, if I remember right, when there was no war, and trade became general and banks were established on nothing, and the system that was in existence at that time was put to very great use. The result was that, notwithstanding the fact that there was no war and no destruction of property, the collapse in property values was generally destructive to business and business institutions. That is true, is it not?

Mr. KING. Yes.

Mr. BUSBY. I call attention to these things because I hear so many cloakroom arguments about the war destroyed so much property, that we are needing a reaction from the destruction of property that was destroyed during the war.

Mr. KING. My opinion would be—if you want it.

Mr. BUSBY. Yes.

Mr. KING. That the destruction of property in war has nothing whatever to do with the things that have happened since 1929. There is no connection whatever.

Mr. BUSBY. That is the conclusion I had come to, but I never had heard anybody else in authority—I mean, who could speak with authority or unusual knowledge—discuss it. Now, it seems to me that if great destruction occurred during the war that there would be a scarcity of goods, consumable goods, as the result of that destruction.

Mr. KING. Yes.

Mr. BUSBY. It seems to me, also, that instead of labor being put out of employment, if there was the question of the destruction of goods in the war, that labor would be called on to set everything in motion to reproduce the things that have been destroyed; but we find the result here, since 1929, exactly the opposite.

Mr. KING. You had, during the period immediately after the war, in France, a beautiful illustration of the effect of the destruction of property, and it resulted in the French people having to work very hard to restore property for the next three or four years. It took them about that long to do it.

Mr. BUSBY. Yes. You would not regard the unemployment at the present time as being the result of war or destruction of property during the war?

Mr. KING. I should think that the only effect that the war has had on unemployment at the present time is that, through the inflation of the currency that went along with the war, and the fact that we have tried to get back to the old system again. That is the only connection that I can see.

Mr. BUSBY. There is one other question: You suggested that, to restore the price level, currency could be put into use in one of several ways, and thereby bring the commodity price up to a higher level than they are now?

Mr. KING. Yes.

Mr. BUSBY. You also suggested that something should be brought in, in issuing that currency, that could be sold to serve as a depressing influence at the proper degree that the deflation had reached.

Mr. KING. That is right.

Mr. BUSBY. I am asking this question largely by request. There seems to be outstanding as the obligations of the Government some

\$2,000,000,000 in soldiers' bonus certificates. It has been frequently suggested that, by redeeming those, and placing the currency in the hands of all of the people who now hold those claims against the Government—that that currency would reach the proper place to do a good deal of good at the present time, and also be no heavier than paying the outstanding obligations that were redeemed. I wonder if you have any suggestion on that line.

Mr. KING. I should think it would put the currency into circulation and would tend to raise the price levels the same as in the other currency put into circulation; but unless you get something in return for them, then you have more danger of creating a dangerous precedent, and you start in to pay off everything else by the same method. That is the chief danger of that device. If you have something that has a real value behind it, gold or bonds or silver, and if it were left in the hands of some responsible authority, like the Federal Reserve Board or the Secretary of the Treasury, you can manipulate it to sell again when necessary; but if you buy labor or something that has no tangible value, then you are putting yourselves into a much more difficult position.

Mr. BUSBY. Well, now to issue this \$5,000,000,000 credit loan and purchase labor and let it go into commodities and construction that are not needed, that would have practically the same effect as having nothing to refer back to, to depress the inflation, if it should come about, would it not?

Mr. KING. That is correct.

Mr. BUSBY. Well, now to buy Government bonds would simply be buying up the debts of the Government, and issuing a noninterest-bearing date against the Government?

Mr. KING. Yes.

Mr. BUSBY. In money, in the form of money, based on these securities?

Mr. KING. Yes.

Mr. BUSBY. But it is your idea that, if we reach a condition of inflation, we can reissue the obligations or bonds which we purchased with the outstanding, noninterest bearing currency?

Mr. KING. Yes.

Mr. BUSBY. And take up those currencies by replacing them with bonds, when the inflation had reached the proper position?

Mr. KING. Yes; because very likely, if you get the thing going and restore confidence, your price level will go right on up through the level you are shooting for, and it ought to be allowed to go that distance; but if you have bonds, they could be issued very promptly and the currency pulled in.

Mr. BUSBY. I suggest that, if we should receive \$2,000,000,000 of veterans' certificates outstanding, you could not replace them again with bonds.

Mr. KING. That would seem to be very difficult, I should say.

Mr. BUSBY. It would have to be by selling to somebody else, instead of the veterans. That is all.

Mr. STRONG. Doctor, are you not the rather noted man who made an estimate of the loss to the Nation by reason of the period of deflation?

Mr. KING. I made an estimate once upon a time of the loss during the inflation after the war. Is that what you refer to?

Mr. STRONG. Yes.

Mr. KING. I estimated that it caused about \$40,000,000,000 to change hands in two or three years, when they inflated prices without any basis of justice, at all.

Mr. STRONG. Have you made any calculations on the cost of this inflation and deflation?

Mr. KING. No; I have not made any calculation on that, but it must run into a very great number of billions of dollars that have changed hands.

Mr. STRONG. More than the last one?

Mr. KING. Probably more than the last one, I should think.

Mr. STRONG. I notice you say the inflation caused the losses; you mean the deflation following the inflation, or do you regard the inflation——

Mr. KING. The inflation caused the loss, and then the deflation caused the loss again.

Mr. STRONG. To whom does that inflation and deflation belong; who is the loser by it?

Mr. KING. Well, in the case of inflation, there is a little difference from what it is in the case of deflation. In case of inflation of a moderate amount, all of the people that have fixed obligations lose; that is, the bondholders and holders of mortgages and life insurance, and that sort of thing, lose; and salaried people lose, temporarily, and holders of stocks gain, and business men usually gain during inflation. In cases of deflation, it is a little different. I made a study recently and tried to figure out who gained in the case of the present deflation; and so far as I can figure out, practically nobody has gained. There have been a few, of course, who have gained. You would think there was some class of people that would gain very largely; ordinarily, the textbooks will tell you that is true; but I think it is true that no one has gained from this deflation, because we are all recipients of income from different sources, and what we gain in one way we lose in another. There was a weakening and falling of incomes in the country, a great shrinkage in the national income, and a great shortage of goods. It is not necessary that anyone gains when the other one loses, as we are all losers. What we are suffering from is very distinct underproduction; these factories are shut and are not producing anything near the amount of goods we ought to, and we are having very severe losses from underproduction, so everybody will lose.

Mr. STRONG. Even the man who has gold has no place to invest it safely.

Mr. KING. No; most of us have investments of one kind or another.

Mr. STRONG. Do you think that we ought to have in any bill of this kind a section providing for a medium for the measuring of the height of the price level?

Mr. KING. I should think it might be a desirable feature. I would suppose that you could either provide for some medium, or provide for some organization to make an index number, with some general instructions. Either one would be satisfactory.

Mr. STRONG. It has been suggested that we permit the officers of the Federal reserve system to have their own index.

Mr. KING. Well, that is possible. I would not suppose there would be much difficulty about it.

Mr. STRONG. There are men on the Federal Reserve Board who believe they should have in a price index, stocks and bonds, and that they should be weighted in the index number the same as anything else. Some of us do not feel that would be very fair to the public at large. Have you any thought on that?

Mr. KING. Why, my own feeling would be that the best type of index number would be made up primarily of commodities ready, or approximately ready, for consumption; so that the amount of goods that the laborer would get for his wages and the ordinary consumer would buy, would be kept stable in value; but I will say, however, if you take a rather inclusive index like Carl Schneider's, and the Federal Reserve Bank of New York, and put it up against the consumer index, they are practically duplicates of each other; so it makes very little difference which you use.

Mr. STRONG. You do not think it is necessary to have an all-commodities index number?

Mr. KING. I think that the consumer's index would be the best, not necessarily the goods on the merchants' shelves, but manufactured commodities, ready for consumption. I think that would probably be the best index; but I would not stand out particularly for any type of index. I think that, obviously, stocks and bonds ought not to be indexed, and I do not think you could put them intrinsically in the index with any success. I think they should be out, for that reason.

Mr. STRONG. The Department of Labor, I know, now put out an index of all commodities monthly, and they have increased them from 504 now to 784, I believe.

Mr. KING. Yes.

Mr. STRONG. Do you think they have improved it by increasing the number of articles?

Mr. KING. I should think it made it more inclusive, probably, or representative of commodities at wholesale, than it was before.

Mr. STRONG. Do you think that their present price index would be a proper measure with which to measure the price level?

Mr. KING. I think it would be a very good measure of the prices of commodities at wholesale, but not a very accurate measure of the prices of commodities in general, because it does not take in any prices at retail.

Mr. STRONG. Well, is not the United States commodity price level at wholesale more accurate than it is liable to be at retail? For instance, in some cities retail prices may be considerably higher than others, but the wholesale price is generally the true price, as being the amount that the retailers pay.

Mr. KING. I have never made up a large index number that way, but I am told that even in the case of wholesale prices, you would not always get the true prices; that many sales are being made at prices other than the quoted ones, especially in such things as steel and copper and so on.

Mr. STRONG. And in cases where the large purchaser gets a discount greater than the small one, of course.

Mr. KING. Yes. If you will permit me to say just a word about a few more prices, I think that all prices are the reflection of the prices of goods to the consumers, that is, all prices come from that source. Those are the only prices which depend upon supply and demand of the article at the moment things that people want to buy and con-

sume, such as shoes and suits of clothes, and so on; and the exchange that is going on depends on the supply on the market, but all of the other things are anticipated. The manufacturer of clothing anticipates the price that the merchant is going to be able to sell the clothing to the consumer for, and the manufacturer of cotton yarn anticipates the price of cotton and finally the goods sold to the consumer and the raw cotton is the anticipation of the price of the cotton yarn, and so on; and, finally, you get back to the stocks in the cotton mills, and those are the anticipations of prices of all of these other things. All prices look to the future, except the prices of the consumable commodities now ready for the consumer to consume; and, hence, these reflections, being somewhat indefinite, are more influenced by opinions than the prices of the consumable commodities; and the more layers of opinion you put in, the more fluctuation you get; so that the prices at wholesale fluctuate more than prices at retail, and the prices of the raw material fluctuate more than the prices of similar manufactured goods; and the prices of the stocks in the corporations fluctuate more than the prices of the wholesale commodities, all the way back. That is, the more anticipation you put in, the more uncertainty and the more fluctuation you have; and I rather prefer—

Mr. STRONG. The more anticipation, or the more weight?

Mr. KING. Yes. And I prefer to get close to the consumer's cost, rather than the other way, but I do not think it makes a great deal of difference, as long as in your index you leave out the stocks and bonds; I think the rest of it will take care of the thing pretty largely.

Mr. STRONG. That is all.

Mr. BEEDY. Mr. King, you suggested some other method of injecting noninterest bearing circulating medium for any interest bearing debt, the purchase of bonds by the Federal Reserve Board.

Mr. KING. That would be one method.

Mr. BEEDY. Of course, as they increase their purchases of such bonds, through the further issuance of Federal reserve notes, they will gradually reach the point where they must stop, because they will be getting where they will have funds out to the full limit of the 40 per cent reserves; and if, at that time, they have not had inflation enough, the price level has gone up, as you say, it is necessary for them to raise the official price of gold?

Mr. KING. Yes.

Mr. BEEDY. Now, compared to that continuing automatic check, which is always in the offing in that operation, what do you say about the method of purchasing bonds by the Secretary of the Treasury through the issuance of Treasury notes?

Mr. KING. I think it would be equally good, provided that he were given definite instructions as to stabilizing the price level. I see no particular choice between the two methods.

Mr. BEEDY. That is, your thought is that, as the Secretary of the Treasury continues to issue more Treasury notes, the relation between the actual gold which we had in the country and the outstanding issues of paper obligations would vary about the same as it would through the issuance of Federal reserve notes?

Mr. KING. I should think it would be about the same thing.

Mr. BEEDY. Notwithstanding there is no law compelling the Secretary of the Treasury to have a certain gold reserve behind the notes which he might issue?

Mr. KING. It would be desirable, however, to keep all notes at par with the gold, so that the Secretary of the Treasury could have the same power to vary the weight of gold in a dollar as the Federal reserve, or else you will probably be arriving at the place where some of your money would circulate at one level and some at another, and that would be a very bad thing.

Mr. BEEDY. That is what I wanted to bring out. So that, in this bill, if you give the Federal Reserve Board the authority to raise and lower the official price of gold, inasmuch as the Secretary of the Treasury is ex-officio member of the Federal Reserve Board, there would be no variation presumably between the price of the notes that he issued, or the value of them, and the notes that the Federal Reserve Board issues at any time?

Mr. KING. I suppose that would equalize them under those circumstances, but somebody has got to have authority to vary the price of gold.

Mr. BEEDY. Have you anything to say to us about the effect on the international exchange of the right to raise or lower the official price of gold in this country, beyond what you have said? Would there be possibly a tendency to widen the fluctuation in these exchange rates, through the existence of such power or not?

Mr. KING. As far as the action of the United States was concerned, I would suppose that it would have no tendency to make the fluctuation wider than it would be otherwise. We are not proposing, under a bill of this type, to introduce some kind of erratic currency; we are proposing to introduce a currency that is exceedingly stable, in terms of commodities, something that is more stable than gold has been before. That kind of currency would not tend to produce an erratic fluctuation in exchange rates. If there were erratic fluctuations, they would come from other countries; because here you are putting in something that is very stable. It is true the price of gold would vary from time to time, but those fluctuations would be slow, and I would expect the changes to be very slight, I think that our action, therefore, would not tend to accentuate the fluctuation in the exchange rate.

Mr. BEEDY. What bearing upon the successful operation of such a law do you think the question as to the proportionate part of the world's gold supply we hold, at any time, would have? Suppose, for instance, that we instituted such a policy, that we pass this bill and it becomes a law, and that the moment we did not have a major portion of the world's gold, due to the fact that France has more gold than we—if you did not adopt such a policy, would the fact that France has more gold than we have any effect upon the successful operation of our policy here?

Mr. KING. I would not say that it would be a matter of any importance at all. The only object in a reserve is to have the ability to pay on demand in gold, and have gold enough to facilitate those exchanges. It does not mean that we have got to have most of the gold in the world. We would need a moderate amount, and we would get it in the ordinary course of trade; but I see no particular desirability in trying to impound the larger part of the world's gold any more than the biggest part of the world's trade.

Mr. STRONG. If, under the existing system, we should continue to hoard gold, before we could pass such a bill and thereby officially

decrease its value, the tendency would be for more gold to flow in, and we could meet our needs in that way.

Mr. KING. I think it would undoubtedly be true.

Mr. GOLDSBOROUGH. Professor King, can you give any opinion as to why the price level has fallen to the extent that it has? You have said, I think, several times, that the business depression was due to falling prices, and that the falling prices were much more than would have been indicated by conditions, as I understood you, as I interpreted what you said. Now, can you explain that, or enlarge upon it?

Mr. KING. Well, the fall in the prices has been partly occasioned by the fact that the gold supply has not kept pace with the volume of business, but that has only been one feature of it. The biggest cause for the very sharp decline in prices that we have had in the United States is the great contraction in the volume of bank credit outstanding, in other words, your deposits subject to check. Those have been contracted tremendously, and those have been contracted tremendously, and those have been contracted because people lost confidence, optimism gave way to pessimism; and the stock-market loans disappeared, and we had enormous volume of credit out on stock-market securities, and the stocks failed until they did not have much value. So, you have had an enormous contraction in bank credit, and people have had less money to spend; so that you have had those two sources of suffering. The fall in prices pulled down the stock-market structure to an unreasonably low level, and that pulled down the volume of bank loans, and that tended also to stop business, and that tended to pull down the volume of bank loans further. So you have had an accumulated effect on the volume of bank loans outstanding.

Mr. GOLDSBOROUGH. Now, Professor King, there is a word used in this country many thousands of times a day, that to me has caused a great deal of unsound public opinion, and that is the word "overproduction." As I understand, your view is that, except in some very exceptional cases, if you keep up the buying power of the people, there is no such thing as overproduction?

Mr. KING. I think that is, in a broad way, true undoubtedly.

Mr. GOLDSBOROUGH. And that, instead of issuing \$5,000,000,000 worth of bonds for construction and adopting means of a similar character, your view would be that, by raising the price level, you would tend to restore confidence and put everybody into the market, and the situation would soon adjust itself.

Mr. KING. I think it would be much wiser to get the people back to work in their normal lines than to try to give them relief work of some sort. Besides, when you issue a bond and sell a bond, you take money away from some classes of people to buy the bond, and they can not hire people, and the Government hires them, and it is doubtful whether you have increased employment at all or not.

Mr. GOLDSBOROUGH. Now, you are aware, I am sure, that under the Glass-Steagall bill, there was made available to the Federal reserve system a vast amount of gold—I will not go into the figures for the moment, because I do not want to confuse the issue. There will be many who will be afraid of this section 3 of this bill that we are discussing now.

Mr. KING. Yes.

Mr. GOLDSBOROUGH. They will say that that means that we have gone off the gold standard, and while a great many know what that means, most of the people who speak of it do not know what it is, but the sound of it is ominous and makes people fearful. Now, with our gold reserves and with the business which we have, world-wide business which we have, do you not think it is very doubtful whether, through the years, we will have any necessity to use section 3 of this bill?

Mr. KING. I really do not know what the answer is to that question. I think that would be a very hard thing to predict.

Mr. GOLDSBOROUGH. I want you to understand, thoroughly, that I am not afraid of section 3. I am not afraid of section 3, myself.

Mr. KING. Yes; I understand.

Mr. BEEDY. But you do think that, to make this law efficacious, we must embrace not only the quantitative theory of money but the qualitative theory, as well, do you not?

Mr. KING. Well, I am not quite sure that I get the meaning of your question.

Mr. BEEDY. If we were to confine our proposed legislation wholly to dealing with the quantitative theory of money, do you not think that our chance of being successful would be much less than if we also considered the qualitative theory, and put in such provision as you find here in section 3 of this bill?

Mr. KING. Well, as I said before, I feel that, if you are going to make this law one that will work, year in and year out, when you really need it most, it should have that provision in it. You never will know, otherwise, when you are going to run up against a situation that will make the law unworkable; and that is like trying to fly an airplane when something is going to go wrong at almost any minute. Now, you do not want anything to go wrong at any minute; you want it to work all of the time, if you are going to come out safely.

Mr. GOLDSBOROUGH. And you think, as I understand it, that the principle involved in section 3 would cover that situation, in any situation, including war?

Mr. KING. It seems to me there is no reason why it should not work just as well in war time as in peace time. The idea that you must have inflation in war time is purely fallacious, and is only true because we have had unsound currency systems in all of the countries; but if you had a sound currency system, it would seem to me to be entirely unnecessary, because you do not lessen the cost of the war by inflation, but you cause a great deal of trouble.

Mr. GOLDSBOROUGH. Now, Professor King, the opponents of this measure will say before this committee, I think, that with the lower price levels, such as they are in foreign countries, as soon as the price level in this country is raised, foreign goods will be dumped in here, and the level will be immediately lowered again, so that we will be confronted with a continuous effort to raise the price levels and the depletion of our supply of gold. What have you to say to that?

Mr. KING. I would say that the international price level, as pointed out a few minutes ago, is the gold price level. The exchanges are made in gold, and they are going to be made on the gold basis. You can not keep the price of a commodity where it is, where there is a free-trade difference in two different countries, when measured in gold, except by the amount of the freight charges; that is, if wheat is moving from here to England, in England it will be worth as much

more as the freight charges are in England, in terms of gold. That will still be true. The effect on trade, therefore, will be negligible, because the international balances will be settled in gold as before. There will be differences in the exchange rate that the bankers and exchange brokers deal in, but they will be the only ones who will notice the difference, but it will not affect trade one way or another, because they will be on the gold basis as long as you use gold as the international basis.

Mr. GOLDSBOROUGH. Suppose a Congressman says on the floor of the House that the price level of shoes or gloves is much lower in Czechoslovakia and France, in Czechoslovakia in the matter of shoes, and in France in the matter of gloves. Now, you raise the price level of shoes and gloves in this country, and that will cause shoes and gloves to come in from Czechoslovakia and France, and will interfere with our labor situation and, as said before, tend to depress the price levels again. What will be your answer to that specific statement? Understand, I do not think there is anything in it, but I want to know what would be your answer to it.

Mr. KING. My answer would be that the people in Czechoslovakia, who are trying to sell the shoes, would be interested in the price in terms of their money, the price that they got for the shoes, because they would be selling in terms of their money, not our money; and if we raised the price level here and changed the value in terms of gold in order to do that, then in that case they would not get as much money for \$1 of American money as they did before; but what they got in their own money would be exactly the same as they got before. It would not make any difference, but they would get more of our money; but if they did not know it, they would only think in terms of their own money.

Mr. GOLDSBOROUGH. That may not be clear to some member.

Mr. KING. The exchange rates would change; that is, if they used the florin, or whatever they use over there, if the exchange rate changed, they would not get as much for one of their florins; that is, they would get more dollars, but they would not get any more florins. We would be paying a higher price, but the whole thing would be based upon gold. If the gold value changed, in that case they would get the same amount of gold they did before, but the ratio between the gold and the paper in this country and the gold and the paper over there would be the thing that would be affected. They would be getting the same amount of gold they would get before, and they would be interested only in how much gold they got, in regard to their money, and it would not make any difference to them, because the international commodities would still be billed on the basis of their values in gold. It would be just the same thing as it was before.

Mr. GOLDSBOROUGH. Now, there is one more question I would like to ask you, and I want to say, if you prefer not to answer it, it is perfectly satisfactory; it may be a delicate question. I understood you to say, Professor King, that, without some specific direction, you did not believe that the legislation would be effective in raising the price level, without some specific direction to the Federal Reserve Board, if that is the power that is to act.

Mr. KING. Yes; I was merely judging by observation. They do not seem to have been particularly interested in stabilizing the price level during the last two or three years, and I do not suppose that

they would change their views in that regard. My impression is, I do not think the Federal Reserve Board has any feeling that that was one of its functions. They are bankers, and they look at the thing from the banking standpoint, and they think of it just as the bankers think of banking in general. They want the credit conditions sound, but they do not think it is one of their functions. They feel that this is something the people are trying to pull on them, and they do not want it. They have said so repeatedly. If they do not want it, some one else should take it that does want it, or else they should be instructed to take it. This is a most important function, and there are other functions, and if they do not care to exercise it, I should say give it to some one who does care to exercise it. They have adopted the attitude that they do not want to give it to anybody else, they prefer to have it there, but do not want to exercise it.

Mr. PRALL. Your idea is that their action depends on the banker's mind—

Mr. KING. Yes.

Mr. PRALL. Rather than on the mind of the needs of the country?

Mr. KING. I think that the needs of the country in a monetary way—that is, my feeling is that bankers are very expert in their line, and they think, because they deal in money, that it has to do with the monetary needs of the country. I really think there is no more connection necessary between being a good banker and being a good money economist, and being a good shoemaker and being a good monetary economist. I think these things are not related. These men are experts in banking, but they are not interested in monetary economics; but the monetary system of the country has turned over to them something they are not interested in, and that it ought to be put in the hands of monetary economists, or else they ought to be instructed to do something in the way of learning something about it. They have plenty of good men and they can learn about it.

Mr. STRONG. They ought to be taught the science.

Mr. KING. Yes; they have some very good men that they could use, but they are not interested. Right in their own organization they have some excellent men, but they do not care about this.

Mr. GOLDSBOROUGH. Professor King, the subcommittee all agree with me, that we have been tremendously enlightened and helped by your fine statement. You have not only expressed views that showed great learning and sound judgment, but you have expressed them in language which is easy to understand, and it is going to be very helpful to the subcommittee and the full committee and to Congress and to the country, and we certainly thank you very much.

Professor FISHER. I suggest that you ask Mr. King to speak about the debenture feature of this bill.

Mr. GOLDSBOROUGH. I think he has already done that, sir.

Professor FISHER. Then he did it before I came in. I am sorry.

Mr. GOLDSBOROUGH. I think, in your discussion with Mr. Busby, you agreed that the reserve system of course, when the inflation or rise in prices had reached the desired point, could stabilize the price level either by selling the bonds which had been bought up, if they had not matured in the meantime, or new bonds could be issued.

Mr. KING. That would be the same; yes.

Mr. GOLDSBOROUGH. And you think that is taken care of, do you, by section 2 of the bill?

Mr. KING. I think that that is exactly what they should do.

Mr. GOLDSBOROUGH. Is that what you had in mind, Professor Fischer?

Professor FISHER. Yes; I knew he had referred to the Government bonds, but these are special debentures of the Federal reserve system.

Mr. KING. It seems to me that would be an excellent provision.

Mr. GOLDSBOROUGH. Thank you very much, sir.

Mr. KING. I want to thank you gentlemen for taking up your time, and I hope I have not bored you too much.

Mr. WHITE. Mr. Chairman, I think I spoke to you about the introduction of a portion of Doctor Warren's and Doctor Pearson's bulletin, pages 1659 to 1703, referring to the price level, in which statements are made and very elaborate graphs are incorporated, and I think it desirable for you people to have the detailed information, and I would like to get it in the record, that portion of it.

Mr. GOLDSBOROUGH. Without objection, it is so ordered.

Mr. WHITE. This is the bulletin that Professor King referred to.

Mr. GOLDSBOROUGH. Yes.

Mr. PRALL. Was not that offered the other day?

Mr. WHITE. We spoke of it, but we failed to include it. There was in just the little that Mr. Wallace referred to.

Mr. GOLDSBOROUGH. That may be inserted.

(The pamphlet above referred to is here printed in full as follows:)

COMMODITY PRICES

With wars or political unrest in much of the world and many countries no longer on a gold basis, the future of the general price level is very uncertain. But farming is such a long time industry that every farmer, either consciously or unconsciously, is adapting his practice to what he thinks the price level will be. Since the most important problem that confronts agriculture is the future of the general commodity price level, a large portion of this number is devoted to commodity prices, physical volume of production, money, wages, and probable future prices. Every plan of farm operation is based on the farmer's guess about future prices. It is not possible to give a perfect answer to the problem, but a knowledge of the basic facts will help. These facts are complicated, but no more complicated than vitamins.

There are always variations in prices of individual commodities. To adjust farming to these is difficult enough, but during the last 17 years, the major problem has been to forecast the general price level because this rather than fluctuations in prices of individual commodities, has been of overwhelming importance.

The movements of the general price level in the Civil War period and the fluctuations in the price of hogs about the general level of commodity prices are shown in Figure 1. The hog cycle was important, but the serious thing was the decline in the general level of commodity prices which dragged the hog cycle down. The same comparisons for the World War period are shown in Figure 2. The whole price structure has declined from 244 in May, 1920, to 100 in December, 1931. The major part of the decline in the price of hogs is not due to the hog cycle, but to a general collapse in all prices.

Similar comparisons for wheat during the Civil War period are shown in figure 3. Wheat prices fluctuate violently, primarily because of variations in weather. Following the Civil War, these fluctuations were about a steadily declining base. Wheat prices and all commodity prices for the World War period are shown in Figure 4. Wheat prices are again fluctuating around a declining base. It is to be expected that wheat prices will continue to follow the general price level and fluctuate about it. There seems to be no fundamental reason for anticipating a change in these relationships at the present time.

It is extremely difficult to imagine a fluctuating price fluctuating about a fluctuating base. The inability to imagine the conditions shown in Figures 1

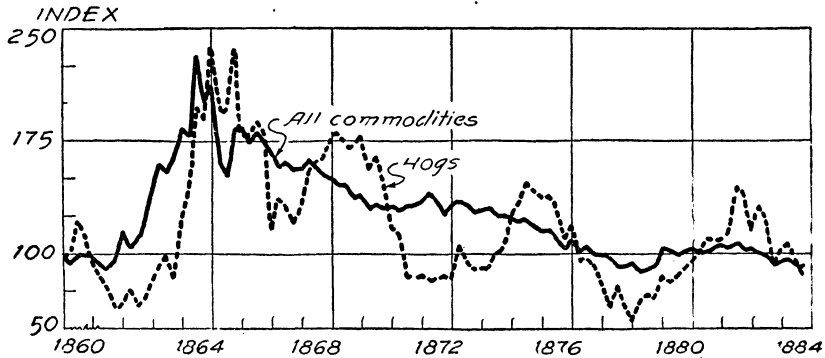


FIGURE 1.—Index numbers of wholesale prices of all commodities and of prices of hogs at New York City, 1860-1885. 1856-60=100. The usual hog cycle continued but fluctuated about a declining base.

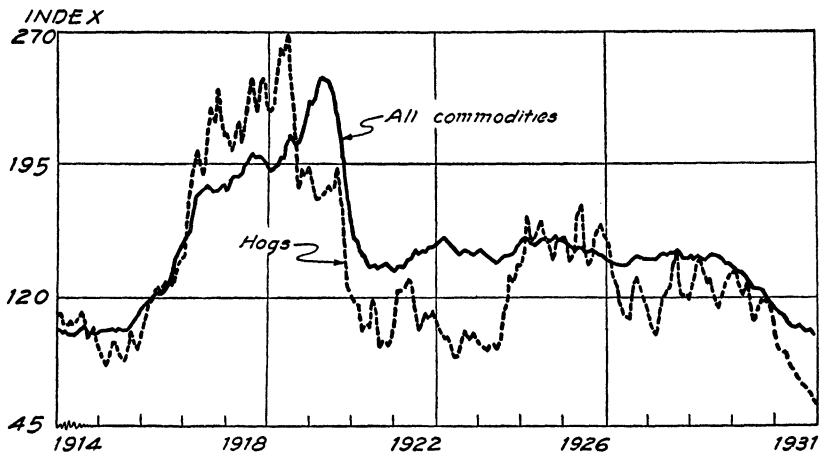


FIGURE 2.—Index numbers of wholesale prices of all commodities and prices of heavy hogs at Chicago, 1914-1931. 1910-14=100. As in the Civil War period, the hog cycle continues but is dragged downward by the decline of the whole price structure. It is to be expected that hog prices will continue to fluctuate about the general price level.

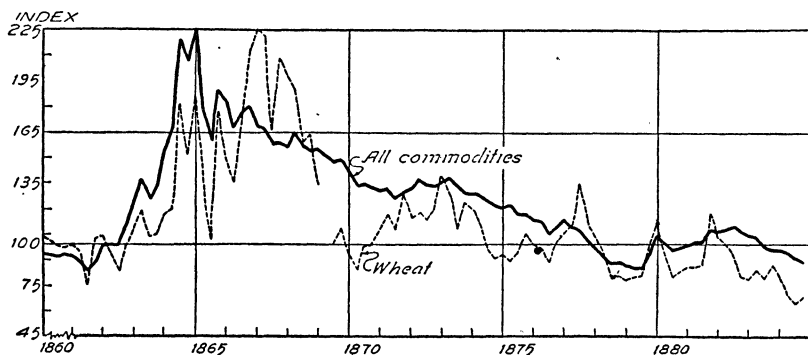


FIGURE 3.—Index numbers of wholesale prices of all commodities and prices of winter wheat at New York City, 1860-1885. 1856-60=100. Wheat prices fluctuated about the general price level, which steadily declined.

to 4 leads to erroneous action³. It also makes it difficult to appreciate the underlying principles governing prices. Many persons imagine that a stable general average of commodity prices would mean stability in each commodity. It would mean that the hog cycle would fluctuate about a stable base. Price changes would therefore be due to changes in the supply of or demand for hogs rather than to a crash in the foundations of the whole price structure. Violent

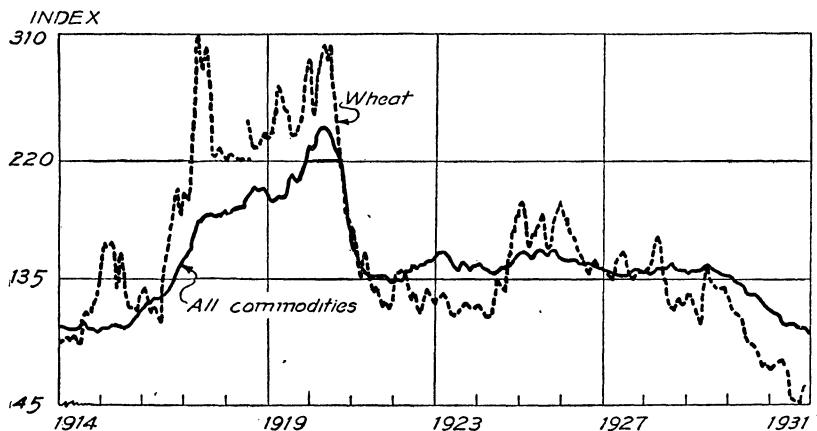


FIGURE 4.—Index numbers of wholesale prices of all commodities and price of No. 2 hard winter wheat at Kansas City, 1910-1931. 1910-14=100. Wheat prices are again fluctuating about the general price level. It is to be expected that this relationship will continue

changes in the general price level do increase somewhat the violence of price changes due to other causes.

The statement is commonly made that prices are due to supply and demand. This is a half truth. It has led to tremendous losses on the farms and in the cities, and has led to the adoption of erroneous public policies. Price is a ratio of the supply of and demand for gold to the supply of and demand for a commodity. In short periods of time credit may act independently of gold to increase or decrease prices. Also in short periods of time, speculation may

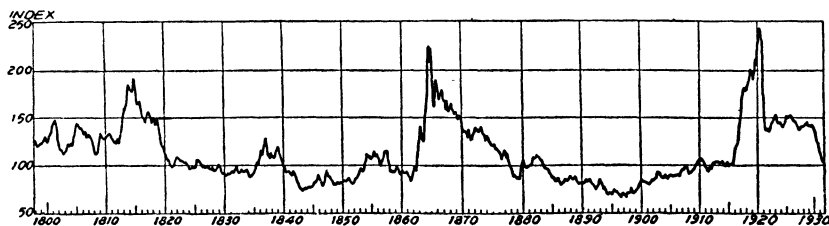


FIGURE 5.—Wholesale prices in the United States for 135 years, 1797-1931. 1910-1914=100. During most of the last 135 years, instability of the general price level has been the most important problem of agriculture. The periods of rising prices have been periods of agricultural prosperity, and periods of falling prices have been periods of agricultural distress

act independently of the supply of or fundamental demand for the commodity. But prices due to speculation are generally brought back with a jerk. Similarly, if credit gets very far from its normal relationship to gold, it is brought back with a jerk.

The movements of the general price level are primarily due to monetary factors. Mere adjustment of the wheat acreage does not solve this problem.

The movements of the commodity prices due to monetary causes have been of overwhelming importance for more than half of the time during the past 135 years (Figure 5).

The comparative price declines in the different war periods are shown in Figures 6 and 7. After each war prices were cut in two. Both the rise and the decline in the World War period were more violent than in previous war periods.

PRICES IN DIFFERENT COUNTRIES

Prices in different countries since the World War are shown in Table 1 and Figures 8 and 9. Prices in England in November, 1931, were 67 per cent below the average for the year 1920 and 28 per cent below 1929. The long decline followed by the crash since 1929, resulted in so much unemployment, business failures, and other distress that England discontinued the gold standard on Septem-

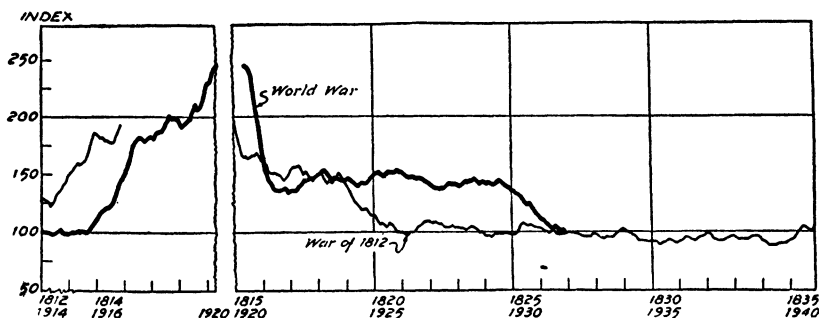


FIGURE 6.—Index numbers of wholesale prices, war of 1812 and World War periods, 1910-1914=100

ber 21, 1931. Rarely, if ever, has a country stood a decline of 67 per cent in its price level without a revolution or a currency change. England now has about 3,000,000 unemployed.

TABLE 1.—Comparative price declines

| | England, Statist- Sauer- beck index, 1910-1914 =100 ¹ | France, Statist- ique Generale index, 1910-1914 =100 ² | Italy, Ricardo Bachi index, 1913=100 ³ | Ger- many, Statist- isches Reich- samt, 1913=100 ³ | United States, all-com- modity index, 1910-1914 =100 ⁴ | United States, 30-basic commod- ity index, 1910-1914 =100 ⁵ | North China, index, 1913=100 ⁶ |
|----------------------------------|--|---|---|---|---|--|--|
| Peak year..... | 7 304 | 8 709 | 8 618 | ----- | 7 226 | 7 231 | ----- |
| Year 1929..... | 139 | 617 | 440 | 137 | 139 | 141 | 165 |
| November, 1931..... | 100 | 412 | 320 | 107 | 103 | 84 | 179 |
| Per cent decline from peak..... | 67 | 42 | 48 | ----- | 54 | 64 | ----- |
| Per cent decline since 1929..... | 28 | 33 | 27 | 22 | 26 | 40 | ----- |
| Per cent advance..... | ----- | ----- | ----- | ----- | ----- | ----- | 8 |

¹ The Statist, vol. cxiv, No. 2812, p. 80, Jan. 16, 1932. The index numbers on the 11-year base, 1867-1877, were converted to the 5 years, 1910-1914, by multiplying by 1.2107.

² Annuaire Statistique for 1928, vol. 44, p. 115, 1929. To convert to the 1910-1914 base from the 1901-1910 base, multiply by 0.8726; from the July, 1914, base, by 0.9888; and from the 1913 base, by 1.0096.

³ Monthly Labor Review, U. S. Bureau of Labor Statistics, vol. 33, No. 6, p. 238, December, 1931. The November, 1931, index numbers were supplied by Ethelbert Stewart.

⁴ Warren, G. F., and Pearson, F. A., Wholesale Prices in the United States for 135 Years, Farm Economics No. 72, p. 1587, September, 1931, and Table 1, p. 1634, of this issue.

⁵ Table 1, p. 1704, of this issue of Farm Economics.

⁶ Nankai University, Statistical Service, Nankai Institute of Economics, Nankai University, Tientsin, China, Vol. III, No. 22, p. 109, June 2, 1930; Vol. IV, No. 49, p. 223, Dec. 21, 1931.

⁷ 1920.

⁸ 1926.

During the first six years of declining prices in England and the United States, France inflated the currency. Prices rose, production was profitable, and there was full employment. All the other conditions were such as accompany rising prices. Instead of attempting a complete deflation as was attempted in England and the United States, France reduced the weight of gold in the franc to one-fifth of the pre-war amount on June 25, 1928. No serious decline in prices occurred until 1930-31. Prices in November, 1931, were four times the pre-war level.

(Fig. 8.) Any debts incurred at pre-war prices or at four times pre-war prices could be readily paid. Farm land is, of course, worth much more than before the war, and a house built before the war is valuable property. But France was becoming adjusted to a price level of about six times pre-war. A price level only four times pre-war is now a serious matter, and France has unemployment.

Italy revalued her currency on December 22, 1927, so that prices are far above pre-war. But Italy was becoming adjusted to a price level of about four times

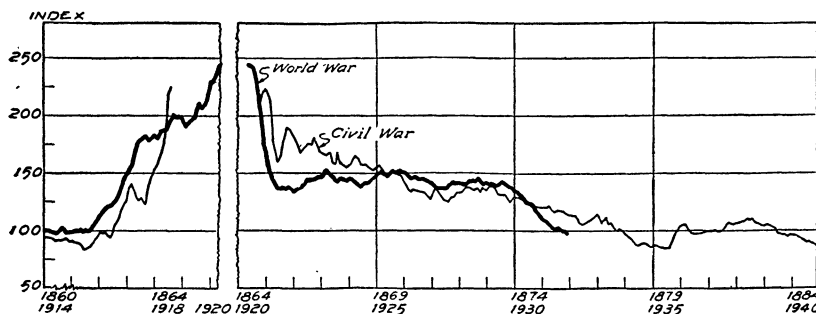


FIGURE 7.—Index numbers of wholesale prices in the Civil War and World War periods. 1910-1914=100. The price declines following the World War were similar to the declines following the Civil War, but were more violent

pre-war so that a drop to an index of three times pre-war or a decline of 27 per cent since 1929 has resulted in about one million unemployed, a record for Italy.

Since 1929, prices in Germany have declined 22 per cent and it is reported that five and one-half million are unemployed, the highest number ever reported.

In the United States, prices declined 54 per cent since 1920. No other important country that had such a large price decline is continuing without some monetary change. Since 1929, prices have declined 26 per cent.

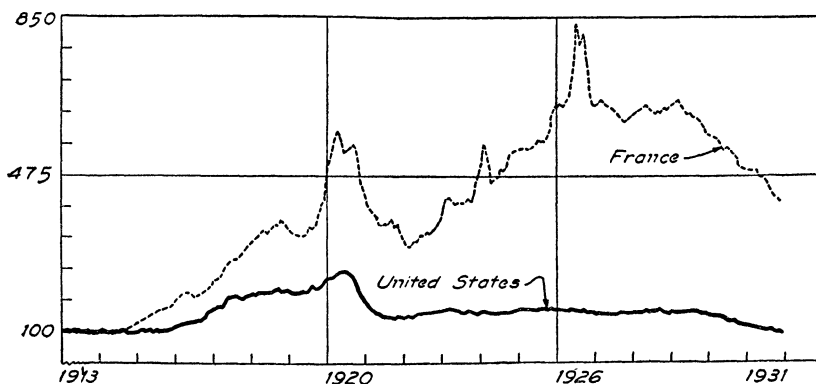


FIGURE 8.—Index numbers of prices in the United States and prices in France, 1913-1931. 1910-1914=100. France has been on a gold basis since 1928, but since the currency was revalued, prices are about five times as high as in England or the United States

Prices of basic commodities in the United States declined about 64 per cent since 1920, and 40 per cent since 1929. These prices are the average at which farmers and other basic producers must sell. They are a sufficient explanation of the decline in freight car loadings. The popular explanation of railroad difficulties is that the trucks are getting the freight. The freight does not exist.

The unemployment in the United States is variously estimated at from six to eight million.

Since 1929, the decline in prices in England, France, Germany, Italy, have been very similar, France 33 per cent; England, 28; Italy, 27; United States, 26; and Germany, 22.

Since 1929, prices in China have risen 8 per cent. China is on a silver basis. In the same period, prices in gold using countries have declined from 22 to 33 per cent. At the same time that other countries are feeling the effects of declining prices, China is feeling the effects of rising prices (fig. 9). There is full employment and profits are large. It does not follow that the prices in the gold using countries would have been the same as the prices in China had these countries been on a silver basis. The use of any metal as money changes the demand for it and hence changes its value.

EFFECTS OF DECLINING PRICES

Every human relationship is affected by prices. It is sometimes said that lenders and those who live on wages or salaries profit by declining prices. Practically every one loses when prices decline seriously. Production stops. Courage in business is penalized. The physical property of the nation deteriorates. Declining prices do not merely transfer wealth—they destroy it.

EFFECTS OF DECLINING PRICES ON PRODUCERS' AND CONSUMERS' PRICES

When prices rise, producers' prices rise faster than consumers' prices. For the year 1917, American grown food sold at 56 per cent above pre-war retail

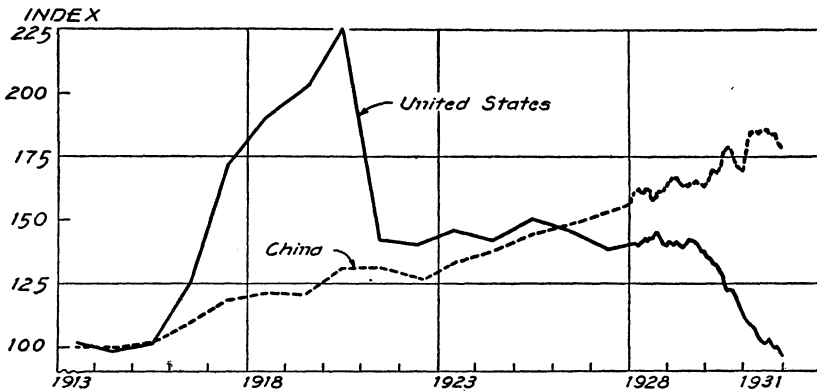


FIGURE 9.—Index numbers of prices in the United States and in China, 1913-1931. Pre-war=100¹. From 1913 to 1920, prices in the United States rose much more rapidly than in China. Since then, prices in China have continued to rise and prices in the United States have fallen. Prices have been extremely erratic in both countries, but have been more stable in China than in the United States

prices. Farmers received 81 per cent above pre-war farmer prices. With declining prices, this same food sold at retail in 1923 at 54 per cent above pre-war, but farmers received only 24 per cent above pre-war. In these two years retail prices were practically identical, but prices which farmers received fell from an index of 181 to 124. These relationships for other years are shown in Figure 10. For the year 1931, retail prices of American-grown food averaged 135 when pre-war is 100. The cost of distribution averaged 178. The farmer received prices only 89 per cent of pre-war. The same relationship holds for other products. The index for 30-basic commodities for 1931 was 90, but the cost of living index averaged 151.

Farmers sell at wholesale and buy at retail. In a period of declining prices there is a wide discrepancy between the prices at which they buy and the prices at which they sell. This discrepancy has lasted for 11 years, and will continue so long as prices decline. If prices rise above the cost of distribution, the situation would be reversed. If the general price level should remain stable, adjustment would ultimately occur, but this would require many years unless prices rise materially. How slowly the adjustment takes place is shown by the changes

¹ The wholesale prices for North China are those reported in the Nankai Weekly Statistical Service Nankai University Committee on Social and Economic Research, Tientsin, China, Vol. 3, No. 22, p. 109 June 2, 1930. The index numbers are on the 1913 base. The index numbers of wholesale prices for the United States are those reported by Warren, G. F., and Pearson, F. A., Wholesale Prices in the United States for 135 years, Farm Economics No. 72, p. 1587, September, 1931 and page 1634 of this issue. The index numbers are on the 1910-1914 base.

that occurred from 1921 to 1929. In this period, the general price level was fairly stable. For the year 1929, retail prices of food were 174 and farmers received 151. Had prices remained stable another 10 years, the readjustment probably would have been completed. For farmers who are not heavily in debt, this price discrepancy is the most serious single effect of declining prices.

Manufacturers have the problem of hiring labor which has a high cost of living to produce products at a low price. Farmers have the additional problem of buying at retail and selling at wholesale. Manufacturers buy at wholesale prices which are low and sell at wholesale prices which are also low, but the farmer buys at high prices and sells at low prices. This is the reason that farmers are so anxious to buy cooperatively at wholesale.

EFFECTS OF DECLINING PRICES ON DEBTS

Before the panic of 1920, relatively few debts had been incurred at the high price level. By 1929, the whole international, national, and other public, and

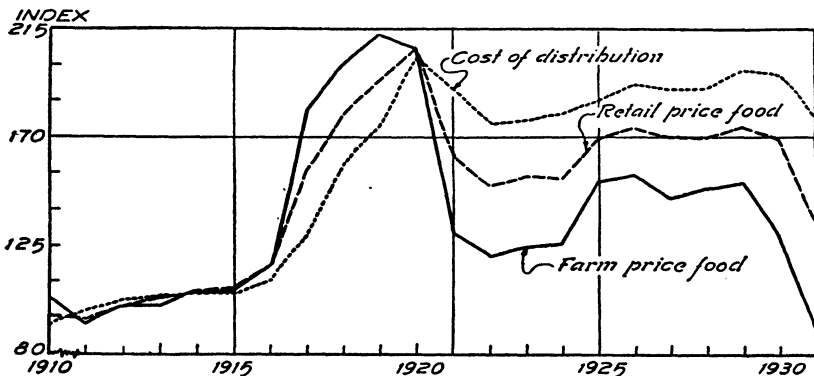


FIGURE 10.—Farm and retail prices of food and cost of distribution, 1910-1931. 1910-14=100. When prices rise, costs of distribution rise less rapidly and farm prices more rapidly than retail prices. When the prices decline, costs of distribution remain high and farm prices decline more than retail prices

private debt structure was adjusted to a commodity price level of about 150. In fact, debts were somewhat high even at this level.

Commodities are the basis of most credit. Brazil expected to pay its debts with coffee. Australia expected to pay with wheat and wool. The State of Georgia and its farmers expected to pay with cotton.

Most of the security for debts is commodities, either movable ones or those that have been built into homes or factories. Most of the taxes are raised by assessing such property. If commodities drop in value, the movable commodities as well as the railroad ties, rails, electric lines, and houses decline in value. The present public and private debts and taxes would not be particularly burdensome at the price level at which they were incurred, that is, at a wholesale commodity price level of about 150. A large part of the indebtedness can not be paid at a price level of 100. It is commonly believed that lenders profit from declining prices because they are paid back with dollars that have a higher value than the dollars which were loaned. Lenders would profit if they were able to collect in full, but the losses of principal are so great that few lenders profit. When the farm or home is foreclosed, it means a total loss to the previous owner, but may also mean a total loss to the lender. He may not be able to sell it for enough to pay taxes and costs while it is held waiting for a sale. Declining prices take property away from persons who want it and place it in the hands of those who do not want it. A long time is then required to find persons who want the property and are able to pay for it.

Rough approximations of certain debts are shown in Table 2. Most of the indebtedness doubled since 1922, and is about four times the pre-war amount. The most serious single unadjusted factor is not wages but debts. There is trouble enough in lowering costs of distribution, rents, and the like, but the process of debt liquidation is even more serious. In many cases the best method of handling debts is to write them down just as rents and commodity prices are being written down.

TABLE 2.—*Estimated public and private debts of various classes in the United States*

[000,000 omitted]

| Year | Gross public debt less sinking fund assets of all classes of Government organizations in the United States | | | | | Build- ing and loan assets ² | Bank loans ³ | Farm mort- gages ⁴ | Corpo- rate lia- bilities ⁵ | Life in- surance policy loans and pre- mium notes ⁶ |
|-----------|--|--------------------|--------------------|--|------------------------|--|----------------------------|-------------------------------------|--|---|
| | Natio- nal | States | Count- ies | Incorporated places and all other civil divi- sions | | | | | | |
| | | | | Cities over 30,000 ¹ | All other places | | | | | |
| 1912..... | ² \$1,029 | ² \$346 | ² \$372 | ⁸ \$1,809 | <i>\$1,374</i> | \$1,138 | \$14,041 | ⁹ \$3,320 | ----- | \$588 |
| 1922..... | ² 22,156 | ⁷ 834 | ² 1,273 | 3,281 | <i>3,200</i> | 3,343 | 27,684 | ¹⁰ 7,858 | ----- | 1,141 |
| 1929..... | <i>16,000</i> | <i>1,662</i> | ----- | 5,530 | <i>6,570</i> | 8,695 | 41,782 | ----- | \$76,096 | 2,379 |
| 1930..... | <i>16,000</i> | <i>1,800</i> | ----- | 8,000 | <i>7,000</i> | 8,829 | 40,510 | <i>9,241</i> | ----- | 2,807 |
| 1931..... | <i>18,000</i> | <i>2,000</i> | <i>3,000</i> | <i>9,000</i> | <i>7,000</i> | ----- | 35,211 | ----- | ----- | <i>3,400</i> |

Figures in italics are estimates.

¹ Financial statistics of cities having a population of over 30,000: 1929, United States Department of

² Statistical Abstract of the United States 1930, Fifty-second number, pp. 220 and 277.

Commerce, Bureau of the Census, p. 5.

³ Comptroller of the Currency for 1930, Reported loans and discounts as of 1930 for banks, pp. 737 and 745. Statistical Abstract of the United States 1912, pp. 622-25, 1922, pp. 516 and 521; 1924, p. 243; and 1930, pp. 267 and 271-3.

⁴ Yearbook of Agriculture 1924, p. 190 reports the farm mortgages for 1920. Later data by E. Englund and D. L. Wickens of the United States Department of Agriculture.

⁵ Furnished through the courtesy of E. White, chief statistician, office of Commissioner of Internal Revenue, United States Treasury.

⁶ Insurance Yearbooks of the Spectator Co., and furnished through the courtesy of W. A. Berridge of the Metropolitan Life Insurance Co.

⁷ Financial Statistics of State Governments: 1929. Bureau of the Census, p. 3.

⁸ 1911.

⁹ 1910.

¹⁰ 1920.

Extremely rough estimates of the total indebtedness are shown in table 3. The total debt is approximately \$1,700 per capita, or about one-half of the national wealth in 1929. If the value of commodities is to drop one-third and remain at that level, the debt would become about 75 per cent of the value of the property. So much of this can never be collected that it is probable that the lenders would have a greater buying power if they were paid in full at a price level of 150. The usual argument for reducing wages is that a dollar has more buying power. This same argument might be applied to debts which are the most serious result of deflation.

TABLE 3.—*Rough approximation of public and private debts (from Table 2)*

| Debt | Amount, billions | Per cent | Per capita |
|---|---------------------|----------|------------|
| Corporations..... | \$76 | 37.4 | \$618 |
| Urban mortgages ¹ | 37 | 18.2 | 301 |
| Bank loans..... | 35 | 17.3 | 284 |
| State, county, and local..... | 21 | 10.3 | 171 |
| National..... | 18 | 8.9 | 146 |
| Farm mortgages..... | 9 | 4.4 | 73 |
| Life insurance policy loans and premium notes..... | 3 | 1.5 | 24 |
| Retail installment paper ² | 3 | 1.5 | 24 |
| Pawn brokers loans and unlawful loans of all kinds ³ | 1 | .5 | 8 |
| Total..... | 203 | 100.0 | 1,649 |

¹ Based on estimates furnished through the courtesy of George Terborgh of the Brookings Institution.

² Based on reports of the National Association of Finance companies.

³ Ryan F. W., Family Finance in the United States, the Journal of Business of the University of Chicago, vol. III, No. 4, pt. 1, p. 404, October, 1930.

Unliquidated public and private debts are the most serious problem in the United States at the present time. These debts could be paid at the price level at which they were incurred. Many of them can not be paid at a pre-war price level.

The decline in commodity prices has resulted in many business failures. During the last two years 3,635 banks have suspended, with deposits of \$2,624,000,000.

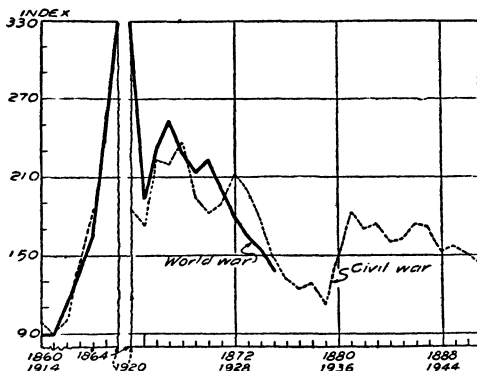


FIGURE 11.—Prices of white pine and brick for the Civil War period and of yellow pine and brick, for the World War period. In each case pre-war is 100. The course of prices is similar in the two war periods but is more violent this time. If the similarity continues, prices will rise in 1936

In the same period, 54,640 business failures have occurred, with liabilities of \$1,405,000,000.

EFFECT OF DECLINING PRICES ON HOME OWNERS

The home owner's security is in the value of a home. If commodity prices fall so that the home can be built for 25 per cent less than he paid, his equity is gone

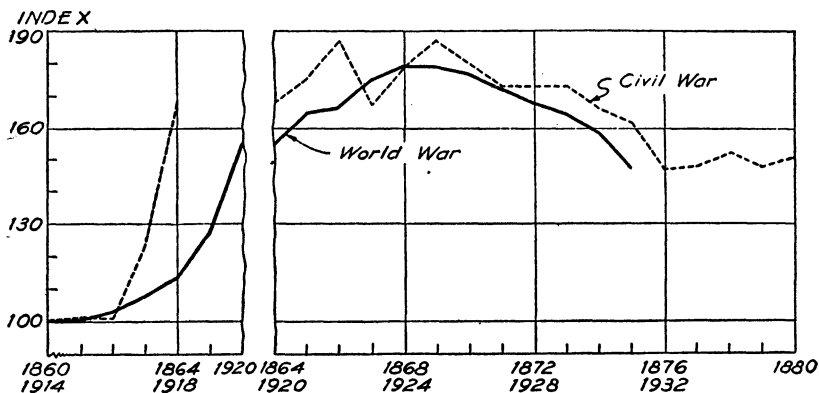


FIGURE 12.—Rents in five large cities in the Civil War period and in eight large cities in the World War period. In each case pre-war is 100. Thus far the experiences of the Civil War have been repeated

unless he paid more than 25 per cent down. But when all the bankrupt properties are thrown on the market, buyers disappear as if by magic, and the multitude of sellers depress prices so that an owner who paid 50 per cent down may see his equity disappear. In such a time it is well to remember that well-constructed, well-located homes have a permanent value even if they are unsalable for a time.

The prices of white pine and brick in the Civil War period and of yellow pine and brick in the World War period are shown in figure 11.

City homes are much like agriculture in that they have a very slow turnover. Most industrial and mercantile operations have a relatively rapid turnover so that adjustment is completed before many years. Agriculture being a biological industry has a slow turnover, and homes last for many years.

After the panic of 1873, building materials declined in price for six years. Apparently building equities were then liquidated, for prices of building materials rose. If the readjustment requires the same period of time in this depression, home building would be expected to commence in 1936. House rents for five large cities in the Civil War period and eight large cities in the World War period are shown in figure 12 and Table 4. Rents reach bottom and stabilize before building starts.

TABLE 4.—Rents in large and small cities in the United States, 1860-1880 and 1914-1931

| Civil War ¹ | | World War ² | | |
|------------------------|-----------------------------|------------------------|------------------------------|-----------------------------|
| Year | Five large cities, 1860=100 | Year | Eight large cities, 1914=100 | Ten lesser cities, 1914=100 |
| 1860..... | 100 | 1914..... | 100 | 100 |
| 1861..... | 101 | 1915..... | 100 | 97 |
| 1862..... | 101 | 1916..... | 103 | 95 |
| 1863..... | 123 | 1917..... | 108 | 94 |
| 1864..... | 168 | 1918..... | 114 | 111 |
| 1865..... | 175 | 1919..... | 128 | 128 |
| 1866..... | 187 | 1920..... | 155 | 146 |
| 1867..... | 167 | 1921..... | 165 | 151 |
| 1868..... | 179 | 1922..... | 167 | 149 |
| 1869..... | 187 | 1923..... | 175 | 149 |
| 1870..... | 180 | 1924..... | 179 | 147 |
| 1871..... | 173 | 1925..... | 179 | 146 |
| 1872..... | 173 | 1926..... | 177 | 145 |
| 1873..... | 173 | 1927..... | 172 | 140 |
| 1874..... | 166 | 1928..... | 168 | 133 |
| 1875..... | 162 | 1929..... | 165 | 130 |
| 1876..... | 147 | 1930..... | 159 | 125 |
| 1877..... | 148 | 1931..... | 147 | 118 |
| 1878..... | 152 | | | |
| 1879..... | 148 | | | |
| 1880..... | 151 | | | |

¹ The rents for 5 large cities from 1860 to 1880 include Boston, Philadelphia, Cincinnati, Louisville, and St. Louis. Weeks, J. D., Report on the Average Retail Price of Necessaries of Life in the United States. Report on the Statistics of Wages in Manufacturing Industries, Tenth Census of the United States, Census Office, Department of the Interior, vol. 20, pp. 104 to 107. 1886.

² Cost of Living, Monthly Labor Review, United States Bureau of Labor Statistics, vol. 28, No. 2, p. 178, February, 1929, and later numbers. The rents for 8 large cities from 1914-1928 include Baltimore, Boston, Buffalo, Chicago, Cleveland, Detroit, New York and Philadelphia. The rents for 10 lesser cities include Houston, Jacksonville, Los Angeles, Mobile, Norfolk, Portland (Maine), Portland (Oregon), San Francisco and Oakland, Seattle, and Washington, D. C.

EFFECT OF DECLINING PRICES ON TAXES

Public debts incurred at a price level of 150 become extremely difficult to pay with a price level of 100. Public debts take preference over private debts because taxes are the first lien on the property. After the preferred creditor has been paid in full, there are times when there is nothing left for the other creditors. To make the tax problem still worse, taxes that are based on profits are greatly reduced and many taxpayers are unable to pay. This necessitates new taxes or heavier taxes on those who can pay. To make matters still worse, falling commodity prices result in increased public expenditures for charity, and the Federal Government is called on to assist banks, railways, and agriculture. It would be desirable to have public reserves in times of prosperity to be used in periods of depression. The major portion of the difficulty could be remedied if violent fluctuations in the general price level could be prevented. There is much heated discussion about tax reduction. Public debts and fixed charges make reduction very difficult. The only way to provide real tax relief is to continue the price level to which debts and business were adjusted.

OTHER EFFECTS OF DECLINING PRICES

The above are but a few of the innumerable effects of a declining price level. Another serious result is the effect on buying. Losses of profits and unemployment of course check buying, but falling prices in themselves are a check on buying. When year after year everything that is bought could have been purchased at a lower price at a later date, a philosophy of delayed buying develops. If after a period of falling prices, prices begin to rise, an abnormal demand develops. Buying is not only for current needs but to make up shortages.

Another effect of declining prices is on wages and employment which are discussed on pages 1671 and 1677.

A clear presentation of the method by which a decline in commodity prices causes business paralysis is given in the Cleveland Trust Co. Bulletin.¹

"During the past two years the general levels of wholesale prices have dropped both here and abroad by about one-third, and have fallen to their pre-war figures. The result is that business relationships and procedures all over the world have been disrupted and partly paralyzed. As business everywhere slowed down, the banks began to feel the pressure of curtailed activity. Credit was contracted by the paying down of business loans, and bank profits were reduced. For a time these developments were not serious, but soon bankers began to realize that trade advances that had been amply secured by the pledge of marketable commodities were no longer so fully protected when the market value of those commodities was rapidly falling. As the banks brought to bear increasing pressure for the payment of such loans the prices of commodities fell still further and faster.

"Then followed a long procession of declines in the market values of other things in which banks everywhere were financially interested. If agricultural commodities were worth less than they had been a short time before, then the farms that produced them were worth less, and farm mortgages were not so secure. As the products of mines declined in value, the stocks and bonds of mining companies became less desirable, and the loans made by banks on such securities were not so safely protected. As manufactured articles fell in price, industrial stocks and bonds declined, and successive payments were demanded by banks on loans secured by such collateral. As the volume of trade declined similar pressure was brought against securities of shipping and railroad companies.

"During much of this year the banks of this country, and of all countries, have been engaged in a race for liquidity. As the prices of commodities continued to sink, as stock prices fell, and as the values of real estate shrank, the banks have been calling upon their customers to make payments of their loans. Some banks moved in these matters less promptly and less vigorously than others. Soon bankers began to realize that the institutions which were failing were largely those that had followed a lenient policy toward their borrowers until collateral values had fallen so low that the loans could not be paid. In banking parlance the loans were frozen.

"The resulting tendency was for every alert banker to resolve to protect his institution and his depositors from the hazards of holding frozen assets, and to do it by getting into the most liquid condition possible. The way to get liquid was to get borrowers to make payments on their loans, and in order to do this many borrowers had to sell securities that had been deposited with the banks as collateral for the loans. Each new wave of selling carried market prices further down, and each new decline in market prices reduced the value of collateral behind other loans and called for further sales. This was a vicious circle of deflation that caused deflation. The individual institution had no choice but to follow the policy of liquidity. It was good banking in each separate case, for it protected the bank and its depositors, but its general results tended to defer business recovery. * * *

G. F. WARREN and F. A. PEARSON.

WAGES—LONG-TIME TREND IN WAGES

If the index numbers of wages, as reported by the United States Bureau of Labor Statistics, are divided by index numbers of wholesale prices, the result is the purchasing power of wages at wholesale prices (fig. 1). From 1840 to 1914, the purchasing power of wages increased at a compound rate of 1.71 per cent per year.

¹ The Cleveland Trust Co. Business Bulletin, Volume 12, No. 12. December 15, 1931.

When prices were falling or rising, the purchasing power of wages exceeded or fell below the normal rate of increase.

As will be shown (Table 1 and p. 1680) the physical volume of production per capita from 1840 to 1914 increased at a compound rate of 1.73 per cent per year. It is not surprising that the purchasing power of wages must keep pace with the production per capita. Farmers and laborers are the great consumers of the nation because there are so many of them. If production is to increase at the normal rate, wages must rise enough faster than prices rise so as to enable the laborers steadily to buy larger and larger quantities of goods.

If the laborer produces more per capita, he must consume more per capita. If he is to consume more per capita, the purchasing power of wages must rise. Over the centuries, wages have been steadily rising when compared with commodity prices. At the present time, many persons are wholly misled on the wage question by assuming that if prices go back to pre-war, wages must go back to pre-war. The only way to bring this about would be to have production per capita return to the pre-war basis. Fortunately no such calamity is possible.

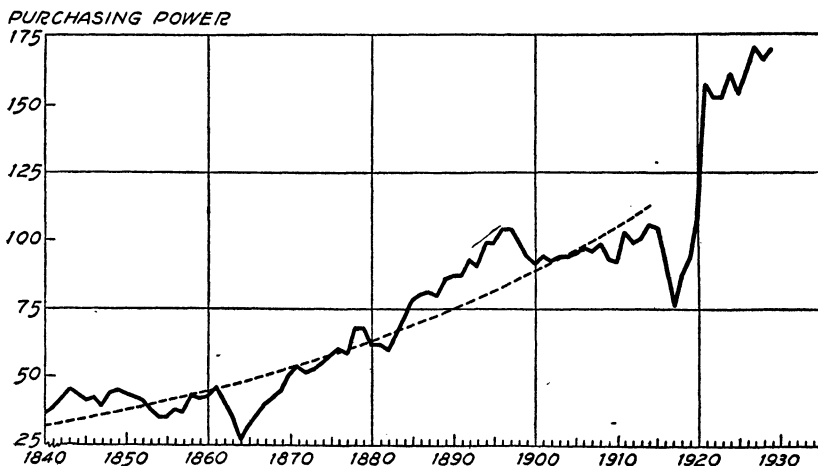


FIGURE 1.—Purchasing power of hourly wages, exclusive of agriculture, in the United States,¹ 1830-1930. 1910-1914=100. From 1840 to 1914, the purchasing power of wages, at wholesale commodity prices, increased at a compound rate of 1.71 per cent per year. The purchasing power of wages was low in the periods of rapidly rising prices during the World War and the Civil War. It was very high in the two periods when prices were declining rapidly.

A steadily increasing percentage of the laborer's income is expended for education, entertainment, and the like. Also, a steadily increasing percentage of the population are engaged in these occupations. The physical volume of production per capita for those engaged in producing physical things is therefore higher than the rate of increase per capita for the Nation. In order to consume all the physical things and also consume the more rapidly increasing nonphysical things, the buying power of labor should rise more rapidly than the national output of physical things per capita.

WAGES FROM THE POINT OF VIEW OF THE EMPLOYER AND EMPLOYEE

If the pre-war trend in wages had continued until 1929, and if prices had remained at 100, wages would normally have been 132 when the five years before the war is 100. This would have given them a purchasing power of 32 per cent above pre-war, which would have been the normal growth in purchasing power in the 16.5 years. But wholesale prices in 1929 were 139 when pre-war is 100. In order to have their normal buying power, wages should have been 183.

Owing to declining prices, wholesale prices were out of line with retail prices. In 1929, the laborer could not buy at a price level of 139. The cost of food at retail was 174; and the cost of living, 172. At an index of 172, laborers would have had to have wages of 227 to have a buying power of 32 per cent above pre-war.

¹ Index numbers of wages per hour, 1840 to 1929. Monthly Labor Review, vol. 32, No. 2, p. 143, February, 1931.

Other evidence of the fact that a wage level of more than double pre-war was a reasonable wage level in 1929 is indicated by the fact that industry was able to pay this wage level and be decidedly prosperous. Some wages were much more than double pre-war, but farm wages and some other wages were not double pre-war.

A collapse in the price structure throws consumers' prices out of line with producers' prices. The laborer is not concerned with wholesale prices when they are out of line with retail prices. If the price level would remain stable, wholesale prices would keep in line with retail prices. In 1931, wholesale prices of all commodities averaged 107 when the five years before the war is called 100. The cost-of-living index averaged 151. If the buying power of wages had continued at the pre-war rate of increase, it would have been 137 in 1931. With wholesale prices at an index of 107, the manufacturer might have anticipated wages of 147. If they could hire labor at this level and sell the product at 107, industry would be prosperous, and production would be at a high level. But in order that the laborers might consume the output that the manufacturers would then produce, they would need a buying power of 137 at a price level of 151 at which they buy. This would require wages of 207 to buy the products of industry. This shows the impossible situation that inevitably develops when the price structure collapses. The manufacturer can not proceed with a wage level of 207 and a price level of 107. But the laborer can not consume the product, unless he receives these wages. The result is that both production and consumption stop. A visionary reply is sometimes made that all other prices should come down. To reduce all freight rates, all telephone charges, all taxes, all wages, all rents, all commissions, all debts, and all doctors', lawyers', and dentists' fees quickly could occur only in Alice in Wonderland. It is about as practical as it is to say that, if a toad could fly, he could spend the winter in Florida. Long years of unemployment, bankruptcies, and distress, are the only means of bringing a collapsed price structure into balance. It could, of course, be brought into balance quickly if the old price level were restored. When unemployment has continued long enough, the great shortage of goods causes industry to start for a time. But a period of declining prices is, as a whole, a period of unemployment.

Such a situation also causes innumerable misunderstandings and violent controversies. The manufacturer who sells his product at an index of 107 feels that wages fifty per cent above pre-war should be a delight to the laborer. He can not understand the situation. The laborer who should have wages of twice pre-war to consume the product at a price level of 151 is unable to understand why the manufacturer is so unreasonable. The "standstill" is due to a collapse in the price structure for which neither party is to blame. Here is a definite illustration of the old conundrum of "what would happen if an irresistible force should meet an immovable body?"

The situation is much worse for both parties than the above picture presents. The employer has many fixed charges such as debts, taxes, and the like. He also sees the value of his property melting away because a new property could be built at less cost.

The real cost of living of the laborer does not decline so rapidly as the index numbers fall. These index numbers include rent, clothing, food, fuel and light at retail prices. They do not include prices of meals which have fallen less. They do not include telephone charges, railroad and street car fares; doctors', dentists' and lawyers' fees; hospital charges; education of children; and the like. Most of these charges have not declined. They decline very slowly.

The cost of living includes rents, but many laborers have followed the highly commended practice of buying their own homes. Declining rents are an injury to these persons. They mean that the home is shrinking in value. This shrinkage is often sufficient to wipe out the life-time savings of the thrifty worker.

Laborers, like other persons, have investments which have melted away. When the wage level is rising as rapidly as the national output per capita increases, the efficient receive promotions, whereas the inefficient may be kept at the old wage. With declining prices, both the efficient and the inefficient workers continue at the same level, or receive a horizontal cut. Such a situation often results in a greater loss through failure to win promotion, than by any cut in wages that is contemplated.

With rising prices, public employees with the lowest salaries almost invariably receive the first increase in pay. With falling prices, the general public policy is to cut the highest salaries first and most vigorously so that the efficient suffer most from unstable prices.

The efficient business man who proceeds with energy is also penalized. The hoarder is rewarded. Most of the stories about misers which fill the literature at certain periods in history were written in periods when prices were declining so that being a miser was profitable.

Public debts and other fixed charges represent such a large part of taxes that wage and salary reductions do not produce the results that the tax payer anti-

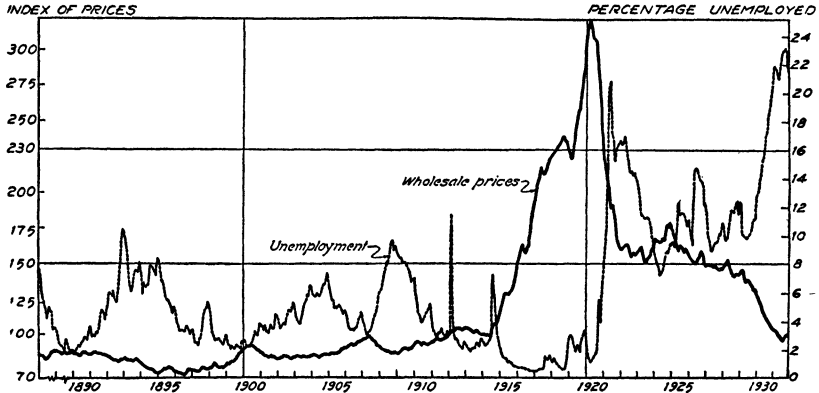


FIGURE 2.—Wholesale prices and percentage of unemployed among trade-unions and insured workpeople in Great Britain,² 1888 to 1931. When prices are rising, unemployment declines. Conversely, falling prices result in an increase in the percentage of unemployed

ipated. If the Federal Government cut all salaries and wages 10 per cent, it would reduce the total expenses only 3 per cent. In 24 typical townships in New York all salaries and wages amounted to only 35 per cent of the expenditures. A 10 per cent cut would reduce taxes only 3.5 per cent.

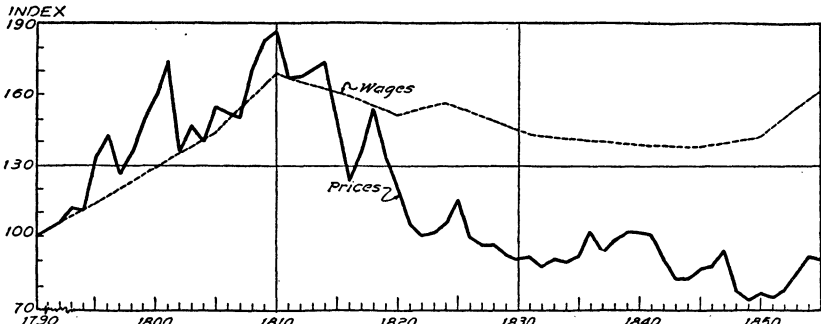


FIGURE 3.—Wholesale prices and wages in England during the Napoleonic War period,³ 1790-1855. 1790=100. From 1810 to 1831 prices declined nearly one-half, but wages declined only 15 per cent.

If no salaries or wages were paid, the tax problem would be much more serious than it was before prices dropped, because New York farm prices have been cut in half.

² From 1888 to 1926 inclusive, the percentage of unemployed is based on percentage unemployed at the end of each month among members of trade-unions making returns, Nineteenth Abstract of Labour Statistics of the United Kingdom, p. 79, 1928. From 1926 to 1931 inclusive, the percentage of unemployed is based on percentage of unemployed at or near the end of the month among insured workpeople. The Ministry of Labour Gazette, Vol. 35, No. 1, p. 2, January, 1927, gives both series for each month of the year 1926. There is very little difference in the two series. The new series was taken from various numbers of the Labour Gazette.

The wholesale prices are the Sauerbeck-Statist index, Warren, G. F., and Pearson, F. A., The Agricultural Situation, p. 263, August, 1924. The index numbers were converted from the 11-year base 1867-1877 to the 5-year 1910-1914 base by multiplying by 1.2107.

³ Wood, G. H., The course of wages between 1790 and 1860, The Economic Journal, Vol. IX, p. 501, December, 1899; and Warron, G. F., and Pearson, F. A., The Purchasing Power of Wages, Farm Economics, No. 68, p. 1438, November, 1930.

RELATION OF FALLING PRICES TO UNEMPLOYMENT

The relationship of rising and falling prices to unemployment in Great Britain are shown in Figure 2. Many persons discuss the present unemployment in England in terms of a decadent nation. England is an industrial country and is therefore more affected by a wreck of the price structure than is any other country. Unemployment in England is a natural consequence of the amount of deflation which England has attempted at a time when world trade is in a chaotic condition.

WAGES IN OTHER PERIODS OF DECLINING PRICES

The declines in prices and wages in England following the Napoleonic War period are shown in Figure 3. From 1810 to 1831 prices declined nearly one-half and wages declined 15 per cent. After a few more years of moderate decline, wages began to rise. Since, over a series of years, wages rise relative to prices, the decline in wages has never been equal to the decline in prices.

Prices and wages in the Civil War period in the United States are shown in Figure 4. From 1864 to 1879, prices declined one-half and wages declined 15 per cent. Thereafter, wages continued to rise although the general trend of prices was downward.

During the World War period, wholesale prices in the United States have declined more than one-half since 1920, and union wage rates are beginning to decline.

FARM WAGES

Farm wages for various States are shown in Tables 1, 2 and 3. Farm wages are a compromise between city wages and farm prices. In States distant from

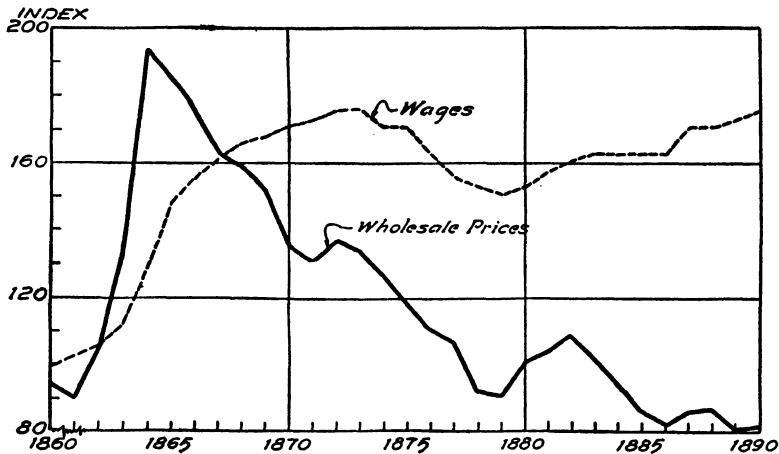


FIGURE 4.—Wholesale prices and wages, exclusive of agriculture, in the United States during the Civil War period, 1860-1890. 1856-1860=100. Prices reached a peak in 1864 but wages continued to rise for nine years. By 1879, prices were cut in half but wages had declined only 15 per cent

industrial centers, farm wages follow farm prices fairly closely. In States that are near industrial centers, farm wages are influenced more by city wages than by farm prices. For example, in 1919 union wage rates were 58 per cent above pre-war. Prices paid to farmers were more than double pre-war, and wages in North Dakota were 86 per cent above pre-war, but in New York State only 76 per cent above. For 1931, union wages were much more than double pre-war, but farm wages in North Dakota were below pre-war, and in New York were 42 per cent above pre-war.

The farm wages paid in Alabama average \$11.83 per month in addition to board. This is below pre-war. A considerable number of persons feel that the present depression is a proper punishment for luxurious living. If this is the case, conditions in Alabama ought to be good. Living could scarcely be luxurious enough to be injurious on \$12 per month.

TABLE 1.—Farm wages by the month with board, 1910-1931¹

| Year | New York | Pennsylvania | Alabama | Texas | Iowa | North Dakota | Oregon | United States |
|-------------------------|----------|--------------|----------|----------|----------|--------------|----------|---------------|
| 1910-1914..... | \$24. 56 | \$19. 75 | \$13. 56 | \$18. 74 | \$29. 34 | \$30. 08 | \$31. 40 | \$20. 41 |
| 1910..... | 23. 50 | 18. 75 | 13. 00 | 18. 00 | 28. 00 | 29. 00 | 32. 00 | 19. 58 |
| 1911..... | 24. 00 | 19. 20 | 13. 70 | 18. 40 | 28. 30 | 28. 90 | 31. 00 | 19. 85 |
| 1912..... | 24. 40 | 19. 80 | 13. 70 | 19. 00 | 29. 60 | 30. 30 | 31. 00 | 20. 46 |
| 1913..... | 25. 50 | 20. 60 | 14. 40 | 19. 20 | 30. 70 | 31. 00 | 31. 00 | 21. 27 |
| 1914..... | 25. 40 | 20. 40 | 13. 00 | 19. 10 | 30. 10 | 31. 20 | 32. 00 | 20. 90 |
| 1915..... | 25. 40 | 21. 00 | 12. 50 | 18. 70 | 31. 10 | 32. 00 | 31. 30 | 21. 08 |
| 1916..... | 29. 40 | 24. 00 | 12. 50 | 20. 40 | 34. 10 | 33. 20 | 34. 50 | 23. 04 |
| 1917..... | 35. 00 | 30. 00 | 16. 00 | 25. 00 | 41. 00 | 41. 00 | 44. 00 | 28. 64 |
| 1918..... | 40. 00 | 34. 00 | 21. 20 | 31. 00 | 50. 00 | 52. 00 | 58. 00 | 35. 12 |
| 1919..... | 43. 30 | 37. 80 | 25. 50 | 38. 80 | 55. 00 | 56. 00 | 64. 00 | 40. 14 |
| 1920..... | 54. 40 | 47. 00 | 29. 30 | 42. 00 | 66. 35 | 70. 00 | 68. 00 | 47. 24 |
| 1921..... | 40. 00 | 35. 00 | 17. 00 | 26. 00 | 39. 60 | 40. 00 | 44. 50 | 30. 25 |
| 1922..... | 39. 70 | 33. 00 | 17. 60 | 24. 20 | 36. 80 | 38. 70 | 43. 50 | 29. 31 |
| 1923..... | 45. 50 | 38. 00 | 19. 90 | 28. 30 | 43. 30 | 40. 30 | 52. 50 | 33. 09 |
| 1924 ¹ | 47. 30 | 39. 24 | 21. 67 | 29. 33 | 43. 82 | 41. 92 | 45. 93 | 33. 34 |
| 1925 ¹ | 48. 40 | 39. 42 | 23. 46 | 27. 75 | 44. 58 | 43. 17 | 45. 79 | 33. 88 |
| 1926 ¹ | 49. 60 | 40. 63 | 22. 00 | 28. 67 | 45. 79 | 44. 17 | 49. 25 | 34. 85 |
| 1927 ¹ | 49. 42 | 40. 21 | 21. 08 | 26. 83 | 46. 92 | 44. 58 | 49. 96 | 34. 93 |
| 1928 ¹ | 48. 52 | 38. 83 | 21. 50 | 29. 54 | 47. 37 | 45. 12 | 48. 17 | 34. 96 |
| 1929 ¹ | 49. 25 | 40. 08 | 21. 17 | 29. 13 | 47. 42 | 43. 96 | 50. 46 | 35. 16 |
| 1930 ¹ | 44. 58 | 38. 83 | 17. 83 | 25. 88 | 45. 00 | 35. 63 | 46. 29 | 31. 57 |
| 1931 ¹ | 34. 96 | 29. 46 | 11. 83 | 19. 08 | 32. 96 | 25. 25 | 33. 08 | 23. 84 |

¹ The quarterly wages published by the United States Department of Agriculture were weighted in the following manner to obtain the average yearly wage rate: Apr. 1, July 2, Oct. 2, and the following Jan. 1.

² Index Numbers of Wages, 1840-1926. Monthly Labor Review, United States Bureau of Labor Statistics, Vol. 26, No. 2, p. 332, February, 1928, and Warren, G. F., and Pearson, F. A., Purchasing Power of Wages, Farm Economics, No. 68, p. 1438, November, 1930.

TABLE 2.—Index numbers of wages, 1910-1931

[1910-14=100]

| Year | Farm wages by the month with board | | | | | | | | United States wage rates ¹ | Earnings of New York factory workers |
|-----------|------------------------------------|--------------|---------|-------|------|--------------|--------|---------------|---------------------------------------|--------------------------------------|
| | New York | Pennsylvania | Alabama | Texas | Iowa | North Dakota | Oregon | United States | | |
| 1910..... | 96 | 95 | 96 | 96 | 95 | 96 | 102 | 96 | 96 | ----- |
| 1911..... | 98 | 97 | 101 | 98 | 96 | 96 | 99 | 97 | 98 | ----- |
| 1912..... | 99 | 100 | 101 | 101 | 101 | 101 | 99 | 100 | 100 | ----- |
| 1913..... | 104 | 104 | 106 | 102 | 105 | 103 | 99 | 104 | 102 | ----- |
| 1914..... | 103 | 103 | 96 | 102 | 103 | 104 | 102 | 102 | 104 | 101 |
| 1915..... | 103 | 106 | 92 | 100 | 106 | 106 | 100 | 103 | 105 | 104 |
| 1916..... | 120 | 122 | 92 | 109 | 116 | 110 | 110 | 113 | 109 | 116 |
| 1917..... | 143 | 152 | 118 | 133 | 140 | 136 | 140 | 140 | 117 | 132 |
| 1918..... | 163 | 172 | 156 | 165 | 170 | 173 | 185 | 172 | 135 | 164 |
| 1919..... | 176 | 191 | 188 | 207 | 187 | 186 | 204 | 197 | 158 | 190 |
| 1920..... | 221 | 238 | 216 | 224 | 226 | 233 | 217 | 231 | 203 | 227 |
| 1921..... | 163 | 177 | 125 | 139 | 135 | 133 | 142 | 148 | 210 | 207 |
| 1922..... | 162 | 167 | 130 | 129 | 125 | 129 | 139 | 144 | 197 | 202 |
| 1923..... | 185 | 192 | 147 | 151 | 148 | 134 | 167 | 162 | 215 | 220 |
| 1924..... | 193 | 199 | 160 | 157 | 149 | 139 | 146 | 163 | 233 | 223 |
| 1925..... | 197 | 200 | 173 | 148 | 152 | 144 | 146 | 166 | 243 | 228 |
| 1926..... | 202 | 206 | 162 | 153 | 156 | 147 | 157 | 171 | 255 | 234 |
| 1927..... | 201 | 204 | 155 | 143 | 160 | 148 | 159 | 171 | 265 | 236 |
| 1928..... | 198 | 197 | 159 | 158 | 161 | 150 | 153 | 171 | 266 | 237 |
| 1929..... | 201 | 203 | 156 | 155 | 162 | 146 | 161 | 172 | 268 | 242 |
| 1930..... | 182 | 186 | 131 | 138 | 153 | 118 | 147 | 155 | 278 | 232 |
| 1931..... | 142 | 149 | 87 | 102 | 112 | 84 | 105 | 117 | 279 | 213 |

¹ Union Scales of Wages and Hours of Labor in 1931: Monthly Labor Review, United States Department of Labor, vol. 33, No. 5, p. 186, November, 1931.

² Wages for the first part of 1931. Some reductions have since occurred.

TABLE 3.—Farm wages by the month with board

| State | Farm wages per month with board | | | Per cent decrease Jan. 1, 1929 to Jan. 1, 1932 | Supply | | | Demand | | | Supply in per cent of demand | | |
|--------------------|---------------------------------|-----------------|-----------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------------------|-----------------|-----------------|
| | Jan. 1, 1929 | Jan. 1, 1931 | Jan. 1, 1932 | | Dec. 1, 1928 | Jan. 1, 1931 | Jan. 1, 1932 | Dec. 1, 1928 | Jan. 1, 1931 | Jan. 1, 1932 | Dec. 1, 1928 | Jan. 1, 1931 | Jan. 1, 1932 |
| New York..... | \$44.75 | \$36.50 | \$28.75 | 36 | 90 | 106 | 118 | 84 | 73 | 68 | 107 | 145 | 174 |
| Pennsylvania..... | 37.25 | 32.00 | 25.75 | 31 | 95 | 109 | 119 | 89 | 76 | 71 | 107 | 143 | 168 |
| Michigan..... | 39.25 | 25.00 | 18.50 | 53 | 90 | 130 | 139 | 84 | 61 | 53 | 107 | 213 | 262 |
| Alabama..... | 22.00 | 15.00 | 10.00 | 55 | 95 | 112 | 123 | 86 | 58 | 58 | 110 | 193 | 212 |
| Texas..... | 28.75 | 22.25 | 17.00 | 41 | 94 | 115 | 121 | 86 | 57 | 53 | 109 | 202 | 222 |
| Arkansas..... | 25.00 | 17.00 | 14.00 | 44 | 93 | 120 | 116 | 82 | 45 | 51 | 113 | 267 | 278 |
| Iowa..... | 44.00 | 33.00 | 23.00 | 48 | 98 | 114 | 120 | 96 | 75 | 63 | 102 | 150 | 190 |
| Kansas..... | 37.00 | 30.25 | 23.00 | 38 | 94 | 122 | 128 | 99 | 63 | 59 | 95 | 194 | 217 |
| North Dakota..... | 27.75 | 16.75 | 17.50 | 37 | 96 | 112 | 117 | 85 | 64 | 50 | 113 | 175 | 234 |
| Montana..... | 46.25 | 33.75 | 26.75 | 42 | 99 | 122 | 132 | 91 | 61 | 43 | 109 | 200 | 307 |
| Oregon..... | 46.00 | 36.00 | 28.50 | 38 | 101 | 138 | 145 | 90 | 66 | 61 | 112 | 209 | 238 |
| Nevada..... | 63.00 | 45.00 | 42.00 | 33 | 100 | 120 | 136 | 97 | 87 | 60 | 103 | 138 | 227 |
| Washington..... | 45.00 | 33.50 | 26.00 | 42 | 101 | 130 | 146 | 91 | 58 | 46 | 111 | 224 | 317 |
| California..... | 62.00 | 53.00 | 39.00 | 37 | 101 | 117 | 123 | 92 | 77 | 69 | 110 | 152 | 178 |
| United States..... | 33.04 | 26.03 | 19.77 | 40 | 94 | 114 | 121 | 88 | 67 | 61 | 107 | 171 | 200 |

NO ONE GAINS BY DEFLATION

All action, public or private, that is based on the idea that some person or group of persons are to blame for the present situation, is unsound. All action that assumes that the losses which one is sustaining are due to gains being made by some one else is equally unsound. The losses are unequal, but practically everyone loses. The trouble is that civilization has not yet progressed far enough to invent a stable measure of value. Not long ago, an outbreak of bubonic plague was blamed on individuals. It is now known that the trouble was due to the lack of development of science or education, or both. Economic diseases are due to a lack of development of economic science and education. Vast sums of money have been spent on chemical and medical research. Very little has been spent on economic research. The little science that has been developed in economics has not become common knowledge, as, for example, the knowledge about bacteria.

Economic troubles are not acts of Providence any more than polluting a stream with typhoid is an act of Providence. Both are acts of man and can be remedied, when there is sufficient knowledge.

F. A. PEARSON.
G. F. WARREN.

PHYSICAL VOLUME OF PRODUCTION IN THE UNITED STATES

CROP PRODUCTION

Index numbers of the physical volume of production in the United States are given in table 1 and figures 1 to 5. The index numbers for food and feed crops

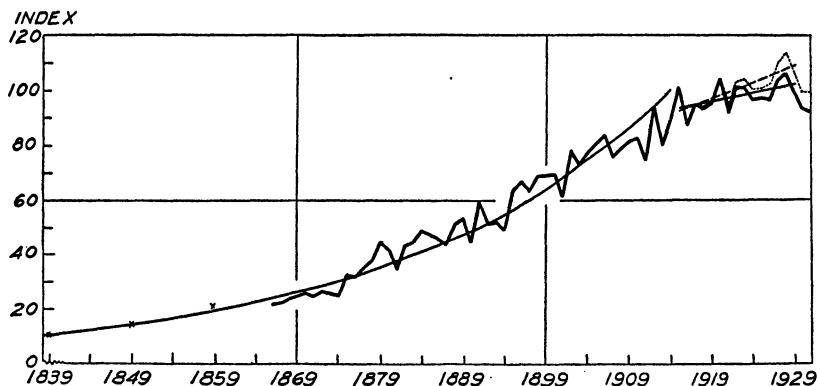


FIGURE 1.—Index numbers of the volume of food and feed crops produced in the United States, 1839–1931. 1926–1930=100. From 1839 to 1914 production increased at the rate of 3.02 per cent per year. From 1915–1929, it increased only 0.60 per cent per year. The upper curve shows production corrected for the reduced number of horses and mules.

were made by adding together bushels of wheat, bushels of potatoes, bushels of corn, quarts of strawberries, and 27 other crops all combined according to their importance. The purpose of the index was to include only basic commodities. Livestock is not included. This is all produced from crops except the portion which is grown on pasture.

The index numbers of crop production are based on reports of the United States Department of Agriculture and the Bureau of the Census.

The production of food and feed crops in the United States increased from 10 in 1839 to 90 in 1914 (Table 1 and Figure 1). During this period the annual rate of increase was 3.02 per cent per year. In popular opinion, the rapid increase in recent years has been the cause of the agricultural depression. As a matter of fact, the rate of increase from 1915 to 1929 was only 0.60 per cent per year. If correction is made for the reduction in the number of horses and mules, this rate was 1.17.

The production of cotton and tobacco followed other crop production closely, so that the total crop production increased at about the same rate as food and

feed crops. But there was a very large cotton crop in 1859 and small cotton crops for a few years as a result of the Civil War.

From 1839 to 1914, the production of food and feed crops per capita increased at the rate of 0.74 per cent per year (Figure 2). This rate of increase was declining slightly before the war (Table 1). From 1915 to 1929, production per

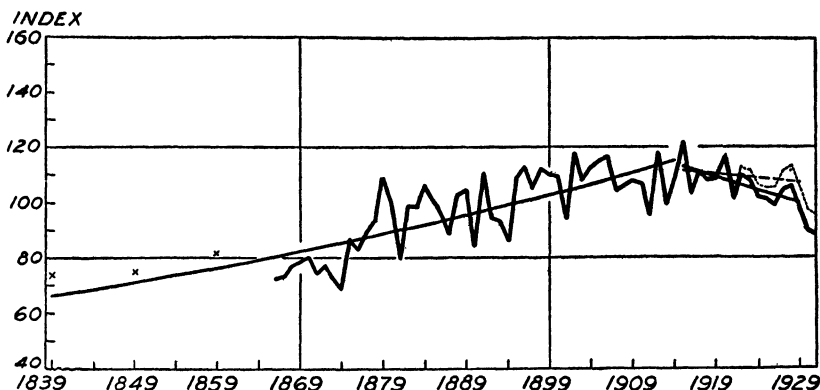


FIGURE 2.—Index numbers of the production of food and feed crops per capita in the United States, 1839-1931. 1926-30 = 100. From 1839 to 1900, the production of food and feed crops increased 0.86 per cent per year; from 1901 to 1914, decreased 0.2 per cent per year; and from 1915 to 1929, decreased 0.29 per cent per year, when adjusted for the changes in the number of horses and mules

capita decreased 0.85 per cent per year. When correction was made for the reduction in the number of horses and mules, the decrease was 0.29.

It is difficult to see how any one can attribute the agricultural depression to over-production when production per capita is for the first time in history declining. If this decline continues, it appears that there ultimately will be another period of high-costs-of-living, which will be particularly severe if the value of gold

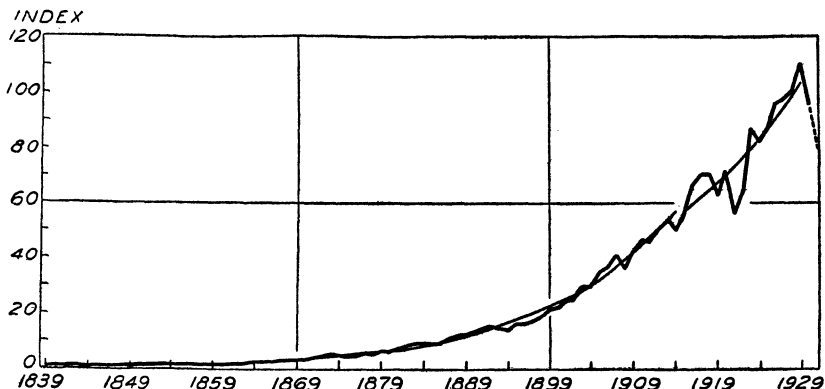


FIGURE 3.—Index numbers of the physical volume of production of minerals, fuel, and power in the United States, 1839-1931. 1926-1930 = 100. From 1839-1914, the production of minerals, fuel, and power increased at the rate of 6.43 per cent per year. From 1915 to 1929, the average rate of increase was 4.31 per cent

should decline. Those who now consider low prices to be a definite proof of over-production will, if they are still living, attribute the high prices to under-production.

The business situation is interfering with consumption so that supplies of some products are high. Livestock cycles go on whether prices are rising or falling. Just now, the supply of hens is low and hogs, high. Last year they were reversed.

TABLE 1.—Index numbers of physical volume of production in the United States, 1839–1931

[1926–1930=100]

| Year | Population | Food and feed crops | Total crop production | Forest products | Electricity from water power | Water power other than electric | Coal | Other fuel | Fuel and water power | Other minerals | Secondary metals | Other minerals and secondary metals | All minerals and water power | Total basic production constant group weights ¹ | Total basic production constant group weights (weighted by value plus value added by manufacture) ² | Total basic production, variable group weights ³ | Total basic production, variable group weights (weighted by value plus value added by manufacture) ³ | Food and feed crops per capita | Total crop production per capita | All minerals and water power per capita | Total basic production per capita ⁴ |
|------|------------|---------------------|-----------------------|-----------------|------------------------------|---------------------------------|------|------------|----------------------|----------------|------------------|-------------------------------------|------------------------------|--|--|---|---|--------------------------------|----------------------------------|---|--|
| 1839 | 13.94 | 10.33 | 10.61 | 4.18 | | | 0.52 | | 0.51 | 0.51 | | 0.35 | 0.45 | 5.96 | 4.99 | 4.29 | 3.69 | 74.10 | 76.11 | 3.23 | 30.77 |
| 1840 | 14.27 | | | 5.16 | | | .50 | | .53 | .52 | | .36 | .46 | | | | | | | 3.22 | |
| 1841 | 14.77 | | | 6.15 | | | .61 | | .58 | .51 | | .35 | .49 | | | | | | | 3.32 | |
| 1842 | 15.28 | | | 7.13 | | | .71 | | .64 | .50 | | .34 | .52 | | | | | | | 3.40 | |
| 1843 | 15.86 | | | 8.12 | | | .81 | | .70 | .68 | | .46 | .60 | | | | | | | 3.78 | |
| 1844 | 16.36 | | | 9.11 | | | 1.04 | | .80 | .85 | | .58 | .71 | | | | | | | 4.34 | |
| 1845 | 16.86 | | | 10.09 | | | 1.29 | | .91 | 1.05 | | .72 | .83 | | | | | | | 4.92 | |
| 1846 | 17.36 | | | 11.08 | | | 1.38 | | .96 | 1.20 | | .83 | .91 | | | | | | | 5.24 | |
| 1847 | 17.86 | | | 12.06 | | | 1.59 | | 1.06 | 1.25 | | .86 | .98 | | | | | | | 5.49 | |
| 1848 | 18.36 | | | 13.05 | | | 1.72 | | 1.12 | 1.24 | | .86 | 1.02 | | | | | | | 5.56 | |
| 1849 | 18.86 | 14.09 | 14.07 | 14.04 | | 24 | 1.86 | | 1.19 | 1.07 | | .74 | 1.01 | 8.63 | 7.46 | 6.73 | 5.93 | 74.71 | 74.60 | 5.36 | 35.68 |
| 1850 | 19.45 | | | 14.72 | | | 1.98 | | 1.25 | .97 | | .67 | 1.02 | | | | | | | 5.24 | |
| 1851 | 20.12 | | | 15.41 | | | 2.54 | | 1.47 | .92 | | .63 | 1.14 | | | | | | | 5.67 | |
| 1852 | 20.78 | | | 16.09 | | | 2.85 | | 1.60 | .87 | | .60 | 1.21 | | | | | | | 5.82 | |
| 1853 | 21.45 | | | 16.78 | | | 3.01 | | 1.68 | 1.00 | | .69 | 1.29 | | | | | | | 6.01 | |
| 1854 | 22.20 | | | 17.47 | | | 3.45 | | 1.86 | 1.10 | | .76 | 1.42 | | | | | | | 6.40 | |
| 1855 | 22.87 | | | 18.15 | | | 3.76 | | 1.99 | 1.16 | | .80 | 1.52 | | | | | | | 6.65 | |
| 1856 | 23.54 | | | 18.84 | | | 3.94 | | 2.07 | 1.29 | | .89 | 1.61 | | | | | | | 6.84 | |
| 1857 | 24.21 | | | 19.53 | | | 3.83 | | 2.05 | 1.21 | | .84 | 1.57 | | | | | | | 6.48 | |
| 1858 | 24.96 | | | 20.21 | | | 3.98 | | 2.12 | 1.15 | | .80 | 1.60 | | | | | | | 6.41 | |
| 1859 | 25.63 | 20.84 | 22.92 | 20.90 | | 33 | 4.49 | | 2.33 | 1.33 | | .92 | 1.77 | 13.98 | 11.94 | 11.30 | 9.67 | 81.31 | 89.43 | 6.91 | 44.09 |
| 1860 | 26.29 | | | 22.13 | | | 3.99 | 0.04 | 2.19 | 1.42 | | .99 | 1.71 | | | | | | | 6.50 | |
| 1861 | 26.88 | | | 23.36 | | | 4.66 | .17 | 2.50 | 1.29 | | .90 | 1.87 | | | | | | | 6.96 | |
| 1862 | 27.46 | | | 24.59 | | | 4.77 | .24 | 2.60 | 1.48 | | 1.03 | 1.98 | | | | | | | 7.21 | |
| 1863 | 28.05 | | | 25.82 | | | 5.81 | .21 | 2.98 | 1.74 | | 1.21 | 2.28 | | | | | | | 8.13 | |
| 1864 | 28.63 | | | 27.05 | | | 6.29 | .17 | 3.15 | 2.00 | | 1.39 | 2.46 | | | | | | | 8.69 | |

TABLE 1.—Index numbers of physical volume of production in the United States, 1839-1931—Continued

| Year | Population | Food and feed crops | Total crop production | Forest products | Electricity from water power | Water power other than electric | Coal | Other fuel | Fuel and water power | Other minerals | Secondary metals | Other minerals and secondary metals | All minerals and water power | Total basic production constant group weights | Total basic production constant group weights (weighted by value plus value added by manufacture) | Total basic production, variable group weights | Total basic production variable group weights (weighted by value plus value added by manufacture) | Food and feed crops per capita | Total crop production per capita | All minerals and water power per capita | Total basic production per capita |
|------|------------|---------------------|-----------------------|-----------------|------------------------------|---------------------------------|--------|------------|----------------------|----------------|------------------|-------------------------------------|------------------------------|---|---|--|---|--------------------------------|----------------------------------|---|-----------------------------------|
| 1906 | 71.62 | 83.78 | 83.41 | 123.67 | 6.06 | | 74.09 | 15.02 | 35.68 | 50.72 | | 39.37 | 37.14 | 66.76 | 64.13 | 63.87 | 64.56 | 116.98 | 116.46 | 51.86 | 89.18 |
| 1907 | 73.04 | 76.03 | 75.01 | 123.83 | 7.18 | | 86.66 | 18.38 | 41.88 | 51.57 | | 40.20 | 41.22 | 64.12 | 61.73 | 61.90 | 62.72 | 104.09 | 102.70 | 56.43 | 84.75 |
| 1908 | 74.37 | 79.14 | 79.60 | 112.90 | 8.33 | | 77.31 | 19.30 | 39.19 | 40.30 | | 31.54 | 36.17 | 63.68 | 59.23 | 60.91 | 59.01 | 106.41 | 107.03 | 48.64 | 81.90 |
| 1909 | 75.71 | 81.85 | 81.45 | 120.18 | 9.68 | 75 | 82.89 | 20.69 | 42.08 | 56.08 | 16.53 | 43.63 | 42.69 | 67.83 | 65.43 | 65.86 | 66.63 | 108.11 | 107.58 | 56.39 | 86.99 |
| 1910 | 77.05 | 82.58 | 81.85 | 120.07 | 11.02 | | 89.24 | 23.14 | 45.68 | 59.60 | 18.77 | 46.74 | 46.10 | 69.45 | 67.22 | 67.45 | 68.44 | 107.18 | 106.23 | 59.83 | 87.54 |
| 1911 | 78.21 | 74.78 | 78.63 | 116.49 | 12.43 | | 90.03 | 24.07 | 46.64 | 55.93 | 20.78 | 44.86 | 45.94 | 67.48 | 65.00 | 65.07 | 65.50 | 95.59 | 100.54 | 58.74 | 83.20 |
| 1912 | 79.38 | 93.67 | 92.68 | 121.81 | 14.17 | | 93.71 | 24.92 | 48.66 | 65.92 | 26.77 | 53.59 | 50.60 | 77.05 | 74.82 | 75.80 | 76.25 | 118.00 | 116.75 | 63.74 | 95.49 |
| 1913 | 80.55 | 80.14 | 81.81 | 119.32 | 16.41 | | 100.25 | 27.25 | 52.43 | 68.67 | 26.80 | 55.48 | 53.63 | 72.52 | 71.25 | 71.30 | 72.18 | 99.49 | 101.56 | 66.58 | 88.52 |
| 1914 | 81.72 | 89.71 | 91.77 | 110.32 | 19.23 | | 92.47 | 28.83 | 50.87 | 59.94 | 24.59 | 48.80 | 50.05 | 75.60 | 72.04 | 74.38 | 72.11 | 109.78 | 112.30 | 61.25 | 90.99 |
| 1915 | 82.89 | 101.11 | 96.79 | 104.36 | 22.66 | | 94.52 | 30.62 | 53.02 | 70.44 | 36.34 | 59.70 | 55.66 | 80.16 | 77.98 | 79.49 | 78.41 | 121.98 | 116.77 | 67.14 | 95.90 |
| 1916 | 84.14 | 87.18 | 85.65 | 110.10 | 26.94 | | 102.18 | 33.94 | 58.00 | 88.36 | 61.13 | 79.78 | 66.61 | 79.31 | 81.84 | 78.73 | 82.76 | 103.61 | 101.79 | 79.17 | 93.63 |
| 1917 | 85.31 | 94.92 | 92.17 | 100.04 | 31.15 | | 113.46 | 37.71 | 64.46 | 87.36 | 63.88 | 79.97 | 70.59 | 83.70 | 84.68 | 83.42 | 85.53 | 111.26 | 108.04 | 82.75 | 97.78 |
| 1918 | 86.48 | 93.86 | 92.41 | 89.36 | 35.27 | | 116.84 | 38.66 | 66.85 | 84.62 | 59.99 | 76.86 | 70.81 | 83.22 | 83.09 | 83.21 | 83.98 | 108.53 | 106.86 | 81.88 | 96.22 |
| 1919 | 87.65 | 95.30 | 93.38 | 95.79 | 39.80 | 79 | 97.31 | 41.06 | 61.76 | 70.14 | 53.31 | 64.84 | 62.98 | 80.88 | 80.81 | 79.37 | 108.73 | 106.54 | 71.85 | 92.20 | |
| 1920 | 88.90 | 103.26 | 101.84 | 97.85 | 48.40 | | 111.96 | 46.97 | 71.22 | 79.12 | 56.38 | 71.96 | 71.51 | 88.95 | 86.48 | 88.72 | 86.55 | 116.15 | 114.56 | 80.44 | 99.80 |
| 1921 | 90.32 | 91.77 | 86.09 | 80.52 | 45.28 | | 91.40 | 47.81 | 63.73 | 46.59 | 39.66 | 44.40 | 56.09 | 73.23 | 67.31 | 73.00 | 66.83 | 101.61 | 95.32 | 62.10 | 80.82 |
| 1922 | 91.74 | 101.36 | 96.11 | 97.81 | 53.35 | | 78.55 | 56.09 | 64.30 | 67.19 | 63.25 | 65.95 | 64.95 | 83.25 | 80.95 | 83.11 | 80.35 | 110.49 | 104.76 | 70.80 | 90.59 |
| 1923 | 93.07 | 101.06 | 96.83 | 112.96 | 62.62 | 90 | 112.83 | 74.41 | 86.31 | 93.44 | 76.11 | 87.98 | 86.97 | 93.78 | 93.48 | 93.41 | 92.51 | 108.58 | 104.04 | 93.45 | 100.37 |
| 1924 | 94.49 | 96.82 | 95.43 | 109.17 | 66.64 | | 99.70 | 75.21 | 82.75 | 86.19 | 74.31 | 82.45 | 82.63 | 90.99 | 90.08 | 91.28 | 90.09 | 102.47 | 100.99 | 87.45 | 96.60 |
| 1925 | 95.83 | 97.12 | 98.69 | 113.25 | 74.90 | | 94.65 | 80.59 | 84.86 | 95.76 | 83.20 | 91.80 | 87.61 | 95.02 | 95.51 | 95.01 | 95.67 | 101.35 | 102.98 | 91.42 | 99.14 |
| 1926 | 97.25 | 96.72 | 99.89 | 110.62 | 84.70 | | 110.52 | 83.78 | 93.78 | 101.00 | 94.42 | 98.93 | 95.81 | 98.89 | 99.60 | 99.35 | 100.25 | 99.46 | 102.71 | 98.52 | 102.16 |
| 1927 | 98.58 | 103.69 | 100.90 | 104.00 | 91.47 | | 101.36 | 96.98 | 97.56 | 98.54 | 96.14 | 97.79 | 97.65 | 99.75 | 99.56 | 99.65 | 99.86 | 105.18 | 102.35 | 99.06 | 101.09 |
| 1928 | 100.00 | 106.31 | 104.85 | 102.79 | 101.56 | 100 | 97.21 | 99.36 | 99.02 | 102.50 | 104.79 | 103.22 | 100.68 | 102.98 | 103.32 | 103.09 | 103.87 | 106.31 | 104.85 | 100.68 | 103.09 |
| 1929 | 101.42 | 99.85 | 100.14 | 103.89 | 111.96 | | 101.28 | 114.06 | 108.85 | 109.98 | 116.39 | 112.00 | 110.10 | 104.53 | 105.96 | 103.66 | 105.52 | 98.45 | 98.74 | 108.56 | 102.21 |
| 1930 | 102.75 | 93.41 | 94.21 | 110.31 | | | 89.63 | 105.82 | 100.81 | 87.98 | 88.26 | 88.07 | 95.78 | 93.86 | 91.56 | 93.14 | 91.42 | 90.91 | 91.69 | 93.22 | 90.65 |
| 1931 | 104.17 | 98.14 | 95.83 | 50.87 | 105.86 | | 74.37 | 100.56 | 98.16 | 60.86 | 57.37 | 69.56 | 79.19 | 85.94 | 78.21 | 85.06 | 78.29 | 88.45 | 91.99 | 78.08 | 81.66 |

MINERALS, METALS, FUEL, AND POWER

This index number includes coal, petroleum, natural gas, nearly all other minerals, and includes scrap iron and other secondary metals and water power.

From 1839 to 1914 production increased 6.43 per cent. (Table 1 and fig. 3.) From 1915 to 1929 it increased only 4.31 per cent per year. Production was a little high in 1910, but was low in 1921 and in 1931. The production per capita

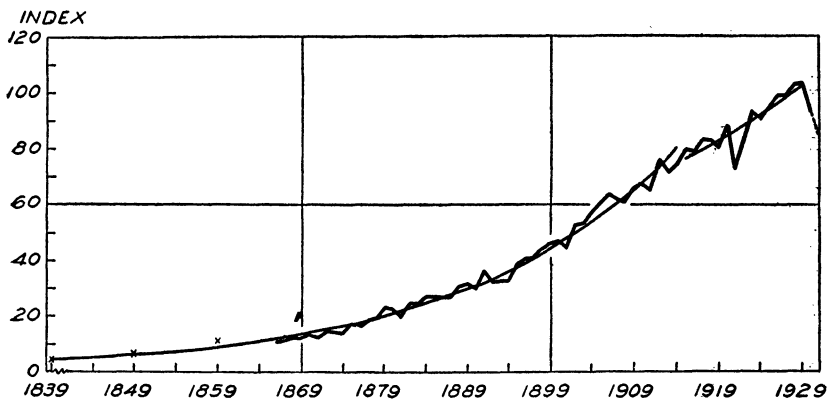


FIGURE 4.—Index numbers of the physical volume of total basic production in the United States, 1839-1931. 1926-1930=100. From 1839 to 1914 the total volume of basic production increased at the rate of 4.03 per cent per year, and from 1915 to 1929 production increased only 2.11 per cent per year

from 1839 to 1914 increased 4.08 per cent per year, but only 2.8 per cent from 1915 to 1929. (Table 1.)

TOTAL PHYSICAL VOLUME OF PRODUCTION

When crops, forest products, fuel and power, and other minerals and secondary metals were all combined, using variable group weights in accordance with their importance from time to time, the total basic production increased 4.03 per cent

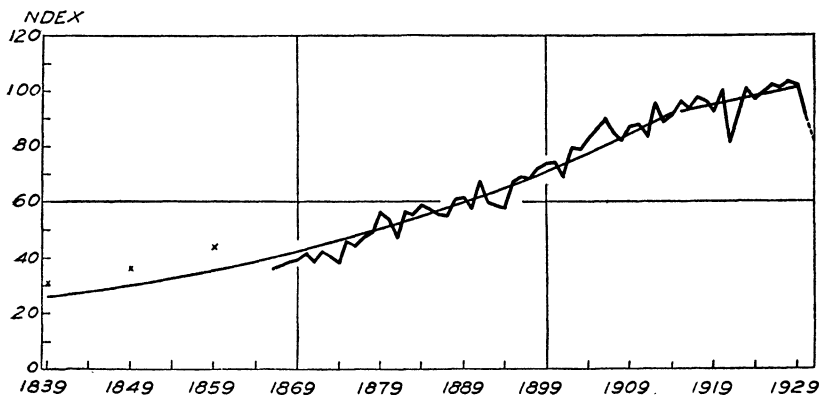


FIGURE 5.—Index numbers of the physical volume of total basic production per capita in the United States, 1839-1931. 1926-30=100. From 1839 to 1914, the total basic production per capita increased at the rate of 1.73 per cent and from 1915 to 1929, only 0.64 per cent

per year from 1839 to 1914. (Table 1 and fig. 4.) From 1915 to 1929 production increased only 2.11 per cent per year.

Before the war the total basic production per capita increased 1.73 per cent per year, but from 1915 to 1929 increased only 0.64 per cent per year. (Table 1 and fig. 5.) In only one year since 1913 has production per capita been as low as it was in 1931. That year was 1921.

Data before the Civil War are limited, but apparently this war also reduced the output per capita for a time. At that time there were very large undeveloped natural resources per capita.

WORLD PHYSICAL VOLUME OF PRODUCTION

World physical volume of production as calculated by Carl Snyder of the Federal Reserve Bank of New York is shown in Table 2 and figure 6. From 1865 to 1914 production increased at the rate of 3.15 per cent per year. Production was materially reduced by the World War and by the panic of 1920. It was gradually increasing until the panic of 1929.

The comparative growth of world population and world production can be approximately measured by determining production per capita in all countries exclusive of Africa and Asia. (Table 2 and fig. 7.) This indicates that from 1865 to 1914 the production per capita increased 1.91 per cent per year. This rate of increase is about the same as for the United States (1.97). Production per capita is of course far higher in the United States than in other countries. Apparently the world has been able to increase its lower production at about the same rate that the United States has increased its higher production.

TABLE 2.—Index numbers of world production, 1840-1930¹

[1910-14=100]

| Year | World physical volume of production | Physical volume of production per capita | Year | World physical volume of production | Physical volume of production per capita | Year | World physical volume of production | Physical volume of production per capita | Year | World physical volume of production | Physical volume of production per capita |
|------|-------------------------------------|--|------|-------------------------------------|--|------|-------------------------------------|--|------|-------------------------------------|--|
| 1840 | 11 | 24 | 1863 | 22 | 39 | 1886 | 46 | 63 | 1909 | 93 | 97 |
| 1841 | 11 | 23 | 1864 | 23 | 40 | 1887 | 46 | 63 | 1910 | 95 | 98 |
| 1842 | 12 | 22 | 1865 | 23 | 40 | 1888 | 50 | 67 | 1911 | 96 | 97 |
| 1843 | 12 | 26 | 1866 | 24 | 42 | 1889 | 52 | 69 | 1912 | 105 | 105 |
| 1844 | 12 | 26 | 1867 | 24 | 42 | 1890 | 50 | 65 | 1913 | 106 | 105 |
| 1845 | 13 | 28 | 1868 | 25 | 42 | 1891 | 56 | 72 | 1914 | 98 | 95 |
| 1846 | 13 | 28 | 1869 | 25 | 41 | 1892 | 53 | 68 | 1915 | 100 | 96 |
| 1847 | 14 | 29 | 1870 | 29 | 48 | 1893 | 54 | 69 | 1916 | 96 | 92 |
| 1848 | 14 | 29 | 1871 | 28 | 46 | 1894 | 54 | 68 | 1917 | 97 | 92 |
| 1849 | 15 | 31 | 1872 | 31 | 50 | 1895 | 61 | 76 | 1918 | 96 | 91 |
| 1850 | 15 | 30 | 1873 | 31 | 50 | 1896 | 64 | 78 | 1919 | 93 | 87 |
| 1851 | 15 | 29 | 1874 | 30 | 48 | 1897 | 63 | 76 | 1920 | 105 | 97 |
| 1852 | 16 | 31 | 1875 | 33 | 53 | 1898 | 69 | 82 | 1921 | 93 | 87 |
| 1853 | 16 | 31 | 1876 | 33 | 53 | 1899 | 68 | 81 | 1922 | 107 | 101 |
| 1854 | 17 | 33 | 1877 | 35 | 55 | 1900 | 72 | 86 | 1923 | 114 | 109 |
| 1855 | 17 | 33 | 1878 | 36 | 56 | 1901 | 72 | 84 | 1924 | 115 | 110 |
| 1856 | 18 | 34 | 1879 | 37 | 57 | 1902 | 77 | 89 | 1925 | 126 | 119 |
| 1857 | 19 | 35 | 1880 | 41 | 63 | 1903 | 78 | 90 | 1926 | 123 | 113 |
| 1858 | 19 | 35 | 1881 | 38 | 58 | 1904 | 77 | 88 | 1927 | 130 | 115 |
| 1859 | 20 | 36 | 1882 | 44 | 66 | 1905 | 84 | 94 | 1928 | 136 | 119 |
| 1860 | 20 | 36 | 1883 | 43 | 62 | 1906 | 90 | 98 | 1929 | 139 | 121 |
| 1861 | 21 | 38 | 1884 | 46 | 66 | 1907 | 87 | 94 | 1930 | 130 | 112 |
| 1862 | 22 | 39 | 1885 | 46 | 64 | 1908 | 87 | 92 | 1931 | | |

The figures in italics are estimates.

¹ The index numbers of world physical volume of production from 1865-1930 were prepared by Carl Snyder and furnished through the courtesy of the Federal Reserve Bank of New York.

An index number of world physical volume of production of cotton, coal, and pig iron was calculated for 1840, 1850, and 1860. These index numbers were 12, 14, and 24. For the same years the Snyder curve projected backwards gave index numbers of 11, 15, and 20. An index number for the same years was calculated including steam and sailing vessels, miles of railroad, cotton, coal, and pig iron. The index numbers of 10-year periods from 1840 to 1890 were as follows: 11, 15, 23, 28, 39, and 53, and the Snyder index for the same years was 11, 15, 20, 29, 41, and 50. These index numbers agreed very closely with the projected Snyder index.

These index numbers from 1840 to 1865 are the Snyder curve, $y=23.830(1.0315)^x$, projected. These are, of course, only approximations and do not show variations from year to year.

Production per capita is based on the population for Europe, America, and Australia, as reported by Willcox, W. F., International Migrations, Publications of the National Bureau of Economic Research, (Inc.), Report 18, vol. 2, Appendix 1, p. 641-4, 1931.

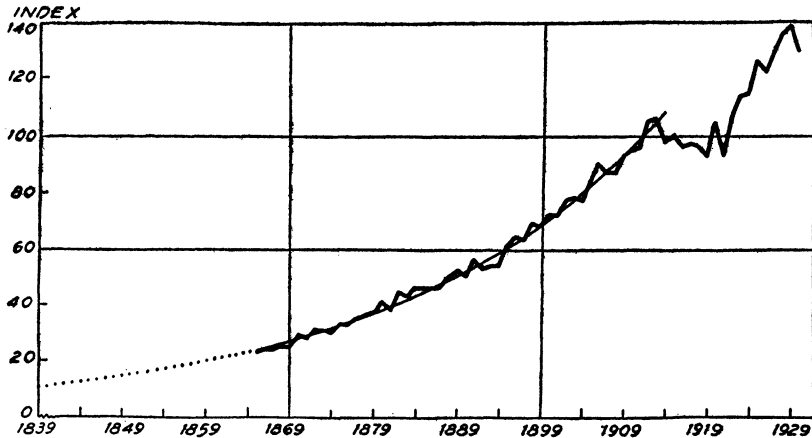


FIGURE 6.—Snyder's index numbers of world physical volume of production, 1840-1930. 1910-1914=100. From 1865 to 1914, the world's physical volume of production normally increased 3.15 per cent per year. Production was materially reduced by the World War and by the panics of 1920 and 1929, but is gradually increasing

The production per capita was very low during the war period; low in 1921; and is again very low for 1930-31. In no year since the outbreak of the war has production per capita been as high as would be expected from the pre-war trends.

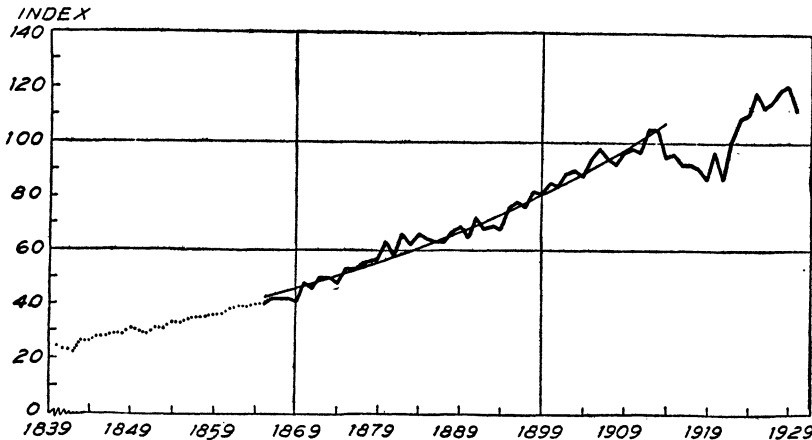


FIGURE 7.—World production per capita, 1840-1930. 1910-14=100. From 1865 to 1914, the world's physical volume of production per capita increased 1.91 per cent per year. For many years before the war, production per capita proceeded with great regularity. During the World War period, it was strikingly decreased. This is contrary to the popular opinion, but shows that man can not fight and produce at the same time

CAUSES OF LOW PRODUCTION PER CAPITA

During the World War, the low production per capita is easily explained by the fact that such a large percentage of the able-bodied men were in the Army. All of the production of copper, lead, iron, food, and the like which these men used is of course included regardless of the purpose for which these commodities were used.

Another factor preventing a normal increase in production is the breakdown in world trade. Each country of the world is attempting to become self-sufficient. It is seeking actively for foreign markets in which to sell and is attempting to stop buying from other countries. This is done by tariffs, prohibition of imports, limitation of imports, and milling restrictions. France has set the amount of

meat it will accept from other countries. Many foreign countries allow only a certain percentage of foreign wheat to be milled. These restrictions tend to keep production in areas where production is inefficient.

An even more important factor in preventing the normal development of production is the decline in prices. A price decline throws producers' prices out of line with consumers' prices. Since laborers and farmers are producers, the values of their products are thrown out of line with the prices of the products which they must buy. This makes it impossible to buy the normal amount of produce and results in unemployment. Since 1920, the United States has had two of the worst periods of unemployment ever known, and England has had continuous unemployment. These results of the war are checking the rate of improvement in the physical well-being of the world.

Instead of finding ways of further curtailing production, the world needs to find ways for increasing production by finding ways whereby the populations that desire to work may be employed producing things to sell in exchange for things that they desire. (Pp. 1671 and 1675.)

F. A. PEARSON,
G. F. WARREN.

MONEY AND PRICES

WORLD GOLD PRODUCTION

World gold production was strikingly decreased during the war period. This was due, in part, to the decreasing value of gold and in part to the exhaustion of mines. In 1922, gold production was less than three-fourths of the pre-war amount. Production is now increasing but the estimated production for 1930 is less than that of 22 years ago. (Table 1.)

TABLE 1.—*Relation between monetary stocks of gold and the physical volume of production and wholesale prices in England, 1839-1931*

| Year | World's production of gold, thousand fine ounces | Estimated world's stock of monetary gold at the end of year, millions of fine ounces ¹ | Index numbers of world's stock of monetary gold, 1880-1914=100 ¹ | Index numbers of world's physical volume of production 1880-1914=100 ² | Ratio, gold divided by production | Index numbers of wholesale prices in gold in England, 1880-1914=100 ³ | Five-year moving average | |
|-----------|--|---|---|---|-----------------------------------|--|-----------------------------|-----------------------------|
| | | | | | | | Ratio of gold to production | Wholesale prices in England |
| 1880-1914 | 12,293 | 231 | 100 | 100 | 100 | 100 | | |
| 1840-1844 | | 47 | 20 | 17 | 118 | 125 | | |
| 1945-1849 | 2,037 | 49 | 21 | 20 | 105 | 115 | | |
| 1850-1854 | 5,835 | 63 | 27 | 24 | 113 | 116 | | |
| 1855-1859 | 6,267 | 89 | 38 | 28 | 136 | 134 | | |
| 1860-1864 | 6,057 | 107 | 46 | 52 | 144 | 137 | | |
| 1865-1869 | 6,206 | 122 | 53 | 36 | 147 | 136 | | |
| 1870-1874 | 5,299 | 136 | 59 | 44 | 134 | 141 | | |
| 1875-1879 | 5,254 | 146 | 63 | 52 | 121 | 124 | | |
| 1880-1884 | 4,921 | 154 | 67 | 63 | 106 | 113 | | |
| 1885-1889 | 5,361 | 162 | 70 | 71 | 99 | 96 | | |
| 1890-1894 | 7,109 | 178 | 77 | 79 | 97 | 93 | | |
| 1895-1899 | 11,907 | 209 | 90 | 96 | 94 | 87 | | |

¹ The world's production of gold in dollars from 1844 to 1859 was taken from the final report of the Royal Commission appointed to inquire into the recent changes in the relative values of the precious metals, published by the gold and silver commission, Washington, D. C., pp. 154-155, 1889. These figures were converted to fine ounces by dividing by \$20.67. Later figures were taken from the United States Treasury Finance Report, p. 675, 1929. The estimates for 1929 are subject to revision.

² Warren, G. F., and Pearson, F. A., *Relation of Gold to Prices*, Farm Economics No. 69, pp. 1461-2, February 1931. Kitchin, J., *The supply of gold compared with the prices of commodities, interim report of the gold delegation of the financial committee of the League of Nations*, Document C. 375. M. 161. Annex XI, pp. 79-85. September, 1930. The index numbers of the world's stock of monetary gold were converted to the 35-year base, 1880-1914, by multiplying by 0.43247. The fine ounces of gold may be converted to dollars by multiplying by \$20.67.

³ The index numbers of the world's physical volume of production were converted from Carl Snyder's estimated values at 1923-1925 average price to the 35-year base, 1880-1914, by multiplying by 0.004416. The index on the 1910-1914 base was projected backwards from 1864 to 1839 on the basis of the curve, $y=23.830(1.0315)^x$, and then converted to dollars by multiplying by the 1910-1914 base, \$33563. Page 1684.

⁴ Warren, G. F., and Pearson, F. A., *The Agricultural Situation*, p. 263, August 1924. These index numbers were converted to the 35-year base, 1880-1914, from the 1910-14 base by multiplying by 1.1254. They may also be converted to the 35-year base from the 11-year base, 1867-77, by multiplying by 1.362.

TABLE 1.—Relation between monetary stocks of gold and the physical volume of production and wholesale prices in England, 1839-1931—Continued

| Year | World's production of gold, thousands of fine ounces | Estimated world's stock of monetary gold at the end of year, millions of fine ounces | Index numbers of world's stock of monetary gold, 1880-1914=100 | Index numbers of world's physical volume of production, 1880-1914=100 | Ratio, gold divided by production | Index numbers of wholesale prices in gold in England, 1880-1914=100 | Five-year moving average | |
|-----------|--|--|--|---|-----------------------------------|---|-----------------------------|-----------------------------|
| | | | | | | | Ratio of gold to production | Wholesale prices in England |
| 1900-1904 | 14,391 | 294 | 108 | 111 | 97 | 97 | | |
| 1905-1909 | 20,246 | 304 | 131 | 131 | 100 | 102 | | |
| 1910-1914 | 22,116 | 362 | 157 | 148 | 106 | 113 | | |
| 1915-1919 | 20,285 | 433 | 187 | 143 | 131 | 211 | | |
| 1920-1924 | 16,876 | 481 | 208 | 159 | 131 | 186 | | |
| 1925-1929 | 19,414 | 525 | 227 | 194 | 117 | 169 | | |
| 1839 | | 46 | 20 | 16 | 125 | 140 | | |
| 1840 | | 46 | 20 | 16 | 125 | 140 | | |
| 1841 | | 47 | 20 | 17 | 118 | 137 | | |
| 1842 | | 47 | 20 | 17 | 118 | 124 | 119 | 131 |
| 1843 | | 47 | 20 | 18 | 111 | 113 | 117 | 126 |
| 1844 | 1,799 | 47 | 20 | 18 | 111 | 114 | 114 | 121 |
| 1845 | 1,799 | 48 | 21 | 19 | 111 | 118 | 109 | 118 |
| 1846 | 1,799 | 49 | 21 | 20 | 105 | 120 | 106 | 117 |
| 1847 | 1,799 | 49 | 21 | 20 | 105 | 129 | 104 | 115 |
| 1848 | 1,799 | 49 | 21 | 21 | 100 | 106 | 103 | 112 |
| 1849 | 2,990 | 52 | 22 | 22 | 100 | 100 | 104 | 108 |
| 1850 | 3,343 | 54 | 23 | 22 | 105 | 105 | 105 | 104 |
| 1851 | 3,908 | 57 | 25 | 23 | 109 | 102 | 110 | 108 |
| 1852 | 8,605 | 63 | 27 | 24 | 115 | 106 | 116 | 116 |
| 1853 | 7,320 | 69 | 30 | 24 | 125 | 129 | 122 | 122 |
| 1854 | 6,001 | 74 | 32 | 25 | 128 | 138 | 123 | 129 |
| 1855 | 6,360 | 80 | 35 | 26 | 135 | 137 | 133 | 137 |
| 1856 | 6,950 | 85 | 37 | 27 | 137 | 137 | 137 | 136 |
| 1857 | 6,276 | 90 | 39 | 28 | 139 | 143 | 140 | 134 |
| 1858 | 5,869 | 94 | 41 | 28 | 146 | 124 | 143 | 133 |
| 1859 | 5,879 | 98 | 42 | 29 | 145 | 128 | 144 | 133 |
| 1860 | 6,486 | 102 | 44 | 30 | 147 | 135 | 146 | 131 |
| 1861 | 5,950 | 105 | 45 | 31 | 145 | 133 | 146 | 135 |
| 1862 | 5,950 | 108 | 47 | 32 | 147 | 137 | 145 | 138 |
| 1863 | 5,950 | 110 | 48 | 33 | 145 | 140 | 145 | 138 |
| 1864 | 5,950 | 112 | 48 | 34 | 141 | 143 | 146 | 139 |
| 1865 | 5,950 | 115 | 50 | 34 | 147 | 137 | 145 | 139 |
| 1866 | 6,270 | 119 | 51 | 35 | 146 | 138 | 145 | 138 |
| 1867 | 6,270 | 122 | 53 | 36 | 147 | 136 | 146 | 136 |
| 1868 | 6,270 | 125 | 54 | 38 | 142 | 135 | 144 | 135 |
| 1869 | 6,270 | 128 | 55 | 37 | 149 | 133 | 142 | 134 |
| 1870 | 6,270 | 131 | 57 | 42 | 136 | 131 | 139 | 137 |
| 1871 | 5,591 | 134 | 58 | 42 | 138 | 136 | 137 | 140 |
| 1872 | 5,591 | 136 | 59 | 45 | 131 | 149 | 135 | 141 |
| 1873 | 4,654 | 138 | 60 | 45 | 133 | 151 | 132 | 141 |
| 1874 | 4,390 | 140 | 61 | 45 | 136 | 138 | 130 | 140 |
| 1875 | 4,717 | 141 | 61 | 49 | 124 | 131 | 128 | 135 |
| 1876 | 5,016 | 144 | 62 | 49 | 127 | 129 | 125 | 129 |
| 1877 | 5,512 | 146 | 63 | 52 | 121 | 128 | 122 | 124 |
| 1878 | 5,671 | 149 | 64 | 54 | 119 | 118 | 119 | 122 |
| 1879 | 5,262 | 150 | 65 | 55 | 118 | 114 | 117 | 119 |
| 1880 | 5,149 | 151 | 65 | 60 | 108 | 120 | 113 | 116 |
| 1881 | 4,984 | 153 | 66 | 56 | 118 | 116 | 111 | 115 |
| 1882 | 4,934 | 154 | 67 | 65 | 103 | 114 | 107 | 113 |
| 1883 | 4,615 | 155 | 67 | 63 | 106 | 111 | 105 | 109 |
| 1884 | 4,921 | 156 | 67 | 68 | 99 | 104 | 102 | 104 |
| 1885 | 5,246 | 158 | 68 | 68 | 100 | 98 | 102 | 100 |
| 1886 | 5,136 | 160 | 69 | 68 | 101 | 95 | 100 | 97 |
| 1887 | 5,117 | 162 | 70 | 68 | 103 | 92 | 99 | 96 |
| 1888 | 5,331 | 165 | 71 | 75 | 95 | 96 | 98 | 96 |
| 1889 | 5,974 | 167 | 72 | 77 | 94 | 98 | 96 | 96 |
| 1890 | 5,749 | 169 | 73 | 74 | 99 | 98 | 95 | 96 |
| 1891 | 6,320 | 173 | 75 | 83 | 90 | 98 | 96 | 96 |
| 1892 | 7,094 | 177 | 77 | 78 | 99 | 92 | 98 | 93 |
| 1893 | 7,619 | 182 | 79 | 80 | 99 | 92 | 97 | 90 |
| 1894 | 8,764 | 189 | 82 | 80 | 103 | 86 | 97 | 87 |
| 1895 | 9,615 | 195 | 84 | 90 | 93 | 84 | 97 | 86 |
| 1896 | 9,784 | 201 | 87 | 94 | 93 | 83 | 95 | 85 |
| 1897 | 11,420 | 208 | 90 | 94 | 96 | 84 | 94 | 86 |
| 1898 | 13,878 | 217 | 94 | 102 | 92 | 88 | 95 | 90 |
| 1899 | 14,838 | 226 | 98 | 101 | 97 | 92 | 95 | 92 |
| 1900 | 12,315 | 233 | 101 | 106 | 95 | 102 | 95 | 95 |
| 1901 | 12,626 | 241 | 104 | 107 | 97 | 96 | 96 | 96 |

TABLE 1.—Relation between monetary stocks of gold and the physical volume of production and wholesale prices in England, 1839-1931—Continued

| Year | World's production of gold, thousands of fine ounces | Estimated world's stock of monetary gold at the end of year, millions of fine ounces | Index numbers of world's stock of monetary gold, 1880-1914=100 | Index numbers of world's physical volume of production, 1880-1914=100 | Ratio, gold divided by production | Index numbers of wholesale prices in gold in England, 1880-1914=100 | Five-year moving average | |
|------|--|--|--|---|-----------------------------------|---|-----------------------------|-----------------------------|
| | | | | | | | Ratio of gold to production | Wholesale prices in England |
| 1902 | 14,355 | 249 | 108 | 114 | 95 | 95 | 97 | 97 |
| 1903 | 15,853 | 257 | 111 | 115 | 97 | 95 | 97 | 96 |
| 1904 | 16,804 | 266 | 115 | 115 | 100 | 96 | 96 | 98 |
| 1905 | 18,396 | 280 | 121 | 125 | 97 | 98 | 98 | 101 |
| 1906 | 19,471 | 290 | 125 | 134 | 93 | 105 | 99 | 101 |
| 1907 | 19,777 | 301 | 130 | 129 | 101 | 109 | 100 | 102 |
| 1908 | 21,422 | 317 | 137 | 129 | 106 | 99 | 102 | 104 |
| 1909 | 21,965 | 330 | 143 | 138 | 104 | 101 | 104 | 105 |
| 1910 | 22,022 | 340 | 147 | 140 | 105 | 106 | 104 | 106 |
| 1911 | 22,397 | 351 | 152 | 143 | 106 | 109 | 104 | 110 |
| 1912 | 22,605 | 360 | 156 | 156 | 100 | 116 | 106 | 113 |
| 1913 | 22,255 | 372 | 161 | 157 | 103 | 116 | | |
| 1914 | 21,302 | 388 | 168 | 146 | 115 | 117 | | |
| 1915 | 22,738 | 407 | 176 | 148 | 119 | 144 | | |
| 1916 | 22,031 | 423 | 183 | 142 | 129 | 181 | | |
| 1917 | 20,346 | 434 | 188 | 144 | 131 | 233 | | |
| 1918 | 18,614 | 449 | 194 | 142 | 137 | 255 | | |
| 1919 | 17,698 | 452 | 195 | 138 | 141 | 255 | | |
| 1920 | 16,130 | 463 | 200 | 156 | 128 | 258 | | |
| 1921 | 15,975 | 476 | 206 | 138 | 149 | 168 | | |
| 1922 | 15,452 | 481 | 208 | 159 | 131 | 163 | | |
| 1923 | 17,791 | 490 | 212 | 169 | 125 | 165 | | |
| 1924 | 19,031 | 493 | 213 | 171 | 125 | 172 | | |
| 1925 | 19,026 | 501 | 217 | 187 | 116 | 185 | | |
| 1926 | 19,349 | 513 | 222 | 182 | 122 | 172 | | |
| 1927 | 19,431 | 525 | 227 | 193 | 118 | 167 | | |
| 1928 | 19,675 | 537 | 232 | 201 | 115 | 163 | | |
| 1929 | 19,590 | 550 | 238 | 205 | 116 | 156 | | |
| 1930 | <i>20,160</i> | <i>572</i> | <i>247</i> | 193 | <i>128</i> | 132 | | |
| 1931 | | <i>580</i> | <i>251</i> | | | <i>106</i> | | |

The figures in italics are estimates.

WORLD MONETARY STOCKS OF GOLD

In spite of the low production, world monetary stocks are steadily rising. This has led to the erroneous belief that the stocks must be ample, for "Are they not larger than ever before?" With business at a normal level there would not be enough gold to maintain pre-war prices.¹

The true measure of the adequacy of a money supply is whether there is enough of it to sustain the price level to which society is most nearly adjusted. Public and private debts, taxes, hospital charges, freight rates, passenger fares; doctors, dentists, and lawyers' fees; and all other economic relationships in England and the United States were becoming fairly well adjusted to a wholesale commodity price level of 150.

If there were only gold enough to support pre-war prices, there would be just enough to explain the present world catastrophe.

WORLD MONETARY STOCKS OF GOLD AND WORLD PHYSICAL VOLUME OF PRODUCTION RELATED TO PRICES IN ENGLAND

World monetary stocks of gold are given in Table 1. From 1850 to 1910, monetary stocks of gold increased from 54 to 340 million ounces. The index numbers of gold stocks increased from 23 to 147 when the stocks of 1880-1914 are called 100.

In the same period, the physical volume of world production increased from 22 to 140.

¹ Warren, G. F., and Pearson, F. A., Relation of Gold to Prices, Farm Economics No. 69, pp. 1460-3, February, 1931.

If the gold stock of 23 is divided by a production of 22, the result expressed as a percentage is 105. If the gold stocks of 147 are divided by 140, the same ratio, 105, is obtained.

Prices in England in 1850 were 105 and in 1910 were 106. The ratio of the stocks of gold to the production of other things remained the same, and prices were stable.

From 1850 to 1870, gold increased faster than the production of other things, so that the ratio of gold to other production increased from 105 to 136 and prices rose from 105 to 131.

From 1870 to 1890, gold increased from an index of 131 to 169, or 29 per cent. The production of other things increased 76 per cent. The gold stocks did not keep pace with other things. The ratio of gold to other things fell from 136 to 99, and prices fell from 131 to 98.

These relationships for the entire period are given in Table 1 and Figure 1. While there are considerable variations in short periods of time, prices for 75 years before the war were generally very close to the quantity of monetary gold divided by the quantity of other things.

The 5-year averages show how closely the relationship holds in each period. The widest divergence is shown for the five years 1865-1869 when gold divided

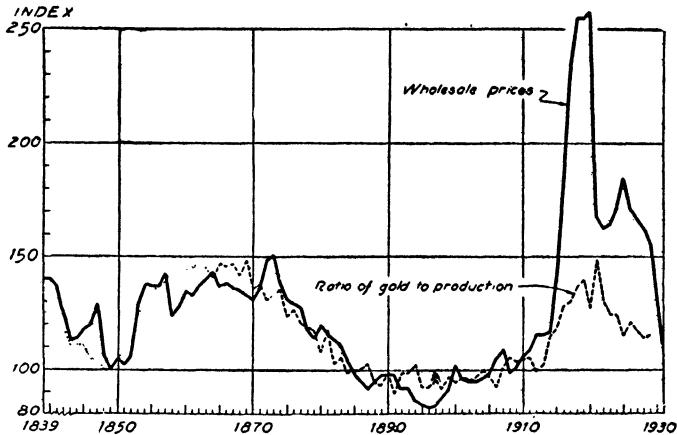


FIGURE 1.—Ratio of world's monetary gold stocks to world physical volume of production and wholesale prices in England, 1839-1930. 1880-1914=100. For the 75 years before the World War, prices rose if the world's monetary stocks of gold increased faster than the production of other things and fell if gold increased less rapidly. An exception occurred during and following the World War when most of the countries of the world discontinued the gold standard. But the relationship has been restored.

by production averaged 147, while prices in England were 136, or a 7 per cent difference in the relationship. About the same percentage difference occurred for the five years 1895-1899 and for 1910-1914. For a number of years in the nineties, prices were low. This was a period of severe depression, and considerable gold was doubtless hoarded. During most of this period, the Bank of England paid a premium for gold.²

Short-time fluctuations are affected by other factors. The final fluctuations in the price level from the gold relationships are the algebraic sum of short time variations in crops, due to weather; livestock cycles; business cycles; and to some other causes. In 75 years before the war these variations were always temporary.

This 75-year relationship may be expressed as follows:

$$\text{Gold} = \text{Prices} \times \text{physical volume of production,}$$

$$\text{or, Prices} = \frac{\text{Gold}}{\text{Physical volume of production.}}$$

For 75 years before the World War, world monetary stocks of gold had to increase at the same rate as the world physical volume of production in order to maintain stable commodity prices in England. If gold stocks increased more rapidly than other things, prices rose; if they increased less rapidly, prices fell.

² Report of the Director of the Mint, 1900, p. 206. 1900.

In order to eliminate short-time variations, 5-year moving averages of the ratio of gold to production and wholesale prices in England were calculated (Table 1 and fig. 2). Each figure given in the last two columns of Table 1 is an average for that year and the two preceding and two following years.

Discrepancies still exist, but the general trend of the two curves is the same, showing that, although physical volume of production increased nine times, prices fell only a small amount in 75 years, because monetary stocks of gold increased over eight times.

The abnormally high prices from 1915 to 1930 were, in part, explained by the reduced demand for gold (page 1694) and, in part, by the low production of

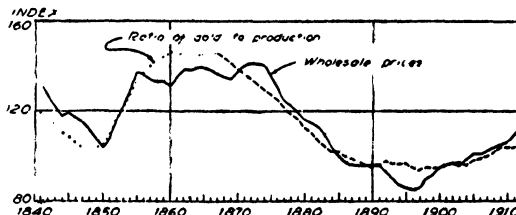


FIGURE 2.—Five-year moving averages of the ratios of world monetary stocks of gold to world physical volume of production and wholesale prices in England, 1840-1931, 1880-1914=100. Comparisons of 5-year averages of the ratios and 5-year averages of prices fit more closely than the data for single years (Figure 1)

other things. The world physical volume of production was low from 1914 to 1925 and has been low since 1929. The abnormally low production raised the ratio of gold stocks to production in that period, and accounts for the rise in the gold to production ratio line. World production of goods began to rise from 1923 to 1929, but was at no time equal to the normal increase. The low production in 1930 raised the ratio line. A still further decrease in 1931 will raise it strikingly. These fluctuations do not change the long relationships.

TABLE 2.—Relation between monetary stocks of gold and the physical volume of production and wholesale prices in the United States, 1839-1931

| Year | Estimated world's stock of monetary gold at the end of the year, millions of fine ounces | Index numbers of world's stock of monetary gold 1880-1914=100 ¹ | Index numbers of the world's physical volume of production 1914-1880=100 ² | Ratio gold divided by production | Index numbers of United States wholesale prices in gold 1880-1914=100 ³ | United States gold stocks (millions of dollars) ⁴ | Index numbers of United States gold stocks 1880-1914=100 ⁴ | Index of United States physical volume of production 1880-1914=100 ⁴ | Ratio United States gold divided by United States production | Per cent of world's stock of gold held in the United States |
|----------------|--|--|---|----------------------------------|--|--|---|---|--|---|
| 1880-1914..... | 231 | 100 | 100 | 100 | 100 | 1,003 | 100 | 100 | 100 | 20 |
| 1840-1844..... | 47 | 20 | 17 | 118 | 96 | ..... | ..... | ..... | ..... | ..... |
| 1845-1849..... | 49 | 21 | 20 | 105 | 96 | ..... | ..... | ..... | ..... | ..... |
| 1850-1854..... | 63 | 27 | 24 | 113 | 105 | ..... | ..... | ..... | ..... | ..... |
| 1855-1859..... | 89 | 38 | 28 | 136 | 118 | ..... | ..... | ..... | ..... | ..... |

¹ Warren, G. F., and Pearson, F. A., Relation of Gold to Prices, Farm Economics No. 69, pp. 1461-2, February, 1931. Kitchin, J., The supply of gold compared with the prices of commodities, Interim Report of the Gold Delegations of the Financial Committee of the League of Nations, Document C. 375. M. 161, Annex XI, pp. 79-85, September, 1930. The index numbers of the world's stock of monetary gold were converted to the 35-year base, 1880-1914, by multiplying by 0.43247. The fine ounces of gold may be converted to dollars by multiplying by \$20.67.

² The index numbers of the world's physical volume of production were converted from Carl Snyder's estimated values at 1923-1925 average prices to the 35-year base, 1880-1914, by multiplying by 0.004416. The index on the 1910-1914 base was projected backwards from 1864 to 1839 on the basis of the curve, $y = 23,930(1.0315)^x$, and then converted to dollars by multiplying by the 1910-14 base, \$33,593. Page 1684.

³ Warren, G. F. and Pearson, F. A., Index Numbers of Wholesale Prices of All Commodities, FARM ECONOMICS No. 72, pp. 1589-7, September, 1931, and page 1634 of this issue. The index numbers were converted to the 35-year base, 1880-1914, by multiplying by 1.14604.

⁴ Statistical Abstract of the United States, United States Department of Commerce, 1922. Forty-fifth Number, p. 512, 1923, and the fifty-second number, pp. 246-7, 1930. The index numbers were converted to the 35-year base, 1880-1914, by multiplying by 0.00973.

⁵ Table 1, page 1680. The index numbers were converted from the five-year base, 1926-30, to the 35-year base, 1880-1914, by multiplying by 2.2411.

TABLE 2.—Relation between monetary stocks of gold and the physical volume of production and wholesale prices in the United States, 1839-1931—Continued

| Year | Estimated world's stock of monetary gold at the end of the year, millions of fine ounces | Index numbers of world's stock of monetary gold 1880-1914=100 | Index numbers of the world's physical volume of production 1914-1880=100 | Ratio gold divided by production | Index numbers of United States wholesale prices in gold 1880-1914=100 | United States gold stocks (millions of dollars) | Index numbers of United States gold stocks 1880-1914=100 | Index of United States physical volume of production 1880-1914=100 | Ratio United States gold divided by United States production | Per cent of world's stock of gold held in the United States |
|-----------|--|---|--|----------------------------------|---|---|--|--|--|---|
| 1860-1864 | 107 | 46 | 32 | 144 | 105 | 246 | 25 | ----- | ----- | 11 |
| 1865-1869 | 122 | 53 | 36 | 147 | 136 | 175 | 17 | ----- | ----- | 7 |
| 1870-1874 | 136 | 59 | 44 | 134 | 134 | 157 | 16 | 31 | 52 | 6 |
| 1875-1879 | 146 | 63 | 52 | 121 | 111 | 176 | 18 | 43 | 42 | 6 |
| 1880-1884 | 154 | 67 | 63 | 106 | 116 | 485 | 48 | 54 | 89 | 15 |
| 1885-1889 | 162 | 70 | 71 | 99 | 99 | 644 | 64 | 64 | 100 | 19 |
| 1890-1894 | 173 | 77 | 79 | 97 | 86 | 640 | 64 | 74 | 86 | 18 |
| 1895-1899 | 209 | 90 | 96 | 94 | 81 | 751 | 75 | 95 | 79 | 17 |
| 1900-1904 | 249 | 108 | 111 | 97 | 97 | 1,186 | 118 | 114 | 104 | 23 |
| 1905-1909 | 304 | 131 | 131 | 100 | 107 | 1,512 | 151 | 140 | 108 | 24 |
| 1910-1914 | 362 | 157 | 148 | 106 | 115 | 1,794 | 179 | 159 | 113 | 24 |
| 1915-1919 | 433 | 187 | 143 | 131 | 181 | 2,785 | 278 | 182 | 153 | 31 |
| 1920-1924 | 481 | 208 | 159 | 131 | 183 | 3,693 | 368 | 193 | 191 | 37 |
| 1925-1929 | 525 | 227 | 194 | 117 | 165 | 4,366 | 435 | 224 | 194 | 40 |
| 1839 | 46 | 20 | 16 | 125 | 128 | ----- | ----- | ----- | ----- | ----- |
| 1840 | 46 | 20 | 16 | 125 | 109 | ----- | ----- | ----- | ----- | ----- |
| 1841 | 47 | 20 | 17 | 118 | 105 | ----- | ----- | ----- | ----- | ----- |
| 1842 | 47 | 20 | 17 | 118 | 94 | ----- | ----- | ----- | ----- | ----- |
| 1843 | 47 | 20 | 18 | 111 | 86 | ----- | ----- | ----- | ----- | ----- |
| 1844 | 47 | 20 | 18 | 111 | 88 | ----- | ----- | ----- | ----- | ----- |
| 1845 | 48 | 21 | 19 | 111 | 95 | ----- | ----- | ----- | ----- | ----- |
| 1846 | 48 | 21 | 20 | 105 | 95 | ----- | ----- | ----- | ----- | ----- |
| 1847 | 49 | 21 | 20 | 105 | 103 | ----- | ----- | ----- | ----- | ----- |
| 1848 | 49 | 21 | 21 | 100 | 94 | ----- | ----- | ----- | ----- | ----- |
| 1849 | 52 | 22 | 22 | 100 | 94 | ----- | ----- | ----- | ----- | ----- |
| 1850 | 54 | 23 | 22 | 105 | 96 | ----- | ----- | ----- | ----- | ----- |
| 1851 | 57 | 25 | 23 | 109 | 95 | ----- | ----- | ----- | ----- | ----- |
| 1852 | 63 | 27 | 24 | 113 | 101 | ----- | ----- | ----- | ----- | ----- |
| 1853 | 69 | 30 | 24 | 125 | 111 | ----- | ----- | ----- | ----- | ----- |
| 1854 | 74 | 32 | 25 | 128 | 124 | ----- | ----- | ----- | ----- | ----- |
| 1855 | 80 | 35 | 26 | 155 | 126 | ----- | ----- | ----- | ----- | ----- |
| 1856 | 85 | 37 | 27 | 157 | 120 | ----- | ----- | ----- | ----- | ----- |
| 1857 | 90 | 39 | 28 | 159 | 127 | ----- | ----- | ----- | ----- | ----- |
| 1858 | 94 | 41 | 28 | 146 | 107 | ----- | ----- | ----- | ----- | ----- |
| 1859 | 98 | 42 | 29 | 145 | 109 | ----- | ----- | ----- | ----- | ----- |
| 1860 | 102 | 44 | 30 | 147 | 107 | 214 | 21 | ----- | ----- | 10 |
| 1861 | 105 | 45 | 31 | 145 | 102 | 270 | 27 | ----- | ----- | 12 |
| 1862 | 108 | 47 | 32 | 147 | 105 | 283 | 28 | ----- | ----- | 13 |
| 1863 | 110 | 48 | 33 | 145 | 105 | 260 | 26 | ----- | ----- | 11 |
| 1864 | 112 | 48 | 34 | 141 | 110 | 203 | 20 | ----- | ----- | 9 |
| 1865 | 115 | 50 | 34 | 147 | 136 | 189 | 19 | ----- | ----- | 8 |
| 1866 | 119 | 51 | 35 | 146 | 142 | 167 | 17 | 24 | 71 | 7 |
| 1867 | 122 | 53 | 36 | 147 | 135 | 186 | 19 | 26 | 73 | 7 |
| 1868 | 125 | 54 | 38 | 142 | 130 | 160 | 16 | 27 | 59 | 6 |
| 1869 | 128 | 55 | 37 | 149 | 131 | 173 | 17 | 28 | 61 | 7 |
| 1870 | 131 | 57 | 42 | 136 | 134 | 190 | 19 | 30 | 63 | 7 |
| 1871 | 134 | 58 | 42 | 138 | 134 | 164 | 16 | 29 | 55 | 6 |
| 1872 | 136 | 59 | 45 | 131 | 139 | 148 | 15 | 33 | 45 | 5 |
| 1873 | 138 | 60 | 45 | 133 | 134 | 135 | 13 | 32 | 41 | 5 |
| 1874 | 140 | 61 | 45 | 136 | 130 | 147 | 15 | 31 | 48 | 5 |
| 1875 | 141 | 61 | 49 | 124 | 118 | 121 | 12 | 38 | 32 | 4 |
| 1876 | 144 | 62 | 49 | 127 | 113 | 130 | 13 | 38 | 34 | 4 |
| 1877 | 146 | 63 | 52 | 121 | 117 | 163 | 17 | 41 | 41 | 6 |
| 1878 | 149 | 64 | 54 | 119 | 103 | 213 | 21 | 44 | 48 | 7 |
| 1879 | 150 | 65 | 55 | 118 | 103 | 246 | 25 | 52 | 48 | 8 |
| 1880 | 151 | 65 | 60 | 108 | 115 | 352 | 35 | 51 | 69 | 11 |
| 1881 | 153 | 66 | 56 | 118 | 118 | 473 | 48 | 45 | 107 | 15 |
| 1882 | 154 | 67 | 65 | 103 | 124 | 507 | 51 | 56 | 91 | 16 |
| 1883 | 155 | 67 | 63 | 106 | 116 | 543 | 54 | 56 | 96 | 17 |
| 1884 | 156 | 67 | 68 | 99 | 107 | 546 | 54 | 61 | 89 | 17 |
| 1885 | 158 | 68 | 68 | 100 | 97 | 589 | 59 | 61 | 97 | 18 |
| 1886 | 160 | 69 | 68 | 101 | 94 | 591 | 59 | 60 | 98 | 18 |
| 1887 | 162 | 70 | 63 | 103 | 97 | 655 | 65 | 61 | 107 | 20 |
| 1888 | 165 | 71 | 75 | 95 | 99 | 706 | 70 | 69 | 101 | 21 |
| 1889 | 167 | 72 | 77 | 94 | 93 | 680 | 68 | 71 | 96 | 20 |
| 1890 | 169 | 73 | 74 | 99 | 94 | 696 | 69 | 67 | 103 | 20 |
| 1891 | 173 | 75 | 83 | 90 | 94 | 647 | 65 | 81 | 80 | 18 |

TABLE 2.—Relation between monetary stocks of gold and the physical volume of production and wholesale prices in the United States, 1889-1931—Continued

| Year | Estimated world's stock of monetary gold at the end of the year, millions of fine ounces | Index numbers of world's stock of monetary gold 1880-1914=100 | Index numbers of the world's physical volume of production 1914-1880=100 | Ratio gold divided by production | Index numbers of United States wholesale prices in gold 1880-1914=100 | United States gold stocks (millions of dollars) | Index numbers of United States gold stocks 1880-1914=100 | Index of United States physical volume of production 1880-1914=100 | Ratio United States gold divided by United States production | Per cent of world's stock of gold held in the United States |
|-----------|--|---|--|----------------------------------|---|---|--|--|--|---|
| 1892..... | 177 | 77 | 78 | 99 | 87 | 664 | 66 | 74 | 89 | 18 |
| 1893..... | 182 | 79 | 80 | 99 | 89 | 598 | 60 | 74 | 81 | 16 |
| 1894..... | 189 | 82 | 80 | 103 | 80 | 627 | 63 | 74 | 85 | 16 |
| 1895..... | 195 | 84 | 90 | 93 | 81 | 636 | 63 | 87 | 72 | 16 |
| 1896..... | 201 | 87 | 94 | 93 | 78 | 600 | 60 | 91 | 66 | 14 |
| 1897..... | 208 | 90 | 94 | 96 | 78 | 696 | 69 | 92 | 75 | 16 |
| 1898..... | 217 | 94 | 102 | 92 | 81 | 862 | 86 | 99 | 87 | 19 |
| 1899..... | 226 | 98 | 101 | 97 | 88 | 963 | 96 | 104 | 92 | 21 |
| 1900..... | 233 | 101 | 106 | 95 | 94 | 1,034 | 103 | 105 | 98 | 21 |
| 1901..... | 241 | 104 | 107 | 97 | 93 | 1,125 | 112 | 100 | 112 | 23 |
| 1902..... | 249 | 108 | 114 | 95 | 99 | 1,193 | 119 | 118 | 101 | 23 |
| 1903..... | 257 | 111 | 115 | 97 | 100 | 1,249 | 125 | 119 | 105 | 24 |
| 1904..... | 266 | 115 | 115 | 100 | 100 | 1,328 | 132 | 128 | 103 | 24 |
| 1905..... | 280 | 121 | 125 | 97 | 101 | 1,358 | 135 | 136 | 99 | 23 |
| 1906..... | 290 | 125 | 134 | 93 | 103 | 1,476 | 147 | 143 | 103 | 25 |
| 1907..... | 301 | 130 | 129 | 101 | 109 | 1,466 | 146 | 139 | 105 | 24 |
| 1908..... | 317 | 137 | 129 | 106 | 105 | 1,618 | 161 | 137 | 118 | 25 |
| 1909..... | 330 | 143 | 138 | 104 | 113 | 1,642 | 164 | 148 | 111 | 24 |
| 1910..... | 340 | 147 | 140 | 105 | 118 | 1,636 | 163 | 151 | 108 | 23 |
| 1911..... | 351 | 152 | 143 | 106 | 109 | 1,753 | 175 | 146 | 120 | 24 |
| 1912..... | 360 | 156 | 156 | 100 | 116 | 1,818 | 181 | 170 | 106 | 24 |
| 1913..... | 372 | 161 | 157 | 103 | 117 | 1,871 | 187 | 160 | 117 | 24 |
| 1914..... | 388 | 168 | 146 | 115 | 113 | 1,891 | 189 | 167 | 113 | 24 |
| 1915..... | 407 | 176 | 148 | 119 | 116 | 1,986 | 198 | 178 | 111 | 24 |
| 1916..... | 423 | 183 | 142 | 129 | 143 | 2,445 | 244 | 177 | 138 | 28 |
| 1917..... | 434 | 188 | 144 | 131 | 197 | 3,220 | 321 | 187 | 172 | 36 |
| 1918..... | 449 | 194 | 142 | 137 | 219 | 3,163 | 315 | 186 | 169 | 34 |
| 1919..... | 452 | 195 | 138 | 141 | 231 | 3,113 | 310 | 181 | 171 | 33 |
| 1920..... | 463 | 200 | 156 | 128 | 259 | 2,865 | 286 | 199 | 144 | 30 |
| 1921..... | 476 | 206 | 138 | 149 | 164 | 3,275 | 327 | 164 | 199 | 33 |
| 1922..... | 481 | 208 | 159 | 131 | 162 | 3,785 | 377 | 186 | 203 | 38 |
| 1923..... | 490 | 212 | 169 | 125 | 168 | 4,050 | 404 | 209 | 193 | 40 |
| 1924..... | 493 | 213 | 171 | 125 | 164 | 4,488 | 448 | 205 | 219 | 44 |
| 1925..... | 501 | 217 | 187 | 116 | 173 | 4,365 | 435 | 213 | 204 | 42 |
| 1926..... | 513 | 222 | 182 | 122 | 167 | 4,447 | 444 | 223 | 199 | 42 |
| 1927..... | 525 | 227 | 193 | 118 | 159 | 4,587 | 457 | 223 | 205 | 42 |
| 1928..... | 537 | 232 | 201 | 115 | 164 | 4,109 | 410 | 231 | 177 | 37 |
| 1929..... | 550 | 238 | 205 | 116 | 162 | 4,324 | 431 | 232 | 186 | 38 |
| 1930..... | <i>572</i> | <i>247</i> | <i>193</i> | <i>128</i> | 144 | 4,535 | 452 | 209 | 216 | 39 |
| 1931..... | <i>580</i> | <i>251</i> | ----- | ----- | 119 | 4,956 | 494 | 191 | 259 | 48 |

NOTE.—The figures in italics are estimates.

Apparently wars, like the Civil War and the World War (figs. 4 and 6) check the increase in production or actually lower it. After recovery occurs, the increase again proceeds at a normal rate. If this is the case, world's gold supply would need to have increased a little less than 3.15 per cent per year since 1914 to sustain pre-war prices with what would now be normal production.

WORLD MONETARY STOCKS OF GOLD AND WORLD PHYSICAL VOLUME OF PRODUCTION RELATED TO PRICES IN THE UNITED STATES

In the 5-year period 1885 to 1889, the world monetary stocks of gold were 70 when the average for 1880-1914=100 (table 2). The world physical volume of production was 71. The ratio of gold to production was 99 and wholesale prices in the United States were 96. Fifteen years later, the world gold stocks had increased 54 per cent, and the world physical volume of production, 56. The ratio of gold to production was 97 and prices were 97.

Many persons now contend that the world's gold stocks are higher than ever before so that they must be ample. They are 49 per cent above the 1914 amount.

In the previous period given, the 54 per cent increase in gold was only sufficient to maintain prices when production increased at the same rate as gold stocks. Is there any reason for assuming that the 49 per cent increase in gold is more than sufficient to maintain pre-war prices with normal production at the present time?

Figure 3 and Table 2 show the relationships of the gold-to-production ratio to prices since 1880. Prices in the United States were more erratic than those in England primarily because of financial difficulties during the 20 years following the return to the gold basis in 1879.

In general, prices rose when gold stocks increased more rapidly than production and fell when they increased less rapidly.

From 1839 to 1880, wholesale prices in the United States were lower than the gold supply would suggest. This difference, compared with England, is due to the fact that agricultural prices in the United States were low during this period and that agriculture has a heavy weight in the United States index numbers, and to the further fact that the United States gold supply was small relative to production.

The discrepancy was very great from 1858 to 1865. This was due to the panic of 1857 and the inflation during the war. When inflation occurs, the value of the money declines faster than prices rise so that a theoretical price in gold is low.

UNITED STATES MONETARY STOCKS OF GOLD AND UNITED STATES PHYSICAL VOLUME OF PRODUCTION RELATED TO WHOLESALE PRICES IN THE UNITED STATES

In 1885, the United States had \$589,000,000 of monetary gold, and in 1897, \$696,000,000. Probably in 1897, some persons contend that there must be enough

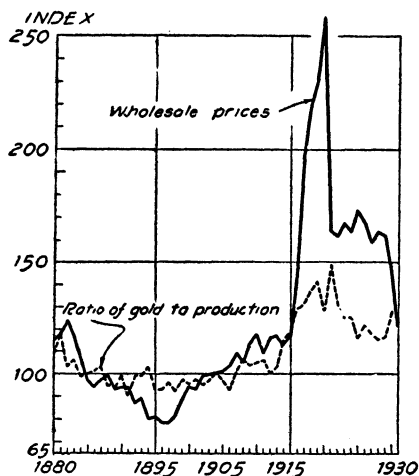


FIGURE 3.—Ratio of world's monetary gold stocks to world physical volume of production in relation to wholesale prices in the United States, 1880-1931. 1880-1914=100. For the 35 years before the World War prices rose if the world's monetary stocks of gold increased faster than the production of other things and fell if gold increased less rapidly. An exception occurred when most of the countries of the world discontinued the gold standard. But the relationship has been restored.

gold as the supply had increased 18 per cent. In the same period, the United States physical volume of production increased at the normal rate, or 52 per cent.

In 1885, the ratio of gold-to-production was 97 and wholesale prices were 97 when the 35 years, 1880-1914 is 100.

In 1897, the ratio of gold-to-production was 75 and wholesale prices were 78.

All the data since 1880 are shown in Figure 4 and Table 2. During the period when the country was off the gold standard, wholesale prices were higher than the small amount of gold would be expected to support. Specie payment was resumed in 1879 and prices continued high relative to gold for the following six years:

From 1885 to 1914, the highest discrepancy between prices and the gold-to-production ratio was for 1900 to 1904, when the ratio was 104, but prices averaged only 97. The discrepancy was 7 per cent. No other five-year period showed a discrepancy of more than 4 per cent.

For the thirty-year period 1885 to 1914, monetary stocks of gold in the United States had to increase at the same rate as the physical volume of production in the United States in order to maintain stable commodity prices. If gold stocks increased more rapidly than the production of other things, prices rose; if gold increased less rapidly, prices fell.

From 1892 to 1899, prices in the United States were below the normal relationships to world stocks of gold, but were not below their normal relationships to stocks of gold in the United States. In 1895-96, prices were much below their relationship to world gold but were much above their relationship to United States stocks of gold. The United States returned to the gold standard in 1879 but the resulting bankruptcy, unemployment and political controversies were such that

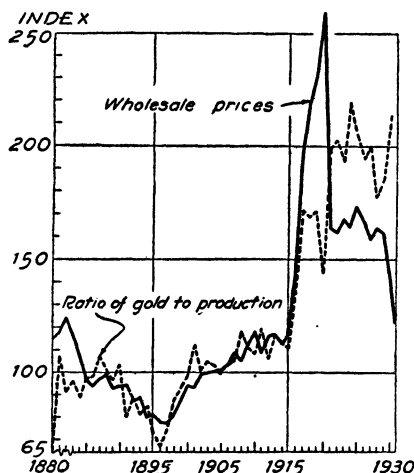


FIGURE 4.—Ratio of the United States monetary gold to the United States physical volume of production in relation to wholesale prices in the United States, 1880-1931. 1880-1914=100. From 1880 to 1914, the United States gold divided by the United States production of other commodities equalled prices

it shook the faith of Europe in the ability of the United States to maintain the gold standard. Securities were returned and sold on the New York market and other means were taken to withdraw gold from the United States. This resulted in a price level far lower than the world stocks would call for. Low as prices were, they were high compared to the United States gold stocks.

A similar situation now exists in England. Gold payments were resumed in 1925, but six years of effort resulted in so much unemployment and political agitation, that the world doubted the ability of England to maintain the gold standard. The same devices were used to withdraw gold and it became impossible for England to maintain the gold standard. Index numbers of wholesale prices in England were low relative to world stocks of gold, but were high relative to English gold stocks. For two years, prices in England have been declining in advance of the decline of prices in the United States. The major factor controlling prices is world gold supply, but the location of the supply has some influence.

WHY WERE PRICES HIGH FROM 1915 TO 1930?

The real problem that requires explanation is not why prices fell when the world went back to a gold basis, but why prices in the gold-using countries were so high from 1915 to 1929. With the outbreak of the war, most of the countries of the world discontinued the use of gold and gave little attention to gold supplies. They shipped gold to neutral countries to pay for war materials. The reduced demand for gold made it cheap, so that prices in countries that did not use gold were high.

The same thing happened a few years ago in China. India began to sell silver, which reduced the value of silver and made prices rise in China. (Fig. 9, p. 1665.) The same thing might occur again if other countries would stop bidding for gold. If this occurred, the gold would move to the gold-using countries. The small world demand would make it cheap and prices would rise.

From 1916 to 1920, prices in the United States were even higher than the gold supply would suggest. This was particularly true from 1919 to 1920. In that period the government held down interest rates in order to sell the Victory loan at a low rate of interest.² This resulted in a great expansion of credit so that the large gold supply was more than fully used. (Table 3.)

Shortage of goods and government and private hoarding of goods also contributed to high prices. England did not sell the last of her war supplies of pork until 1921. Italy was rationing her hoard of sugar in 1921, not to hold prices down (world prices were very low), but to get rid of the sugar at a high price.

Before the other countries began to desire to have the gold back again, wholesale prices in the United States were about 50 per cent above pre-war.

England and other countries made the mistake of thinking they could go back on the gold basis by deflating to the level of prices in the United States. The government did not realize that this increased demand for gold would lower prices in both countries.

One after another of the various countries began to move toward the reestablishment of the gold standard. Sweden returned to the gold basis on April 1, 1924; Germany, in the fall of 1924; England and the Netherlands on April 28, 1925; Belgium, October 25, 1926; Italy, December 22, 1927; and France, June 25, 1928. These countries did not return to a free gold coinage but to a gold exchange basis so that one could get gold bars if he had money enough. In France, it requires about \$8,000 to buy a gold bar. The only way that most Europeans can get gold is to buy American coins. Our \$20 gold pieces are reported to be selling at \$21.50 in France. This demand has been so keen that New York banks are trying to prevent the movement.³

The vigorous bidding for gold made it very valuable regardless of its location. The United States held large stocks of gold, but the world demand determined its value. The demand for gold gradually grew until there was a world-wide panic to get it. This panic grew worse and worse until the fall of 1931 when England and a large number of other countries discontinued the gold standard.

EFFICIENCY IN THE USE OF GOLD

Much has been said about the increased efficiency in the use of gold. The monetary circulation of the United States has steadily declined in proportion to gold. (Table 3.) Bank deposits (or credit) have steadily risen in proportion to gold.

In the 17 years preceding the establishment of the Federal reserve system, 1888-1897 to 1905-1914, the total monetary circulation plus bank deposits in the United States for each dollar of monetary gold increased from \$9.17 to \$10.78 or an increase of \$1.61. In the next 17 years, 1905-1914 to 1922-1931, the increase was from \$10.78 to \$12.03, or an increase of \$1.25. The rate of increase has been less rapid than that which was occurring before the establishment of the system. If a dollar of money performs more transactions than a dollar of bank credit, the increased efficiency is less than this comparison indicates.

The small increase in the efficiency in the use of gold is easily offset by other factors. Some of these may be that the number of transactions to handle a given volume of physical production has increased. When bread was made in the home, fewer transactions were involved than when bread is purchased. Increased fabrication may have occurred. There is a steadily increasing number of noncommodity transactions. Newspaper, radio, and moving picture employees and laborers are relatively more numerous than formerly. When commodity prices are stable, wages rise and require more money. All of these things have been occurring gradually throughout the 75-year period. The increasing efficiency in the use of gold has also been occurring gradually. Whatever the explanation, the simple fact that the general course of prices has been determined by the ratio of gold stocks to production of other things is established.

It is often said that the United States has more gold than it needs and that the gold is sterilized. The total credit outstanding in 1929 was high in propor-

² Report of the Joint Commission on Agricultural Inquiry, House of Representatives, 67th Cong., 1st sess. Report 408, P. II, p. 12, 1922.

³ New York Times, Feb. 3, 1932, p. 26.

tion to total gold supply indicating that the gold was fully used. (Table 3.) It was so fully used as to cause a reaction.

FUTURE RELATIONSHIPS OF GOLD TO PRICES

The physical volume of production from 1923 to 1929 increased at about the normal rate for the fifty years before the war, 3.15 per cent per year. It will be impossible to know definitely just what the rate of increase will be after such a period of world chaos. Apparently, a production of about 211 would be normal for 1930, and 218 for 1931. The index number of world gold stocks in 1931 was 251. The ratio of gold stocks to this estimate of production was 115. If there were no other factors to consider, a commodity price level of about 115, when 1880-1914=100, would be normal. On a 1910-1914 basis, this would equal prices of 102 in England and 100 in the United States.^{4a} In August, 1931, before the gold basis was abandoned, prices in England fell to 96. In December, 1931, prices in the United States were 100. Prices have returned to their normal relationship to the gold supply.

If a free gold basis were established and all the countries that formerly used gold returned to it, a price level materially below the normal level would be expected for some years.

Confidence in money has been repeatedly shaken for almost a generation. After such a period, there are many factors which tend to make prices low in proportion to gold stocks.

TABLE 3.—*Monetary gold, money in circulation, and bank deposits in the United States on June 30, 1880-1931*

| Period or year | Total money ¹ | Monetary gold coin and bullion ¹ | Total monetary circulation ² | Total individual deposits ³ | Percentage of gold to total money ⁴ | Monetary circulation per dollar of gold | Deposits per dollar of gold |
|----------------|--------------------------|---|---|--|--|---|-----------------------------|
| 1880-1889 | \$1,458,000 | \$563,000 | \$1,222,000 | \$2,988,000 | 37.8 | \$2.17 | \$5.31 |
| 1890-1899 | 1,545,000 | 699,000 | 1,628,000 | 4,962,000 | 37.9 | 2.33 | 7.10 |
| 1900-1909 | 2,906,000 | 1,349,000 | 2,596,000 | 10,792,000 | 46.4 | 1.92 | 8.00 |
| 1910-1919 | 4,722,000 | 2,290,000 | 3,702,000 | 21,210,000 | 43.5 | 1.62 | 9.26 |
| 1920-1929 | 8,422,000 | 4,029,000 | 4,861,000 | 44,510,000 | 47.8 | 1.21 | 11.05 |
| 1880 | 1,186,000 | 375,000 | 975,000 | 2,194,000 | 29.7 | 2.76 | 6.06 |
| 1881 | 1,350,000 | 478,000 | 1,114,000 | 2,539,000 | 35.5 | 2.33 | 5.31 |
| 1882 | 1,409,000 | 507,000 | 1,174,000 | 2,756,000 | 36.0 | 2.32 | 5.44 |
| 1883 | 1,472,000 | 543,000 | 1,230,000 | ----- | 36.9 | 2.27 | ----- |
| 1884 | 1,487,000 | 546,000 | 1,244,000 | ----- | 36.7 | 2.28 | ----- |
| 1885 | 1,537,000 | 589,000 | 1,298,000 | ----- | 38.3 | 2.20 | ----- |
| 1886 | 1,561,000 | 591,000 | 1,253,000 | ----- | 37.8 | 2.12 | ----- |
| 1887 | 1,633,000 | 655,000 | 1,318,000 | 3,305,000 | 40.1 | 2.01 | 5.05 |
| 1888 | 1,691,000 | 706,000 | 1,372,000 | 3,419,000 | 41.7 | 1.94 | 4.84 |
| 1889 | 1,659,000 | 680,000 | 1,380,000 | 3,776,000 | 41.0 | 2.03 | 5.55 |
| 1890 | 1,685,000 | 696,000 | 1,429,000 | 4,061,000 | 41.3 | 2.05 | 5.83 |
| 1891 | 1,752,000 | 647,000 | 1,497,000 | 4,197,000 | 38.5 | 2.31 | 6.49 |
| 1892 | 1,752,000 | 664,000 | 1,601,000 | 4,665,000 | 37.9 | 2.41 | 7.03 |
| 1893 | 1,739,000 | 598,000 | 1,597,000 | 4,627,000 | 34.4 | 2.67 | 7.74 |
| 1894 | 1,805,000 | 627,000 | 1,661,000 | 4,651,000 | 34.8 | 2.65 | 7.42 |
| 1895 | 1,819,000 | 636,000 | 1,602,000 | 4,921,000 | 35.0 | 2.52 | 7.74 |
| 1896 | 1,800,000 | 600,000 | 1,506,000 | 4,945,000 | 33.3 | 2.51 | 8.24 |
| 1897 | 1,907,000 | 696,000 | 1,641,000 | 5,095,000 | 36.5 | 2.36 | 7.32 |
| 1898 | 2,074,000 | 862,000 | 1,838,000 | 5,688,000 | 41.6 | 2.13 | 6.60 |
| 1899 | 2,190,000 | 963,000 | 1,904,000 | 6,769,000 | 44.0 | 1.98 | 7.03 |
| 1900 | 2,336,000 | 1,034,000 | 2,081,000 | 7,239,000 | 43.7 | 2.01 | 7.00 |
| 1901 | 2,511,000 | 1,125,000 | 2,203,000 | 8,461,000 | 44.8 | 1.96 | 7.52 |
| 1902 | 2,594,000 | 1,193,000 | 2,279,000 | 9,105,000 | 46.0 | 1.91 | 7.63 |
| 1903 | 2,718,000 | 1,249,000 | 2,400,000 | 9,554,000 | 46.0 | 1.92 | 7.65 |
| 1904 | 2,838,000 | 1,328,000 | 2,553,000 | 10,001,000 | 46.8 | 1.92 | 7.53 |
| 1905 | 2,919,000 | 1,358,000 | 2,623,000 | 11,351,000 | 46.5 | 1.93 | 8.36 |
| 1906 | 3,109,000 | 1,476,000 | 2,775,000 | 12,216,000 | 47.5 | 1.88 | 8.28 |
| 1907 | 3,158,000 | 1,466,000 | 2,814,000 | 13,100,000 | 46.4 | 1.92 | 8.94 |

¹ Statistical Abstract of the United States 1930, United States Department of Commerce, No. 52, pp. 246-247. 1930.

² From 1880 to 1899, inclusive, Statistical Abstract of the United States 1923, No. 46, p. 605, 1924; and from 1900-1929, Statistical Abstract of the United States 1930, No. 52, p. 247. 1930.

³ From 1880-1914, Statistical Abstract 1923, No. 46, p. 798, 1924, and from 1915-1929 from Statistical Abstract of the United States 1930, No. 52, p. 262. 1930.

⁴ 6-year average, excluding 1883-1886, for which data are lacking.

^{4a} Estimates of a normal price level of about 90 were obtained by assuming that production proceeded at a normal rate, since the war began. Farm Economics No. 69, pp. 1460-1462, February, 1931.

TABLE 3.—*Monetary gold, money in circulation, and bank deposits in the United States on June 30, 1880-1931—Continued*

| Period or year | Total money | Monetary gold coin and bullion | Total monetary circulation | Total individual deposits | Percentage of gold to total money | Monetary circulation per dollar of gold | Deposits per dollar of gold |
|-------------------------|-------------|--------------------------------|----------------------------|---------------------------|-----------------------------------|---|-----------------------------|
| 1908..... | \$3,423,000 | \$1,618,000 | \$3,079,000 | \$12,785,000 | 47.3 | \$1.90 | \$7.90 |
| 1909..... | 3,452,000 | 1,642,000 | 3,149,000 | 14,108,000 | 47.6 | 1.92 | 8.59 |
| 1910..... | 3,467,000 | 1,636,000 | 3,149,000 | 15,283,000 | 47.2 | 1.92 | 9.34 |
| 1911..... | 3,607,000 | 1,753,000 | 3,263,000 | 15,906,000 | 48.6 | 1.86 | 9.07 |
| 1912..... | 3,702,000 | 1,818,000 | 3,335,000 | 17,024,000 | 49.1 | 1.83 | 9.36 |
| 1913..... | 3,777,000 | 1,871,000 | 3,419,000 | 17,476,000 | 49.5 | 1.83 | 9.34 |
| 1914..... | 3,798,000 | 1,891,000 | 3,459,000 | 18,518,000 | 49.8 | 1.83 | 9.79 |
| 1915..... | 4,051,000 | 1,986,000 | 3,320,000 | 18,966,000 | 49.0 | 1.67 | 9.55 |
| 1916..... | 4,542,000 | 2,445,000 | 3,649,000 | 22,526,000 | 53.8 | 1.49 | 9.21 |
| 1917..... | 5,679,000 | 3,220,000 | 4,066,000 | 26,058,000 | 56.7 | 1.26 | 8.09 |
| 1918..... | 6,906,000 | 3,163,000 | 4,482,000 | 27,716,000 | 45.8 | 1.42 | 8.76 |
| 1919..... | 7,088,000 | 3,113,000 | 4,877,000 | 32,629,000 | 40.5 | 1.57 | 10.48 |
| 1920..... | 8,158,000 | 2,865,000 | 5,468,000 | 37,268,000 | 35.1 | 1.91 | 13.01 |
| 1921..... | 8,175,000 | 3,274,000 | 4,911,000 | 34,791,000 | 40.1 | 1.50 | 10.62 |
| 1922..... | 8,276,000 | 3,785,000 | 4,463,000 | 37,144,000 | 45.7 | 1.18 | 9.81 |
| 1923..... | 8,703,000 | 4,050,000 | 4,823,000 | 39,984,000 | 46.5 | 1.19 | 9.87 |
| 1924..... | 8,847,000 | 4,488,000 | 4,849,000 | 42,904,000 | 50.7 | 1.08 | 9.56 |
| 1925..... | 8,304,000 | 4,365,000 | 4,815,000 | 46,715,000 | 52.6 | 1.10 | 10.70 |
| 1926..... | 8,429,000 | 4,447,100 | 4,885,000 | 48,827,000 | 52.3 | 1.10 | 10.98 |
| 1927..... | 8,667,000 | 4,587,000 | 4,851,100 | 51,062,000 | 52.9 | 1.06 | 11.13 |
| 1928..... | 8,118,000 | 4,109,000 | 4,797,000 | 53,245,000 | 50.6 | 1.17 | 12.96 |
| 1929..... | 8,539,000 | 4,324,000 | 4,746,000 | 53,158,000 | 50.6 | 1.10 | 12.29 |
| 1930 ^a | 8,307,000 | 4,535,000 | 4,522,000 | 53,564,000 | 54.6 | 1.00 | 11.81 |
| 1931 ^b | 9,080,000 | 4,956,000 | 4,822,000 | 50,485,000 | 54.6 | .97 | 10.19 |

^a Annual Report of the Comptroller of the Currency, Dec. 1, 1930, pp. 57 and 138. 1931; and Text of the Annual Report of the Comptroller of the Currency, pp. 128 and 146. December, 1931.

Whenever the countries again establish a free gold basis, the tendency to hoard gold will be greater than before the war.

Banks in the United States and in other countries will, for some years, wish to maintain a liquid position so that they will not again be called on to sell securities at a loss in order to get cash. This means that high cash reserves will be held.

In some regions, there is a shortage of banks so that a much larger amount of money will be kept in homes than formerly was the case. For some time, fear of banks will increase the tendency to keep cash rather than bank accounts.

Because of low profits, many banks are introducing a charge for checks. This will tend to reduce the number of small accounts and reduce payments by check.

In case all the countries that formerly used gold return to the gold standard, large bank reserves will be necessary in order to establish confidence in the country. It is not enough that the bank have the confidence of the citizens of that country. If the citizens of other countries do not have confidence in the bank, gold withdrawals from that country are easily made.

The situation during the nineties was somewhat similar to the present, but much less serious. During that period, prices in England as well as in the United States, were low relative to the world monetary stocks of gold. In the United States, they were often 10 to 15 per cent below the normal ratio. In England, the discrepancy for several years was more than 10 per cent.

In recent years, the world stocks of monetary gold have not been increasing as much as 3 per cent per year. Gold production is increasing, but would have to increase strikingly to allow world monetary stocks to increase 3 per cent per year. Some economists have been misled by making calculations on the rate of increase in gold production since 1922. This is doubly fallacious. It begins measurement from an abnormally low point, and would be incorrect in any event, for it is world monetary stocks of gold and not gold production that must increase at the same rate as other things in order to maintain stable prices.

Another reason for anticipating that wholesale prices will be lower than the normal gold relationship is that other uses of money include many fixed or semi-fixed charges that remain high and temporarily absorb more than the normal share of money and credit. Until these become adjusted to wholesale prices, they will depress wholesale prices below the normal gold relationships.

Regardless of what temporary price level may occur, if all of the countries that formerly used gold return to a gold basis, there does not seem to be any probability of maintaining pre-war wholesale commodity prices except in those countries that reduced the weight of gold in the monetary unit.

If there should be a material increase in the efficiency with which gold is used in the Federal reserve system, this conclusion would still hold because there is almost no chance of a general increase in efficiency throughout the world. It is world supply and world demand that determine the value of gold. There is no indication that the Federal reserve system has increased the efficiency of gold more than the slow and gradual normal increase would call for. (Table 3.) Decreased world efficiency is to be expected.

Of course, a sudden discovery of some phenomenal supply of gold might change the situation, but such discoveries are largely accidental and usually require some years to strikingly increase the gold supply.

There are four important possibilities that will affect the situation:

1. Countries now off the gold basis may cease to bid for gold and reduce its value.
2. Whether or not No. 1 occurs, they may not return to the gold standard.
3. Whether or not No. 1 occurs, they may return to the gold standard. This can occur with or without revaluing the currency.
4. With any one of the above combinations, it is possible that the United States may follow a monetary policy that will tend to correct the present deflation.

It is possible, but not probable, that the countries which formerly were on the gold basis, will discontinue to bid for it and by reducing demand reduce its value. If this or any other cause should raise prices in the countries that continue on the gold basis, the world would again probably be misled into believing that all countries could go back to the gold standard by deflating to that price level, not realizing that the increased demand for gold would lower the price level. If the various countries should reduce the weight of gold in their currencies so as to restore their prices to the level to which their internal debts and other economic relations are adjusted, they would escape the further catastrophes that accompany deflation. But by that act they would increase their ability to withdraw gold from other countries. Such a normal price relationship causes normal business within the country and costs of production below those in the country that is deflating. Deflation always leaves costs high relative to prices.

There is, of course, a possibility that the United States will adopt a monetary policy that will tend to restore prices. In any event, a striking temporary recovery will sometime occur from the extremely low prices which now prevail for basic commodities. Any price level that is out of adjustment with the monetary situation should not be expected to be maintained permanently.

A summary of the major forces affecting the general price level is given below.

| Forces tending to raise commodity prices above the pre-war level | Forces tending to lower prices below the pre-war level |
|--|--|
| <ol style="list-style-type: none"> 1. England and other countries might cease to bid for gold. 2. Phenomenal discoveries of gold might occur. 3. Financial policy may raise prices for a time or a permanent monetary change might be made. 4. A temporary rebound from phenomenally low prices for some basic commodities is likely to carry them above pre-war for a time. | <ol style="list-style-type: none"> 1. If the normal relationship held, world monetary stocks of gold would only support pre-war prices. 2. World monetary gold stocks are not increasing so rapidly as the physical volume of production. 3. All central banks desire high reserves. 4. All private banks desire high cash reserves. 5. Some individuals cannot use banks because their banks have closed. 6. Banks are discouraging small checking accounts. 7. Throughout the world, confidence is such as to favor hoarding. |

PROPOSALS BEING DISCUSSED IN VARIOUS COUNTRIES

1. The gold standard has been suspended in England and about 20 other countries. During such a period the country has a managed currency. Some countries are discussing the possibility of permanently maintaining such a managed currency, but some definite base for currency is generally desired. Suspension of the gold standard is generally looked upon as a temporary measure to check bankruptcies and price collapse and give time to decide what to do next.

2. Reduction of the weight of metal in the monetary unit is another proposal. This does not provide for a continuing measure of stability of value. It is a single drastic adjustment to meet a catastrophe resulting from declining prices. This was done by France, Belgium, Italy, and most of the other countries of continental Europe. By this means they avoided the effects of the deflation before 1930. Since the adjustment was made when gold prices were about 150,

these countries did not escape the results of deflation to a gold level of 100. England and the other countries that are off the gold basis are discussing revaluation. If England should reduce the weight of gold in a pound about one-third, she could restore the price level to about 150 if gold prices remain at 100.

3. Instead of revaluing the currency as France has done, Germany is attempting to avoid the maladjustment due to deflation by revaluing everything except money. Debts in East Prussia were reduced 50 per cent. For all Germany, wages and salaries have been reduced 10 to 15 per cent; interest rates 14 to 25 per cent; rents and freight rates about 10 per cent; and prices fixed by industrial concerns are lowered 10 per cent. A price dictator has been appointed to complete the process. These measure are as drastic as the methods used by France but are more cumbersome.

The world has had innumerable experiences with plans to prevent prices from rising. But such a writing down in the whole price structure has rarely if ever been attempted.

4. The use of two or more metals not as alternates, which bimetallism proposes, but as provided by Marshall's symetallism, is being discussed in England. He proposed, "that currency should be exchangeable at the mint or issue department, not for gold, but for gold and silver, at the rate of not £1 for 113 grains of gold, but £1 for 56½ grains of gold, together with, say, 20 times as many grains of silver." He . . . "would make up the gold and silver bars in gramme weights, so as to be useful for international trade."⁶

5. There is some discussion of a proposal to keep all of the gold in a central bank and to change the weight which will be given for one unit of money from time to time, in order to keep the buying power of the monetary unit approximately constant in terms of all commodities.⁷

6. If no means is found for restoring prices, the only alternative is to complete the process of deflation. Much of this can be done in 10 years, and it can be completed in a generation.⁸ Debt collections, foreclosures, writing down, and writing off of debts, liquidation of banks and the like will be some of the innumerable problems. Nothing is gained from minimizing the gravity of such an effort.

F. A. PEARSON
G. F. WARREN.

ADJUSTING AGRICULTURE TO THE PROBABLE PRICE LEVEL

The general commodity price level is the most important problem that confronts the farmer. The ideas that present prices are due to extravagant living; to the substitution of gasoline power for horses; to lack of confidence; to over-production;⁹ or to the business cycle are so prevalent that all this long discussion has been given to arrive at the simple fact that prices below pre-war are to be expected if the gold-using world returns to gold basis.

Some recovery from the present extremely low prices is to be expected.

There is a possibility that monetary changes may be made, but the only safe procedure for the farmer is to anticipate the continuance of prices at or below pre-war. If some monetary change is made, it will be easy to adjust to the more favorable situation.

If this is true, the chief ways of procedure are:

1. Find ways of producing farm products with less hours of labor.
2. Find ways of reducing costs of distribution.
3. For certain products, increase the quality to meet the new demands for quality from workers who have a high buying power.
4. Not being able to increase efficiency or reduce distributing charges fast enough, total food production is being reduced or held about stationary while population grows. Ultimately, this will result in a period when consumers' prices of food are high compared with other things.

⁶ Marshall, A., Money, Credit, and Prices, p. 65, 1923.

⁷ Such a proposal is applied to the commodity price level because all monetary experience has been with commodity money. This proposes to make all rather than one commodity the standard of value, but keeps one precious metal as a reserve. If the level of all payments, including wages, were kept stable, it would mean that commodity prices would constantly fall because wages in terms of commodities rise as efficiency increases. A stable level of commodity prices is the aim.

⁸ If the prices should continue to decline, the adjustment would continue to lag.

⁹ A popular remedy for the present situation in the United States is to attempt to restore prices by reducing production. To reduce production sufficiently to restore the price level of 1929 with the world reestablished on a gold basis would call for a reduction of about 38 per cent below the 1929 level of physical volume of production. No such calamity can occur. If any group can maintain monopolistic control of its product its prices might be maintained, at the expense of others.

If this diagnosis is correct, the individual farmer should be careful about long-time debts, except for things that are below pre-war prices.

He should not buy land nor work land that does not give a high output per hour of labor. He should have a business large enough fully to employ all his time and that of his labor. He must get more bushels of grain and more pounds of milk per hour of labor. The chief ways of doing this are by obtaining more milk per cow, more eggs per hen, higher crop yields per acre, and if these high productions are obtained, by having a larger business, and otherwise by using labor more efficiently.

Higher crop yields should be obtained by dropping out of use the fields that do not give high yields. Such fields may be used for pasture or, if very poor, may be left idle. This often means renting, or buying all or part of an adjoining farm and working only the best land on both.

In northern Livingston County from 1908 to 1928, the average size of farm increased from 148 to 166 acres, but the acres of crops remained the same. The poorer crop land was thrown into pasture. In this way, crop yields were increased. Those who carried this movement much farther than the average did best.

The fields that are used for cultivated crops should be well fertilized and well cared for. Fertilizers are cheap, but wages are high. More care in using good seed, attention to disease control, and the like are essential. Such changes mean more production per man, but mean fewer men and some reduction in total agricultural production. How much reduction occurs depends on how many acres are thrown out of use or into lower classes of use.

Occasionally, as in western Kansas, a region of low yields per acre can be used because a new machine comes in and makes the output per man high with low yields. But even in this region, high yields for the region are very important.

The most effective way to obtain more milk per cow and more eggs per hen is to cull the herds and flocks vigorously and promptly, so that no low producers are kept.

Those that are kept should be well fed and well cared for. It is to be expected that on the average for the next ten years, that labor will be higher and feed will average cheaper than milk and eggs, therefore the best way to save labor is to keep only good stock.

Farms that depend primarily on hired labor are usually less efficient in the use of labor than family farms, but are more efficient in the buying of supplies and selling products. In a period of deflation, labor becomes a much more important item in costs. It is, therefore, a particularly unfavorable time for farms that depend primarily on hired labor.

However, the majority of the farms in New York State are not large enough fully to employ the present labor when modern machinery and efficient methods are used. Many farms need more land or more cows, or both. This does not mean an increase in the total cows. It means fewer farmers and more cows per man.

Labor may be made more efficient by the greater use of autos, trucks, tractors, and other machinery. Labor-saving plans are often more important than machinery. Methods of doing work at the time and in the manner that make an hour count for the most are of unusual importance. Usually it is necessary to have yields per acre and per cow above the average before it pays to enlarge the business. The only solution for the person with low yields is to reduce both his living and farm expenses.

More bushels of potatoes and pounds of milk are required than formerly to hire a man for a day. The farmer's own time is, therefore, valuable. Even if he hires no labor, he should be no less interested in efficient use of labor.

Because distributing charges remain high, it is particularly important that farmers reach nearer to consumers before they sell. On the main highways, many New York, farmers are going the entire distance by serving the cooked food to the tourist, or selling at roadside stands. Others truck their products to city wholesale markets or retail markets. Others sell to truckers who come to the farm. All these movements will proceed much further. Any tendency to excessive taxation of trucks will be injurious.

In the past 10 years, the high distributing charges have served as a protection to farmers in southeastern New York, southern New England, and New Jersey, so that these regions have had no severe agricultural depression.

Another method of reaching nearer the consumer is through cooperative selling associations. These should eliminate unnecessary services, and perform the necessary services better, or at less cost. They also look after the general welfare of the product.

In order to get out from under the handicap of selling at wholesale prices which are low and buying at retail prices which are high, one should buy in quantity and for cash. The immediate response is, "Where will one get the cash?" But this takes less cash than to buy small quantities on time. Only rich people can afford to buy small quantities on time. If credit must be obtained, it means using banks instead of stores for credit. If legislative provision is made for use of the intermediate credit banks, these can help.

Through cooperative associations in New York, the farmers have greatly reduced the cost of feed, seed, fertilizers and other farm supplies. These cooperative movements are destined to go much further in the future.

Decade after decade, the percentage of the consumer's income that goes for food is decreased. This enables consumers to demand better quality. The lag in wages when deflation occurs, makes a special demand for quality. This may have a little setback in a severe depression, but in a deflation period as a whole, quality is of special importance. For example, potatoes from some parts of New York are as good as they used to be, but are not good enough to satisfy consumers. Many of our apples are not good enough. Our grade A milk is not good enough. The new price schedule is intended to improve its butterfat.

The consumption of milk, eggs, fruit, and fresh vegetables has not yet reached the limit. If the whole standard for these is raised, it will result in increased consumption and will benefit farmers and consumers.

In a period of falling prices, the prices of milk, eggs, fresh vegetables, and other choice products hold up better than prices of grain and other less desirable foods. This was true after the Civil War and has been true for the past 10 years. Fortunately for New York, these are our main products. This fact together with location is largely responsible for the fact that prices paid to New York farmers for farm products averaged 73 in December, 1931, while the average prices paid farmers for all food products in the United States was only 69.

Whatever the price level in the United States may be, New York farmers will receive relatively higher prices than the average for the United States compared with pre-war prices for the same products and will further benefit by being producers of the choicer products.

There are some large areas in New York State that can not use labor efficiently. Many farms in these areas have been abandoned and many more ought to be abandoned. Fortunately, these farms are generally good forest land and are needed for forests to protect water supplies, regulate stream flow, provide for hunting and recreation. It is fortunate that New York State has adopted a policy of buying and reforesting a million acres of such land.

G. F. WARREN and F. A. PEARSON.

WHY ARE PRICES LOW?

In February, 1919, high prices were explained by monetary causes. In February, 1931, low prices are explained by monetary causes.

For a number of years, gold was not used by many countries. The lack of demand reduced its value. Economic relationships were being fairly well adjusted to a commodity price level of about 150. Recently, the gold-using world attempted to return to a gold basis. There was only gold enough to sustain pre-war prices with all countries on a gold basis and normal production of other things. Prices in England and the United States returned to the pre-war relationship to the world gold supply in 1931. In August, 1931, prices in England were 96. In December, 1931, they were 100 in the United States.

Many calls are received for the Extension Service News of February, 1919. The supply has long since been exhausted. Therefore a few quotations from it are given below.

The last Government loan was the Victory loan, which was sold April 21 to May 10, 1919. Ninety per cent was sold on credit with payments to be made May 10 to November 11.¹ The peak of prices came in May, 1920.

Mr. WHITE. Then I have another one here by Professor Warren, containing three pages from the discussion he had at Syracuse, N. Y., last week, at a milk meeting, in which he spoke of the cost of distribution, due to the rise of value, in which he says that the prices rose because of the low demand for gold; prices fell because of the high demand for gold; debts, not wages, the major problem, and so forth,

¹ Federal Reserve Bulletins, Vol. V, No. 5, page 417, May 1, 1919.

and I would like to offer it, because I think it has very valuable material.

Mr. GOLDSBOROUGH. Without objection, it will be included in the record.

(The matter above referred to is here printed in full as follows:)

[Meeting of representatives of the county emergency milk committees at Syracuse, N. Y., March 15, 1932]

THE ECONOMIC SITUATION

By G. F. Warren

I have been asked to present something of the general economic situation. I will call attention to four points:

1. The general price level.
2. The necessary surplus of milk.
3. The unnecessary surplus.
4. Unusual cost of distribution due to rise in the value of gold.

Anything peculiar about the dairy industry, about agriculture, or about business cycles is trivial in importance when compared with the rise and collapse of the whole price structure, which has caused chaos in all price relationships. Briefly, I explain this situation as follows:

PRICES ROSE BECAUSE OF LOW DEMAND FOR GOLD

For half a generation most of the world ceased to use gold as money and ceased to bid for it. This made gold cheap, just as wheat would be cheap if half of the wheat-eating countries should cease to use it or to bid for it. Since gold has been chosen for money, cheap gold means high prices and dear gold means low prices. For years, England and the United States had a wholesale commodity-price level of 40 to 50 per cent above pre-war. We were becoming fairly well adjusted to such a price level.

This price level meant wages of more than double pre-war. The normal increase in efficiency of labor made wages of more than 200 in adjustment with a price level of 150. It is a mistake to assume that wages and prices go together. For centuries, wages have risen as efficiency increases. With the cost of living at the December index of 146, wages must be double pre-war in order to consume the product if we are to resume normal production.

The price level of 150 also greatly increased debt-paying power. Public and private debts in the United States rose to several times pre-war. With the higher price level and the increased business, these debts were not particularly burdensome.

PRICES FELL BECAUSE OF HIGH DEMAND FOR GOLD

From 1925 to 1928 the various countries began to bid for gold in an effort to reestablish the gold basis for money. Each of them desired high reserves. To make matters worse, India attempted to shift from silver to gold. France reestablished a gold basis in 1928, but reduced the weight of gold in the franc to one-fifth of the former amount. This placed her in a strong competitive position in world markets. She was able to sell goods abroad and get gold. This developed into a world-wide panic to get gold. We must distinguish between location of gold and demand for gold. The value of gold is determined by the world supply of it and world demand for it.

With the small demand for gold in the war period, mining decreased. It is now increasing, but production is only equal to that of 23 years ago. But world business is much greater than it was 23 years ago.

There is scarcely gold enough to maintain pre-war prices, with all the countries that formerly used gold back on a gold basis. But all of them have incurred public and private debts. Last year, prices in England and the United States fell to the pre-war relationship to gold; that is, gold is as valuable as it was before the war, when compared with the average of all commodities. It is still more valuable in terms of basic commodities. Instead of exchanging 20 bushels of wheat for an ounce of gold, the Kansas, Australia, and Argentine farmers found it necessary to give 80 bushels. At prices paid to New York farmers, twice as much produce is necessary to get an ounce of gold as was the case for the 10 years ending with 1930. But public and private debts must be paid in gold. The scramble to get gold became a panic. Before a free-gold basis was generally established, the crash

came and over 20 countries gave up the effort to stay on a gold basis. Since England left the gold basis, the pound still pays a pound of debt (except in foreign countries). But it now requires one-fourth less gold to get the pound.

DEBTS, NOT WAGES, THE MAJOR PROBLEM

There are only two possible solutions of the present business chaos. Either the commodity price level must rise to and remain at the level at which public and private debts were contracted, or else the endless bankruptcies, of which we have had a sample, must continue. Public and private debts in 1929 were estimated to be 56 per cent of the national wealth. The wealth is primarily based on commodity prices. If the wealth should shrink one-third, the debts would become 84 per cent of the wealth, and a large part of them could never be paid. A beginning of this liquidation has occurred in the last two years. It promises to be temporarily interrupted, but unless commodity prices can be raised and kept somewhere near the level at which the debts were incurred, the liquidation will have to continue. The debts can not be paid with a dollar that is worth 50 per cent more than the dollar which was borrowed. It is popularly assumed that the creditor profits by getting a more valuable dollar, but if the dollar rises in value too much, the creditor gets nothing. He may get possession of an unsalable piece of property with a tax bill thrown in for good measure.

Popular discussion centers about wages, both public and private. It should center on debts, both public and private. There is a common opinion that if wages in the building trades should decline, more building would occur. The more the wages drop the less building there will be, so long as the debts are unliquidated. If a house could be built for half the former cost, the value of all the houses in America would drop one-half, and nearly every house on which there is a mortgage would have to change hands at a forced sale. In such a chaotic condition, prices would drop far below the costs of building. The more the costs of building drop, the more bankrupt properties will be thrown on the market and the less building there will be. If commodity prices can be restored to the level to which society is adjusted, industry would start. It can not be started by destroying property values, any more than you can lead farmers to raise cows by destroying the value of the cows which they now have.

RISE IN COMMODITY PRICES ONLY WAY TO RESTORE PROSPERITY

Since debts are largely based on commodities, either directly or on copper in an electric line, rails in a railroad, and lumber and steel in a building, the only way to restore prosperity quickly is to have commodity prices rise. Complete liquidation would ultimately restore prosperity, but it would take many years, with endless economic and political trouble.

The temporary abandonment of the gold standard by many countries may relieve the demand for gold, and cause some rise. But it is probable that most of these countries will continue to bid for gold. A mild temporary relief from this source is possible, but genuine permanent relief is not probable. Of course, we can not tell what monetary laws these countries will pass.

Whenever prices fall, they ultimately go too far, and some recovery is certain to occur.

The new credit legislation and proposed change in Federal reserve policy may help in raising prices. Many economists think that the price level of 1921-1929 will be restored by credit policy. It may also be said that many of them also thought that that price level would continue when we had it.

Whatever the temporary price level, I believe that if all the gold-using world returns to gold, it is likely to have its pre-war value when compared with other commodities. Money would then have its pre-war value except in countries that reduce the weight of gold in the monetary unit.

Mr. WHITE. Upon the request of Mr. Wallace, who was leaving Saturday, I wired for Doctor Pearson's and Doctor Warren's history of prices in the United States. This gives the price levels of the United States and gives a revised, complete form of bibliography, and also would make a basis for anyone who desired to go into detail in the study of these questions of the price levels and their causes and effects.

Mr. PRALL. I move that it be included.

Mr. BUSBY. I second the motion.

Mr. GOLDSBOROUGH. It has been moved and seconded that the document just spoken of be included. All in favor say aye; the contrary no. It is so ordered.

(The matter above referred to is here printed in full as follows:)

THE HISTORY OF PRICES IN THE UNITED STATES

(By George F. Warren and F. A. Pearson, *Farm and Home Week*, February 19, 1932, Friday, 12 m.)

Prices of commodities fluctuate from year to year, month to month, day to day, and hour to hour. The fluctuations in prices are so difficult to follow that it is almost impossible for the human mind to grasp their significance while they are taking place. It is frequently difficult to explain the changes even after they have occurred. These fluctuations cause more happiness, suffering, and misery than any other phenomena with which we deal. Variations in prices cause far-reaching changes in human relationships. The proportion of the good things of life that go to thrifty old people who have saved, to the farmer, to the railroad worker, and to the teacher, are changed whenever the general price level rises or falls. If prices rise or fall, wealth is transferred from one group to another. Falling prices transfer more wealth from debtor countries to creditor countries than was originally foreseen. Falling prices transfer more wealth from the indebted farmer to the creditor than was anticipated at the time of the loan.

When prices rise, industry is stimulated. Those who borrow money to buy for sale on a later market prosper. The government that is in debt finds it easy to pay because taxes that may be high in dollars are low in goods and are easily paid. Those who live on fixed incomes and salaries suffer; wages lag; strikes are numerous; city laborers are radical; and labor legislation is popular.

When prices fall, most of these things are reversed. Buying is checked; unemployment occurs; taxes are a heavy burden; borrowers suffer; farmers experience hard times and are discontented. Agricultural legislation is demanded. The production of goods is curtailed and the nation grows poorer.

If changes in prices are slow and gradual, adjustments are made with less friction. Violent changes, such as are now occurring, cause so many injustices that man is arrayed against man, class against class, and nation against nation.

The fluctuations in the general price level play an important rôle in the history of a people. In our colonial history, prices were closely allied with the monetary, political, and economic events of that time. In every new agricultural country money and capital are scarce. A new country wants more money, not in itself, but for the things it will command. Money will buy plows, wagons, clothing, medical supplies, guns, powder, and many other things that are sorely needed in a new country.

The colonies had numerous experiences with paper money. Some were fairly successful, but most of them were a failure. An old country like England wants a stable price structure or even a declining price level as they think they gain as creditors. The new country wants rising prices because it is then easy to pay their obligations.

The Revolutionary War was not due to the Boston Tea Party but was more largely due to the act of Parliament which forbade the Colonies to print paper money.

During the Revolutionary War, prices rose very high due to the printing of paper money—the continental notes—and to-day we have the old expression, "things are not worth a continental." Following the Revolutionary War, we find experiences similar to those following the Civil War and the World War. Immediately following declaration of peace, extravagance and luxury prevailed among all classes throughout the States. State and continental paper money was plentiful. The English merchants who were anxious to sell goods and had accumulated stocks during the war extended credits to facilitate sales. The foreign goods found a ready market as the people had been deprived of them for almost 10 years. Although they had no money, they purchased the goods with little thought of how to pay for them. The apparent prosperity, however, did not last long as the English creditors called for payment. The distress was widespread. Goods were offered for sale but would not bring fair prices because of the scarcity of money. Land that was sold for debts brought practically nothing. Prudent men did not consider it safe to lend money at the rates then prevailing—25

to 30 per cent. Everywhere the papers were filled with notices of insolvencies. In one county of Maryland, the populace forced the suspension of all civil suits and in another the people would not allow anyone to bid on land offered at sheriff sales.¹ In Rhode Island, a paper-money party was formed. In Massachusetts, the discontent was expressed by Shay's Rebellion, which was a farmers' revolt against deflation. Farmers had borrowed money at high prices with an inflated paper currency, and it was impossible for them to meet their obligations after prices dropped. Although the rebellion was put down, the State recognized the injustice and legalized a moratorium for debtors.²

In October, 1797, the first year for which data are available, prices were 124 when 1910-1914=100. Prices were at about the same level as they were in July, 1930, 133 years later.

The first United States bank was established in 1792. Webster described the results as follows: "He was made Secretary of the Treasury; and how he fulfilled the duties, at such a time, the whole Nation received with delight, and the whole world saw with admiration. He smote the rock of natural resources, and abundant streams of revenue gushed forth. He touched the dead corpse of public credit, and it sprang to its feet."³ He might have added that prices rose rapidly. The highest prices of this period occurred from 1797 to 1801. Just prior to this time, the United States was not a large exporter, but with the Napoleonic Wars there was a strong demand for goods and much of the carrying trade fell into our hands. The country was highly prosperous. Due to the various embargoes and other war measures, prices were very erratic. In 1801-02 prices declined from 148 to 111. Domestic goods, as well as imported goods, declined. At this time, Great Britain and the rest of Europe were at peace, crops were good, agricultural prices declined, shipping was depressed.

France and Great Britain resumed hostilities and American products were in demand. From 1803 to 1806, prices rose from 113 to 137. American merchants and carriers of freight prospered until Jefferson laid the embargo on all ships in American ports.⁴

In 1806, England issued a proclamation blockading all the ports from southern France to northern Germany. Napoleon retaliated with the Berlin decree which declared the British Isles in a state of blockade. These and various other measures made it difficult for us to reach European markets and prices in the United States were erratic and declined. In 1807, the United States passed the embargo act, forbidding American vessels to depart for any foreign port or foreign vessels to load in American ports. This act was disastrous to American trade, and prices fell from an index of 137 to 112. A few years later, a less restrictive measure, the nonintercourse act, was substituted, and prices rose.

WAR OF 1812

The charter of the first United States bank expired in 1811, and was not renewed because of the opposition of the State banks. The bank was dissolved and \$7,000,000 of the \$10,000,000 was remitted to British capitalists.⁵ The people got what they wanted—cheap money. In 1811, there were 88 State banks and in 1813 there were 208. During 1813-14, Pennsylvania alone chartered 41 banks.⁶

The War of 1812 was financed largely by loans. The State banks purchased the United States notes and issued their own paper money payable on demand. The bank note circulation increased from \$45,000,000 in 1812 to \$100,000,000 in 1817,⁷ which is almost the same percentage increase as occurred in bank deposits in the World War; and prices rose from an index of 126 to 182. Specie payment was suspended except in New England. The war was not popular in New England, as it interfered with their shipping. New England banks refused to lend to the Government as the Government refused to guarantee the interest on the money it borrowed and made no effort to collect taxes to meet these monetary interest charges. The financing of the War of 1812 fell heavily on the banks of the Middle Atlantic States. The Treasury levied against the resources of the Middle Atlantic banks to obtain funds. For this reason, specie

¹ Behrens, K. H., Paper Money in Maryland. Johns Hopkins University Studies in Historical and Political Science, Series 41, No. 1, p. 78-9. 1923.

² Hickernell, W. F., Financial and Business Forecasting, p. 106. 1928.

³ Kinley D., The Independent Treasury of the United States, p. 3. 1893.

⁴ Smith, W. B., Wholesale Commodity Prices in the United States, 1795-1824, The Review of Economic Statistics, vol. 9, No. 4, p. 176. October, 1927.

⁵ Gallatin, A., Considerations on the Currency and Banking Systems in the United States, p. 44. 1831.

⁶ Hickernell, W. F., Financial and Business Forecasting, vol. 1, p. 143. 1928.

⁷ Dewey, D. R., Financial History of the United States, 8th ed., p. 144. 1920.

moved from Middle Atlantic States to New England. The South could not export cotton due to blockade by the British Navy, and shipped gold to New England to pay for merchandise much the same as gold moved to the United States during the World War. However, the specie movement reached a peak in 1814 and specie moved out of New England. Prices declined from an index of 182 in 1814 to 151 in 1816.

The chaos which inevitably followed recalled the valuable services rendered by the first bank of the United States, and political antagonism melted away.

THE SECOND BANK OF THE UNITED STATES

The second bank of the United States was formed in 1816 and in the next two years expanded rapidly. Specie payment was resumed in 1817. The bank expanded too rapidly, became alarmed, and contracted its currency. This precipitated the crisis of 1818. The currency was reduced from \$8,300,000 in 1818 to \$3,600,000 two years later, and prices dropped from an index of 151 in October, 1818, to 100 in December, 1820. According to Gouge, "The bank was saved and the people were ruined."⁸ After another war, a century later, prices declined almost exactly the same amount. From the prosperity of 1929 to December, 1931, prices fell from about 150 to exactly 100.

Wheat sold as low as 20 cents a bushel in Kentucky. A man in West Virginia who formerly purchased a year's subscription to Niles Register with a barrel of flour stopped his subscription because four barrels were required. It is also recorded that at Pittsburg, flour was \$1 per barrel; boards, \$2 per thousand; sheep, \$1 per head, but imported goods remained at the old price level.⁹ This agrees in principle with the agricultural panic 100 years later, when, as is well known to all farmers, agricultural products are now very cheap, but prices of the things farmers buy has dropped slowly. The only difference was that in 1820 the manufactured goods were imported, while in 1929 they were made largely in the United States.

The results of this wild inflation and deflation and mismanagement of a central bank are evidenced in the agriculture of the time. In Lancaster County, Pa., land rose from \$85 to \$275 and then dropped to \$65. In Cumberland County land rose from \$50 to \$175 per acre and then dropped to \$35.¹⁰

Prosperity of the period continued in the western country until the middle of 1818. Huntington¹¹ calls it "The golden age of the western country," and in the words of Gouge, "Silver could hardly have been more plentiful at Jerusalem in the days of Solomon than paper money was in Ohio, Kentucky, and the adjoining regions."¹² Large quantities of goods were brought into the country, and with the collapse, the specie moved east to pay for these goods. Prices fell and the paper currencies depreciated. This is well illustrated by the depreciation of Ohio banks¹³ in February, 1822.

Bank of Steubenville, par; Lancaster Bank, 1; Western Reserve, 2; Columbus, 2; Portsmouth, 15; Hamilton, 31-35; West Union, 40; New Lisbon, 50; Cleveland, 75.

One writer comments on the decline in prices at Steubenville, Ohio, where at a marshal's sale an elegant sideboard gig and a very valuable horse sold for \$4, and concludes with the comment that a man with a little money could make a fortune attending marshal's and sheriff's sales.¹⁴

In March, 1822, the Dayton prices were: Flour \$2.50 per barrel; whiskey 12½ cents per gallon; wheat 20 cents, rye 25 cents, and corn 12 cents per bushel; fresh beef 1 to 3 cents per pound, butter 5 to 8 cents per pound; eggs 3 to 5 cents per dozen; and chickens 50 to 75 cents per dozen.¹⁵

Following this panic, the second Bank of the United States was on a sound basis, and for a decade was fully established in the confidence of the people. Prices were stable for a decade at about the 1914 level.

⁸ Gouge, W. M., *A Short History of Paper Money and Banking in the United States*, Pt. II, p. 110. 1833.

⁹ Sumner, W. G., *History of American Currency*, p. 82. 1874.

¹⁰ Gouge, W. M., *Short History of Paper Money and Banking in the United States*, Pt. II, p. 122. 1833.

¹¹ Huntington, C. C., *A History of Banking and Currency in Ohio Before the Civil War*, Ohio Archaeological and Historical Publication, vol. 24, p. 285. 1915.

¹² Gouge's *Journal of Banking*, p. 320, Mar. 30, 1842.

¹³ Huntington, C. C., *A History of Banking and Currency in Ohio Before the Civil War*. Ohio Archaeological and Historical Publication, vol. 24, pp. 333-345. 1915.

¹⁴ *Western Herald and Steubenville Gazette*, August 19, 1820, cited from Huntington, C. C., *A History of Banking and Currency in Ohio Before the Civil War*. Ohio Archaeological and Historical Publications, vol. 24, p. 298. 1915.

¹⁵ Ohio Archaeological and Historical Publications, vol. 24, p. 298. 1915.

PANIC OF 1834

Andrew Jackson was raised in Tennessee and had seen the struggle of the farmers developing a new country under very adverse conditions. He felt that the Bank of the United States should help the farmers as it had helped the business men. He insisted that the bank should loan to agriculture as well as to trade. What he really wanted was a Federal land bank system. The bank had been so successful that it was not expedient to attack the financial policies so he attacked the social policies.

Jackson was a persistent enemy of the second Bank of the United States. He ordered that the public funds be deposited in certain specified State banks known as "Jackson's pets." This so unsettled the money market that the bank contracted its loans and currency from \$66,000,000 to \$52,000,000, and prices declined from 102 to 88.

At this time, the country was on a bimetallic basis, but silver was the common coin. By the coinage act of June 24, 1834, the ratio was changed from 15 to 1 to 16 to 1, and the gold coins were reduced from 247.5 grains of fine gold to 232 grains.¹⁶ Thus the gold coins were debased 6.26 per cent. This act definitely shifted the United States to a single gold standard. After 1840, American silver dollars were seldom seen, because they were worth more than gold.

PANIC OF 1837

It was well known that the charter of the second bank of the United States would not be renewed. It expired in 1836 and resulted in the establishment of many State banks. From 1834 to 1837, the money in circulation increased 50 per cent, and prices rose from an index of 88 to 129. These index numbers are based on prices at New York City where wild banking was not so prevalent. In the West and South, the rise was much greater. Uncontrolled banking was substituted for conservative banking. Banks were located in the depths of the forest where there were few people and plenty of wild cats, and were known as wild-cat banks.

The following quotation is typical of conditions in Michigan:

"AN ALADDIN'S PALACE

"Apropos to the plan of establishing banks at inaccessible places is the incident related by a gentleman in this city, who, in wild-cat days, was traveling through the woods of Shiawassee County. The country was very new, with only here and there a log cabin in the woods, surrounded by a little clearing. The road had never been worked, and was principally indicated by 'blazed' trees. Toward night of an early June day he came upon a fork in the road, and was uncertain which track to take. He had not gone far upon the one which he had chosen before he became satisfied that it was only a wood road—that is, it had been used for hauling out wood or lumber. * * * He had not proceeded far, when in a little clearing before him there loomed up a large frame structure, across the front of which was the conspicuous sign, 'Bank of Shiawassee.' It was one of the wild cats quartered in the native haunts of that animal, the depths of the forest."¹⁷

This was a period of rapid expansion. In the preceding quarter of a century the finances of the country were on a sound basis, and the foreigners loaned us large amounts of capital. From 1830 to 1837 our imports of merchandise exceeded our exports, which indicates that foreigners invested large amounts. This tended to easy credit and expansion. Foreigners invested in our railroad, State, and municipal bonds. It was a period of interior improvements and expansion of business, agriculture, waterways, turnpikes, and railroads.

This resulted in reckless expenditures in farm land, city lots, cotton, grain, slaves, railroads, canals, and public improvements. The speculation culminated in the panic of 1837. In May, 1837, the banks suspended specie payment. Wholesale prices declined from an index of 129 to 99 three years later. The decline was about the same as occurred from May, 1930, to January, 1932. The Federal expenditures doubled in a year, and the Treasury was confronted with a \$12,000,000 deficit. States and municipalities were bankrupt, and many States repudiated their debts. We are frequently reminded of these debts by the English.

¹⁶ Laughlin, J. L., *Money, Credit, and Prices*, vol. 1, p. 236., 1931.

¹⁷ Report of the Pioneer Society of the State of Michigan, vol. 5, p. 217. 1884.

The years 1834 to 1836 were memorable ones; emigrants poured into the Middle West; money was plentiful. Land was purchased from the Government at \$12 per acre and platted in town lots which sold for \$20 per lot. Chicago was the center of the land craze. Salesmen went back to New York and Boston to sell lots in imaginary cities. Water-front lots in Chicago, with 4,000 people, sold for \$7,000. Land in Maine that sold for 25 cents per acre seven years previous now sold for \$12. Land on Long Island brought \$1,000 per acre.

Grain was high priced on the Atlantic seaboard, and some was imported from Europe. It was unfortunate that grain should be imported from Europe when the Middle Western States could produce much more than was needed and prices were ridiculously low.¹⁸ It took little imagination to prove that transportation was necessary. Borrow money and build canals, as they would pay for themselves, was the popular cry. The Erie Canal had been producing \$1,000,000 in revenue. New York State was in the midst of vast internal development. Trade diminished and tolls fell off, and in 1838 the legislature authorized a loan of \$4,000,000 for further expansion. The plan was to borrow as long as tolls met the interest, with no provision for paying off the principal. In 1833 the 6 per cent stock of the State commanded a premium of 20 per cent, and in 1841 it sold at a discount of 22 per cent.

In 1837, Massachusetts issued State bonds to finance railroads to bring Massachusetts in touch with western commerce.

Maryland was involved in extensive internal improvements involving the Chesapeake & Ohio Canal Co. and the Baltimore & Ohio Railroad. In 1842 State script was down to 50 cents on the dollar.²⁰

In South Carolina, tangible and active property depreciated 50 per cent, land even more, and city lots scarcely sold for the cost of improvement. Diversification of crops was the proposal to relieve the situation.¹⁹

As early as the fall of 1836, Mississippi land speculators complained of the shortage of money. The credit of the South had been overrated and now it was underrated. Negroes that formerly commanded \$1,200 to \$1,500 each were sold for \$200 to \$250 cash. In 1836, a small planter bought 22 slaves for \$3,200. In 1837, he sold 3 of the best men for \$850 to buy pork and corn to feed the remaining 19. The common complaint was that the farmers placed too much reliance on a single crop and bought everything else. This is not an unfamiliar note.

In 1836, it was estimated that Louisiana would soon have 900 miles of railroad and 60 miles of canal under State supervision.

The panic came somewhat later in the Central West. By 1839, however, farm-prices declined, money was scarce. Much of the indebtedness in Illinois to eastern merchants was liquidated in produce. Notes were drawn payable in corn, horses, or other farm products. Interest rates ranged from 10 to 50 per cent. Wisconsin was flooded with spurious paper money. By 1841 it is estimated that one-third of the banks of Ohio had failed and riots occurred. Wisconsin, Tennessee, Kentucky, Indiana, and Michigan had similar experiences.²¹

In 1835-36, the Indiana Legislature authorized the construction of more than 1,200 miles of canals, two long railroads, and many miles of macadamized road. Illinois planned no less than nine railroads and 1,300 miles of canals crisscrossing the State and the improvement of five rivers. Michigan was the most enthusiastic. With 100,000 persons, the State bonded themselves for three railroads and several canals.

With the panic of 1837, all the States were in difficulty. Michigan repudiated her debts. Indiana compromised with her creditors, forcing them to take less than was due. Illinois had a wise governor who stopped all improvements, raised taxes, and protected the State's credit. Pennsylvania bonds fell below par and in 1840 the State defaulted on the payment of interest.²²

The deflation produced its usual effects which are now so apparent. Prices of food at interior points fell much more than at large centers. Indian meal per barrel of 196 pounds on western waters was worth \$1 per barrel and at New York City \$3.19.²³

¹⁸ Harlow, A. F., *Old Towpaths*, 1926, p. 109.

¹⁹ McGrane, R. C., *The Panic of 1837*, p. 104. 1924.

²⁰ McGrane, R. C., *The Panic of 1837*, pp. 113-114. 1924.

²¹ McGrane, R. C., *The Panic of 1837*, pp. 12, 32, 33, 34, 127, and 130. 1924.

²² Harlow, A. F., *Old Towpaths*, pp. 107-116. 1926.

²³ Ellsworth, H. L., *Report of Commissioner of Patents*, February 15, 1842. See Hazard's *United States Commercial and Statistical Register*, vol. 6, p. 155. March, 1842.

Down in Kentucky, the legislature recognized the impossibility of farmers paying their obligations and "stay laws" were passed giving debtors two years to pay.²⁴

Mark Twain's *Autobiography*, page 9, records that about 1845, at Florida, Mo.—

"Everything was cheap, apples, peaches, sweet potatoes, Irish potatoes, and corn, 10 cents a bushel; chickens, 10 cents apiece; butter, 6 cents a pound; eggs, 3 cents a dozen; coffee and sugar, 5 cents a pound; whisky, 10 cents a gallon."

The credit of a nation is an extremely fickle thing. From 1834 to 1838, the United States imported over \$28,000,000 more goods than we exported. For the five years, 1839 to 1843, our imports and exports practically balanced. The Nation could not borrow and paid for all the imports with exports instead of credit and exports. The crash came during Jackson's administration, and he was replaced by Van Buren.

PRICES IN THE FORTIES AND FIFTIES

During the forties, prices were very low, about 20 to 25 per cent lower than those prevailing at the present time. The Mexican War caused a slight rise in 1846-47.

The low level and declining prices accentuated the margin between prices in producing and consuming centers. In the fall of 1841 wheat was worth 70 cents per bushel at Detroit and \$1.33 at New York City; oats 20 and 49 cents; corn 30 and 69 cents; and hay \$5 and \$20 per ton.²⁵

Prices of agricultural products rose rapidly from 1844 to 1847. The disastrous rains in Europe in 1845, accompanied by the Irish famine,²⁶ and the reduction in import duties by the repeal of the corn laws, caused an advance of 67 per cent in farm prices. In the words of Morley, it "rained away the corn laws."

Deficient crops and the failure of the potato crop in 1846 resulted in the so-called Irish potato famine. There was a remarkable increase in our exports of breadstuffs, which rose from \$7,445,000 in 1845 to \$53,262,000 in 1847.²⁷ There was a general advance in prices of farm products and the large exports at high prices resulted in an inflow of money.

The period from 1846 to 1857 was one of great prosperity in the United States. Immigrants arrived in increasing numbers. In 1845 the immigrants coming to the United States numbered 114,000 and in 1847, 225,000.²⁸ The Subtreasury system was established in 1846. Gold was discovered in California. There was an extensive expansion of railroad construction in the West. The general level of prices rose steadily from an index of 73 in 1843 to 115 in 1857, with but one reaction, 1847-1849. Europeans were eager to loan funds to American industries.

This was one of the golden eras in American history. Early writers and travelers who were usually from the better-educated and leisure classes of Europe did not always understand but always commented on the passion for work, the ingenuity in mechanical inventions, the resourcefulness of business,²⁹ and the prosperity of the country. There was a rapid expansion of railroad construction. Railroad stocks and bonds were issued in excess of the amount that could be absorbed as permanent investment. These accumulated in the hands of the banks and left them with insufficient resources to provide for ordinary business.

Railroad construction rose from 1,654 miles in 1855 to 3,642 miles in 1856.³⁰ Interest rates rose to 15 per cent for the best paper and to 24 per cent for second-grade paper. The banks had loaned heavily to finance railroads and business. The crash came early in 1857. The average price of 10 western railroad stocks fell from 84 in October, 1856, to 33 in October, 1857.³¹ Wholesale prices declined from 115 to 92. In the attempt to reduce loans and accumulate gold, the banks forced customers who had borrowed on railroad stocks to sell out at severe losses. In the fall, most of the banks suspended specie payment. Many railroads went into

²⁴ Hickernell, W. F., *Financial and Business Forecasting*, p. 158. 1928.

²⁵ Hazzard's *United States Commercial and Statistical Register*, Vol. VI, No. 12, p. 177, Mar. 23, 1842.

²⁶ Cole, A. H., *Wholesale Prices in the United States, 1843-1862*, *The Review of Economic Statistics*, vol. 11, No. 1, p. 35. February, 1929.

²⁷ Bullock, C. J., Williams, J. H., and Tucker, R. S., *The Balance of Trade of the United States*. *The Review of Economic Statistics*, vol. 1, No. 3, p. 220. July, 1919.

²⁸ Dewey, D. R., *Financial History of the United States*, p. 257. 1922.

²⁹ *Recent Economic Changes in the United States*, National Bureau of Economic Research, vol. 1, p. 7. 1929.

³⁰ Hickernell, W. F., *Financial and Business Forecasting*, vol. 1, p. 253. 1928.

³¹ Cole, A. H., and Frickey, E., *The Course of Stock Prices, 1825-1866*. *The Review of Economic Statistics*, Vol. 10, No. 3, p. 129. August 1928.

bankruptcy.³² In the interior, bills of remittance to points on the Atlantic coast commanded a premium of 10 per cent.³³

CIVIL WAR

During the Civil War, prices rose rapidly. In the latter part of 1861, specie payment was suspended and Congress issued large quantities of legal-tender notes. This was the beginning of the greenbacks which played such an important rôle in the political and price history following the Civil War. The increasing amounts of currency were accompanied by advancing prices and a depression in the value of the greenbacks. In July, 1864, it took \$2.58 in greenbacks to buy one gold dollar or a greenback was worth 39 cents in gold. The price of greenbacks fluctuated with the fortunes of war, but usually depreciated in advance of the rises in commodity prices. Prices rose from an index of 90 to 225 in September, 1864. After the war, expanding business and declining prices played such an important rôle, that paper currency was the paramount question. Late in 1865, with but six dissenting votes, the House of Representatives passed a resolution approving the contraction of the currency as early as possible in order to resume specie payment. Apparently the people were not so unanimously agreed as the legislators at Washington. They, however, soon had their ear to the ground, and the greenbacks were the center of controversy for the next 15 years. Various methods were proposed. One group suggested a speedy return to specie payment. According to the *New York Tribune*, "The way to resume was to resume." Eastern bankers advised the accumulation of gold to raise the value of greenbacks to a gold standard. David A. Wells suggested the "cremation process." This involved drawing in a few greenbacks each week and destroying them. Another suggestion was to redeem them in gold at say 90 per cent of the face value. Still others suggested a do-nothing policy and that resumption would take place by "growing up to specie payment."

There was another important group which was destined to develop into a powerful institution. This group was opposed to contraction and advocated expansion of the currency. This group grew by leaps and bounds and in a few years was consolidated into the Greenback Party.³⁴

By the funding act of 1866, a slight contraction of the currency resulted,³⁵ but the discontent of the farmers in the West where the farms were heavily mortgaged, made it increasingly difficult to continue the contraction, and in 1868 Congress passed measures condemning contraction and suspending further contraction.

DECLINING PRICES FOLLOWING CIVIL WAR

From September, 1864, prices declined from an index of 225 to 174 two years later. This was quite similar to the collapse in 1920-21 but was less severe. After this collapse, prices declined somewhat and were relatively stable.

A large volume of bonds was sold to finance the Civil War. The interest on some of the bond issues was payable in gold, and in other cases no mention was made of the method of interest payment. At first, the discussions centered around the principle of justice to the bondholder and the credit position of the Government. Although this was the position of the Government, the sentiment in the Middle West was quite different. The greenbacks of the farmer, laborer, merchant, and soldier, were good enough for the bondholder. It was contended that the bondholder should accept the "lawful money" which in reality meant greenbacks. This was known as the "Ohio idea."³⁶

It was a period of very rapid expansion in railroads, industry, and agriculture, which was very similar although not so great as that which occurred from 1924 to 1929.

³² Important railroads expanding into undeveloped sections of the west which went into bankruptcy were the Illinois Central, New York and Erie, and Michigan Central. Dewey, D. R., *Financial History of the United States*, p. 263. 1922.

³³ Hunt's *Merchant's Magazine*, Vol. 37, p. 582.

³⁴ Dewey, D. R., *Financial History of the United States*, pp. 336-338. 1922.

³⁵ During the two years of contraction, \$44,000,000 in greenbacks was withdrawn from circulation. Dewey D. R., *Financial History of the United States*, pp. 343-344. 1922.

³⁶ The Democratic Party and the Republican Party championed it. Grant, the Republican candidate, was elected and declared that the national honor must be protected, and that every dollar of Government indebtedness should be paid in gold.

The effect of postwar economic changes is well put by McCulloch, Secretary of the Treasury in 1865.³⁷ “* * * Steamboats are crowded with passengers, and hotels with guests; that cities are overflowing, rents and the prices of necessities of life as well as luxuries are daily advancing * * * There is no fact more manifest than that the plethora of paper money is not only undermining the morals of the people but encouraging waste and extravagance.”

In 1866, prices and wages were high; labor scarce; speculation was rampant; there was a housing shortage; interest rates were high; business was good; foreign trade was active; and there was a large physical volume of production. In fact, the conditions were more or less similar to those prevailing after the World War.

PANIC OF 1873

The physical volume of production in the latter part of 1872 and early in 1873 was very high. Coal production, railroad construction, and the iron and steel industry were very active. Railroad expansion was more rapid than the sale of bonds to finance them at the time of the panic. There was a large mileage “connecting nothing in particular.”³⁸ Capital was sunk in railroads and industry far beyond immediate needs. Agriculture was expanding in the West and in the South. In the four years, 1869–1872, more than 25,000 miles of railroad were laid down.

The country borrowed more than \$1,500,000,000 in Europe for which there was an annual interest charge of about \$80,000,000.³⁹ In the fall of 1873, about crop-moving time, when credit tightened, a severe panic swept over the country, which was the beginning of a long period of financial and industrial depression. In 1873 an inflation measure was introduced and passed both Houses, but was quickly vetoed by Grant.⁴⁰

The change in our foreign-trade situation was very sudden. Imports decreased and exports increased. In 1873, the United States imported \$120,000,000 more merchandise than was exported. In 1874, the exports exceeded the imports by \$9,000,000.

TABLE 1.—*Exports and imports of merchandise from and into the United States, 1873–74*¹

| | Merchandise | | Balance |
|-----------|---------------|---------------|----------------|
| | Exports | Imports | |
| 1873..... | \$522,479,922 | \$642,136,210 | -\$119,656,288 |
| 1874..... | 586,283,040 | 567,406,342 | +818,876,698 |

¹ Annual review of the Foreign Commerce of the United States, Department of Commerce and Labor p. 121. 1905.

FALLING PRICES, 1873–1896

Wholesale prices in currency declined from an index of 139 in 1873 to 66 in 1896, or 53 per cent. The cause of the decline in prices was a subject of prolonged controversy but was due primarily to the fact that the production of gold, which declined from \$130,000,000 in 1870 to \$111,000,000⁴¹ 20 years later, was not sufficient for our expanding business.

RESUMPTION OF SPECIE PAYMENT

The opposition to the resumption of specie payment came from the agricultural States of the South and West. The resumption of specie payment was decreed by the act of 1875. Western representatives demanded the repeal of the act and several bills were introduced but none passed. During the campaign of 1876 the inflationist group broke away from the two parties and formed the

³⁷ McCulloch, H., Report of the United States Special Commissioner of Revenue, 1869. Cited from Persons, W. M., Tuttle, E., and Frickey, E., Business and Financial Conditions Following the Civil War in the United States, The Review of Economic Statistics, vol. 2, Supplement, p. 6. 1920.

³⁸ Sprague, O. M. W., History of Crises under the National Banking System, p. 1, 2. 1910. Harvard sup. 16.

³⁹ Dewey, D. R., Financial History of the United States, p. 371. 1922.

⁴⁰ Hepburn, A. B., The History of Currency in the United States, p. 273. 1924.

⁴¹ Eddie, L. D., Money, Bank Credit, and Prices, p. 230. 1928.

Greenback Party which polled 81,740 votes in 1876; more than 1,000,000 in 1878, 308,578 in 1880, and only 175,370 in 1884.⁴² After a great deal of controversy, the resumption of specie payment began in 1879. The inflationist group lost this contest, but they stopped once and for all further contraction of the greenbacks.

THE SILVER ISSUE

The paper money issue was hardly settled before the silver issue became prominent. The adoption of the gold standard and the demonetization of silver in Germany in 1871 and limitation of coinage of silver by countries of the Latin Union in 1874 and the large increase in silver production in the United States resulted in a decline in the price of silver. With commodity prices falling and gold production declining, a powerful faction developed which demanded money in the form of silver, and passed over the President's veto the Bland-Allison Act which required that the Treasury buy at least \$24,000,000 of silver per year.

The greenback movement gave way to agitation for the unlimited coinage of silver, and the crusade for the free coinage of silver monopolized the attention of Congress.

By the Sherman Act of 1890 Congress authorized the issue of an indefinite amount of legal-tender notes in order to purchase silver bullion. As the notes were redeemed in gold or silver, the Government was required to keep greenbacks, Treasury notes, and silver at a par with gold. One of the worst droughts that the United States ever had occurred in 1890. Instead of paying the interest on our debts with wheat and food products, we exported gold. Our financial policy shook the confidence of Europe, hastened the outflow of gold, and contributed to the panic of 1893. The Government ceased to purchase silver and the price fell from 82 to 67 cents in three days and 573 banks closed their doors.

During this period the Boy Orator of the La Platte was campaigning for the free coinage of silver at the ratio of 16 to 1. On this issue Bryan led the Democratic Party to defeat in 1896.

THE PERIOD OF THE HIGH COST OF LIVING

The discoveries of gold in Australia, Cripple Creek, Klondike, and the expansion of production in South Africa by the invention of the cyanide process, which enabled gold producers to work poorer ores and rework the refuse that had accumulated in previous years, made gold more plentiful. Prices rose rapidly. Prior to this time, there had been a rapid expansion in the agricultural production of the West. Prices of food had been low and stimulated the rapid expansion of city industries.

During this period we had a continual excess of exports. These large exports were due to the large cumulative debt owed by debtors in the United States to European investors. Previous to this time we had paid our interest in the form of wheat, food, cotton, and other raw materials. This period marks the end of the great expansion in our agricultural exports and the beginning of a rapid increase in manufactured goods. Up to this time no one had disputed the right of Europe to produce most of the world's manufactured goods. In 1892 manufacturers represented only 18 per cent of our exports, but by 1900 were 35 per cent. This rapid expansion resulted in considerable agitation in Europe against the so-called American invasion.

Food prices rose faster than other commodities and wages, and "the high cost of living," a phrase which was supposed to have been coined by Davenport, became a very serious problem. Agriculture was prosperous. Farm mortgages were easy to pay.

THE WORLD WAR PERIOD

As is well known to this group, the warring countries bought large quantities of food and manufactured commodities in all neutral countries. They paid for these goods by returning stocks and bonds, by shipping gold, and by borrowing from American investors. This, of course, resulted in a rise in commodity prices.

The World War produced more and greater changes in the economic and financial structure of the world than any other event for which we have record.

The foreign investors sold about \$2,000,000,000 of American securities. The United States accumulated an enormous amount of gold. Private loans floated in the United States were over \$2,000,000,000. Suddenly the United States changed from the world's greatest borrower to the world's greatest lender.

⁴² Dewey, D. R., *Financial History of the United States*, p. 381. 1922.

After the United States entered the war, we loaned a few paltry billions to the allied governments—over which we are now quarreling, and we will continue to do so for a generation.

This was a period of agricultural prosperity, and because of the lagging wages there was much labor unrest and disturbance. Labor legislation had its day.

The net result was that prices rose to an index of 201 in August, 1918, when pre-war is 100.

POSTWAR INFLATION AND DEFLATION

From April 21 to May 10, 1919, the victory loan was floated. Ninety per cent of the bonds were sold on credit. This resulted in the postwar inflation, and prices rose to an index of 244 in May, 1920.

On May 17, 1920, the United States Senate passed a resolution requiring the Federal Reserve Board "to advise the Senate what steps it proposed to take or recommend to meet the existing inflation of the currency and credits and consequent high prices."⁴³ It was not long before trouble started.

Beginning in May, 1920, prices which were 244 per cent of pre-war started to decline and did not stop until prices reached 136 in June, 1921. This was the beginning of the agricultural depression, of which the end is not yet in sight. Tens of thousands of young men returned from France married, went in debt, and started farming. Many are now paying interest on a debt that it is impossible for them to liquidate.

The agricultural situation is best portrayed by a letter addressed to Secretary of Agriculture H. C. Wallace from an old farmer in the Southwest. It reads as follows:⁴⁴

"Our neighbor joining us on the east, a hard-working man, had rented 320 acres of land. He and his wife and one hired man farmed it. They had about 100 head of cattle and about the same number of hogs. The 1st of December they turned everything over to the landlord, save one team which they hitched to an old wagon, put in their household goods, got in the wagon themselves, and drove away to town to get work at day labor and make a new start in life."

THE PERIOD 1923-1929

The rapid expansion in the production and prosperity of the country from 1923 to 1929 was due primarily to a world-wide shortage of permanent equipment in the form of houses, railroads, factories, apartments, power stations, and roads. A nation can not fight and produce at the same time. Therefore in time of war we produce immediately consumable goods and let the physical property run down. If the United States was short of all kinds of goods, certainly the warring nations were in greater need. Surely France, Germany, Belgium, England, and other countries needed permanent equipment in the form of houses, railroads, central power stations, factories, and the like, which had deteriorated through long years of the war and the years immediately following. Nobody would deny that Rio de Janeiro, Buenos Aires, Melbourne, Quebec, Berlin, Tokyo, and Shanghai needed new central power stations and many other modern improvements. The United States was in a strong financial position and furnished the capital for her own expansion and for a considerable part of the world's expansion. This was our first experience in financing such a world-wide expansion. This put into circulation an enormous volume of purchasing power, and resulted in an expansion in our security markets to a level never before known. We acted like a 4-year-old boy with a pocket full of apples, green or dried, whichever you wish, but in any event the usual difficulties followed.

PANIC OF 1929

In August, 1929, we started on one of the greatest peace-time declines in prices of which the world has a record. The index of prices fell from 141 in August, 1929, to 98 in January, 1932.

Economic changes, drastic in character, are occurring with such rapidity that it is difficult for the human mind to foresee them or even grasp the significance of the changes after they have occurred. The more important are the precipitous decline in commodity prices, followed by the suspension of payments on reparations, war debts, and other international debts; the suspension of specie payment

⁴³ Credit Report of Joint Commission of Agricultural Inquiry, House of Representatives, Sixty-seventh Congress, first session, Report 408, Part II, p. 86. 1922.

⁴⁴ Yearbook of Agriculture, 1922, p. 8, 1923.

by most countries of the world; the drastic drop in the pound sterling and other exchanges; unprecedented exports of gold; the rapid expansion of note circulation; hoarding of currency; advance in discount rates; the \$500,000,000 national credit corporation; bank and business failures; the Interstate Commerce Commission's decision on freight rates; financial embarrassments of many municipalities, States, and railroads; huge Federal deficit; the Hoover-Laval conference; advance and decline in grain and cotton prices; the sweeping conservative victory and the protective tariff in England; repayments by the Bank of England; Snowden's plan for "voluntary conversion" of the \$10,000,000,000 five per cent war loan to a lower rate; von Hindenburg's decree for a suspension of legal executions by creditors in East Prussia and a 50 per cent scale down in debts; the Reconstruction Finance Corporation; the campaign against hoarding; and the proposals to increase the efficiency of the Federal reserve system, the Glass-Steagall bill.

There have been few, if any, periods in the world's history when there were recorded so many disastrous events in so short a time.

The world has never experienced, in times of peace, such a prodigious destruction and transfer of wealth in so short a time. We are now in the midst of the most severe depression this country has ever experienced. Most measures of industrial activity are about 40 to 50 per cent below normal. During the depression of 1921 Ayres's index of American industrial activity fell to 27 per cent below normal. The panic of 1893 was the only one, prior to 1921, that carried business as much as 20 per cent below normal. In short, the business of the United States is at a level never before reached in the annals of American business. Honest men can not get work; creditors can not collect their debts; and "for-rent" signs appear everywhere. Changes are coming so quickly and values are being swept away so rapidly that fearless and honest men are so bewildered that they know not how to act. We are like a gassed and wounded regiment in No Man's Land. After the deluge is over, we can look back and see some of our mistakes. However, while we are in the midst of the depression the farmers, the bankers, the business men, the unemployed, and not the least, the President of the United States, are groping for light in order that, in this rapidly changing panorama, we may act promptly and wisely.

This chaotic history of prices, which meant prosperity or ruined the lifetime opportunities of innumerable individuals, is not due to acts of Providence. It is due to lack of knowledge of economic principles, or failure to apply the little knowledge we have.

Our political acts are based largely on experience. These prices disturbances are not often repeated in the same direction in one generation. It frequently happens that the generation which is to act on a situation has derived all its experiences from the opposite set of conditions. If such price chaos is to be avoided in the future, the scientific principles that govern prices must be discovered, made common knowledge, and applied.

Mr. GOLDSBOROUGH. We have with us this morning a gentleman that I think we should call, who is here from a distance, Mr. Simonds, president of the Simonds Saw & Steel Co., Boston, Mass., and we would be glad to hear from you, Mr. Simonds.

STATEMENT OF ALVIN T. SIMONDS, PRESIDENT SIMONDS STEEL & SAW CO., BOSTON, MASS.

Mr. SIMONDS. I would like to state my connection with the interests in this bill, so you will get a little background of why I am here, and why I am interested. I have been, perhaps, I might say, the principal supporter of the stable money association for the past 10 years. I have given nine annual economic pledges of \$1,500 for each year for the past nine years, and I have contributed a great deal of time in trying to create a better understanding of economics in business by publishing writings and lectures, and so forth, all with the hope of better stabilization for business.

I am a manufacturer, employ normally 2,300 men, and about \$10,000,000 of capital, a family affair, in New England, now in its

one hundredth year, and we have a great deal of trouble with the fluctuations between good and bad times, and trying to get our men get their same income year after year, without violent fluctuations, and letting a lot of men go, and reducing labor rates, and so forth. So I have been very much interested in the stabilization program for a number of years, particularly since 1919, and I have visualized the chart of the commodity prices after the Napoleonic War and after the Civil War, and gradually falling over 30 years after each war back to practically war levels.

I agree entirely with the principles of this bill, but I would differ with section 31.

Mr. GOLDSBOROUGH. You mean the first section?

Mr. SIMONDS. The first section. I am, perhaps you might say, an amateur ex-economist. I can not go with Professor Fischer or Professor King into all of the details of the practice of bringing about the means to do with it, but I agree to the general principles of stabilization, and of the bill, but I think it is absolutely necessary that, if you are getting in an elevator, as you do when you increase the price level, to determine the point at which you want to stop before you start; otherwise, you get the way Russia and Germany did by constantly inflating your currency until you arrive at nothing.

Mr. GOLDSBOROUGH. You think there ought to be a definite level fixed in the bill?

Mr. SIMONDS. Well, you say "the present commodity levels are priced as nearly as possible to the level existing before the present deflation." Well, now that level should be different. The level in 1920 was entirely different from the level in 1926.

Mr. GOLDSBOROUGH. All of the committee will agree with you on that, sir. This was put this way in order to invite discussion, and the committee would be very much interested to know what your view on the level is.

Mr. SIMONDS. Well, I have no view as to any exact level, but I think, in fairness to the debtor and creditor classes, it might be well to adopt a level half way between the present level and the 1920 level, which was taken as the average level after the war up to 1930. Irving Fischer's commodity index went up from 1867 to I do not know when in 1920, and it is now about 3 per cent, I think, below the pre-war level of 1930. It has fallen not only to the pre-war level, but below that wholesale commodity index. Now, I think some point half way between the present level and the 1926 level—in other words, if it was 100 in 1926 and 67 now, I think that half way would be a good place to stop.

Mr. GOLDSBOROUGH. Well, now, why is that your opinion, sir?

Mr. SIMONDS. The principal reason for that is that about 70 per cent, as they usually figure, of the total outgo is for wages—in other words, wages are your most important commodity. It is very hard and a very slow work deflating wages. A 10 per cent reduction of wages is not anything at all if you are going to balance it with a wholesale commodity index, which, after all, is largely wages in its essence. So that we could go on letting the thing go on the present gold standard, if we wished to deflate wages from the 1920 level by at least 50 per cent, but it is a pretty radical thing to do and it takes a lot of time to do it, because the cost of living only goes down about

so often. A man getting anywhere from 15 to 18 per cent less money to-day, per year, is equally as well off as he was before.

We do not care anything about the money we receive, but what we want is its purchase price established on some uniform level. I do not care where that figure is set, but at least it ought to be set in advance, particularly if you are going to use the last section of this bill; because the danger is that we will not stop at that level, and that you must have your stopping point reasonably well established before you start, and that is the place you stop; otherwise, you can go away above and increase the amount, as they did in Germany.

Mr. GOLDSBOROUGH. Do you not think it would require many more readjustments, if we only went half way back to the 1926 level, than it would if we went clear back to the 1926 level?

Mr. SIMONDS. I am afraid of that. I am afraid that these readjustments—if you just adjust the thing on these prices, there is a lag between the time you do so and the time its effect occurs, and I am afraid of that lag—I do not know what the lag, but there is a question of time, and what the time is I do not know; but anyway, I am afraid that you will go away above that price level before you can stop it. In other words, I am afraid the machine will run way.

Mr. GOLDSBOROUGH. That, of course, is a different proposition.

Mr. SIMONDS. Yes.

Mr. GOLDSBOROUGH. The question of whether or not it can be done is a different proposition; but we are assuming now that the Federal reserve system can use their powers to raise the price levels, we will say, to 1926, and stabilize at that point. Now, assuming that you can do that, and can stabilize at that point, would not that call for readjustment in American life, fewer adjustments than going half way to the 1926 level?

Mr. SIMONDS. Yes, I think that level would be all right; except that to do it too violently, you will cause a very severe readjustment and a run-away market that you may not be able to control.

Mr. GOLDSBOROUGH. That is another proposition. That is a very important consideration, but that is not the thing we are talking about right now. What we are talking about right now, sir, what we have in mind now is, assuming that the Federal reserve system can raise the price level to the 1926 level, and that they can prevent it from running away, would you have any objection to it?

Mr. SIMONDS. No, not if you have brakes on the machine designed before you start getting at the—

Mr. BUSBY. Then you would take 1926 as the pole star to which the compromise should go, either above or below, and keep it always directed toward that pole star, if you select 1926. What you want is a pole star to keep your composite of prices directed toward?

Mr. SIMONDS. I agree with the bill and the committee in that respect, that I think your price level can be stabilized. I think we are in a disgraceful condition of mismanaged or unmanaged gold standard, and it is only a bad habit. It is like my going to the Congregational church; there is no particular reason why I go to the Congregational church, except the fact that my father and grandfather went there.

Mr. BEEDY. Mr. Simonds, you have not yet answered Mr. Goldsborough's question. He is not talking about brakes; he is talking

about what floor you are going to get off on, assuming your brakes will work.

Mr. SIMONDS. 1926 is all right. I would prefer something between the 10 per cent labor cut, which is the usual newspaper conversation, of course, when I know it is very much more than that amount—I would prefer not to get labor upset any more than I could, because that is your most important commodity.

Mr. BEEDY. That was what Mr. Goldsborough was talking about. He wanted to know—

Mr. SIMONDS. I prefer not to go back to the 1926 level, although if you choose it, it is as good as any other level when you finally arrive at it.

Mr. BEEDY. He wants to know whether you think it would do more violence not only to labor but to business in general, by your being represented by 1926, or some other floor.

Mr. SIMONDS. I would rather for him to get off at a point 15 or 20 per cent below the 1926 level, rather than to go that now, because I think that would cause less violence between the debtor and the creditor classes, some point below 1926 level, but very much below the present level.

Mr. GOLDSBOROUGH. Would you proceed, sir?

Mr. SIMONDS. I do not have very much more to say about this, gentlemen. I am in favor of the general proposition, but I do not like that first paragraph at all.

Mr. BUSBY. We do not either. We want you to object to it, and we can fix it.

Mr. GOLDSBOROUGH. Mr. Simonds, in order that the full committee and the House may understand your interest in this matter, we would like you to go more fully, if you can, into the interest you have taken in the question.

Mr. SIMONDS. Well, that is a little personal matter that I do not know is of very much interest to the committee. I started under Professor Talsig in Harvard a good many years ago, and I have taken a great deal of interest in it. In fact, it has been my only hobby for a great many years; so I have read everything on the subject, everything written in English, anyway, and I started after the war to devoting part of my personal fortune and part of my time to a stabilization of business conditions. I do not believe there can be an absolutely flat stabilization. Prices are bound to fluctuate; but if we do not do something of this kind, it would be necessary to revise our entire banking and credit structure much more radically than anything that has been suggested so far.

I do not agree with Professor King in one respect. I believe the principal cause of the deflation was the war itself, and not the violent speculation in the stock market of 1928 and 1929. In doing for this country, we ought to learn what has happened in the other countries. In other words, in Russia we had an absolute denial of all of the obligations set up by the Czarist government, and they ran the money down to nothing, and established its new values, but it has since gone backward very largely. In Germany, they ran the money down to nothing and deflated all of their obligations; and while they say that France is on the gold standard, we must remember their obligations that they sold during the war at the 27 price were revalued by them

at the 3.93 cent price; so they also have denied their war obligations; and on top of that, we had England and Japan doing the same thing.

We ran into a very dangerous condition at the present time as to what is going to be the outcome in this country. If this commodity, wholesale commodity index, stays where it is, or continues to fall as it has been doing steadily, we run, as Professor King says, not only into the failure of our principal life-insurance companies, by the failure of the very big interests in our savings-bank systems, because their obligations are going to become worth very much less money in terms of the gold dollar, if you fix the gold dollar.

Mr. BEEDY. You do not mean their obligations; you mean their assets?

Mr. SIMONDS. Yes; if the bonds are going to continue to fall in value.

Mr. GOLDSBOROUGH. Do you care to express an opinion as to whether or not the Federal reserve system, with the Glass-Steagall bill, together with this bill, or a bill like it in principle, have the power to raise the price level?

Mr. SIMONDS. I do not think they have sufficient power. This is only my viewpoint, but as I view the conditions as exist in this country, we have national wealth of—which is very rough figures, because I have never seen exact figures—about \$360,000,000,000. We have a national debt, including the national debt and private debts, of \$120,000,000,000. If you use \$2,000,000,000 to reflate with, you only increase the obligations by 1¼ per cent, which is hardly anything in a country of this size.

Mr. GOLDSBOROUGH. You have in mind the Reconstruction Finance Corporation?

Mr. SIMONDS. Yes.

Mr. BEEDY. Supplementing that act with this—that is, supplementing that 1¼ possible effect with this proposed legislation—do you think that we would have the power, then, to bring the price level up?

Mr. GOLDSBOROUGH. You see, Mr. Simonds, since the Reconstruction Corporation act was passed, we have passed what is known as the Glass-Steagall bill.

Mr. SIMONDS. Yes; I know.

Mr. GOLDSBOROUGH. Which makes available in gold and in gold certificates nearly \$4,000,000,000 in gold as a reserve, upon which we can base nearly \$10,000,000,000 in Federal reserve notes, which could be issued. Now, the thought of some of us is that, if the country—if the banks of the country—and the country need it, after the passage of this legislation, the Federal reserve system had the power, because of its reserves, to issue \$10,000,000,000 worth of notes, if they desired to do it; and if the country also knew that the announced policy of the Federal Reserve Board was to raise the price, whether that would not restore confidence and put the people who had money into the market, which is all that is needed to cure the disease, as we understand it, or as I understand it.

Mr. SIMONDS. Well, personally, I do not believe that any of the legislation passed so far is sufficient to do what this committee wishes to do by this bill; and if it is not accomplished by the first paragraph on page 2, it will be accomplished by the second paragraph.

Mr. GOLDSBOROUGH. You think it can be accomplished by this legislation?

Mr. SIMONDS. I do, but there must be some authority to fluctuate prices of gold, in dollars, in order to arrive fully at a price stabilization, which is what we want. If we do not do something of this kind, the promise to pay a gold bond, a promise to pay 50 years in the future, as many of them, is simply ridiculous.

Mr. GOLDSBOROUGH. Mr. Simonds, we are very much gratified to know the interest you have taken in this matter, and we appreciate very much your leaving this tremendous business that you have and coming down before this committee—

Mr. SIMONDS. It is not very tremendous right now.

Mr. GOLDSBOROUGH. In the desire to help the country out of the very trying situation it is now in, and you certainly have the thanks of the subcommittee.

We will adjourn until 2.30 o'clock p. m.

(Thereupon a recess was taken in the hearing until 2.30 o'clock the same day.)

AFTERNOON SESSION

Mr. GOLDSBOROUGH. Now, gentlemen, the subcommittee will please come to order. Now, Mr. Stewart, we are all ready, sir.

STATEMENT OF ETHELBERT STEWART, UNITED STATES COMMISSIONER OF LABOR STATISTICS

Mr. STEWART. Mr. Chairman, my name is Ethelbert Stewart, and I am United States Commissioner of Labor Statistics.

Mr. GOLDSBOROUGH. For how long have you been commissioner, Mr. Stewart?

Mr. STEWART. Since August, 1920.

Mr. GOLDSBOROUGH. How long have you been connected with the department?

Mr. STEWART. Since July, 1887. I was with the United States Tariff Board in 1911 and 1912 as statistician in charge of schedule K, but apart from that, I have been with the Department of Labor since 1887.

Mr. PRALL. Only 45 years.

Mr. STEWART. That is all.

Mr. GOLDSBOROUGH. Now, Mr. Stewart, the subcommittee, I think, is very anxious to hear just what your department does in the way of ascertaining the general level of commodity prices. Will you make your statement in your own way, please?

Mr. STEWART. Yes, Mr. Chairman. The so-called Aldrich committee of the United States Senate Finance Committee, in 1889, wanted to get the wages and prices for 50 years, 1840 to 1891. At that time the Bureau of Labor Statistics, or the then Board of Labor, which was in the Department of the Interior, was the only organization to which they could appeal, and we did that work for them, bringing the wages and prices down from 1840 to 1890. The bureau then began to continue those prices. We began the present work in 1890, and at first issued it annually, and in 1915, when the Labor Review was started, we began to issue it monthly, and down to January of 1932, when we began issuing the index weekly. We do not now print the prices with the weekly index, because we have not the facilities to do it, but we do issue the index weekly.

Now, I take it, if I give you two or three illustrations of just what we do, I do not need to go through the 744 articles.

Mr. GOLDSBOROUGH. No, indeed.

Mr. STEWART. I will take wheat, for instance, and in consultation with the Department of Agriculture and all of the interests involved, we decide what grades of wheat and in which markets—which grades of wheat determine the price of all wheats, and in which markets we could take that price to get the average price of wheat. For instance, we take No. 2 red wheat in Chicago, we take No. 2 hard wheat in Kansas City, we take No. 1 northern spring in Minneapolis, we take No. 2 dark northern spring in Minneapolis, we take No. 1 hard winter in Portland, and we take No. 2 red winter in St. Louis.

Now, as to what proportion of these wheats pass through these markets, we take the Agricultural Department figures, and the figures of the grain exchanges at these points.

On No. 1 hard winter wheat at Portland, which is the local wheat—I say “local,” but that is the general district around there, and this is, I understand, blue stem—I think they call it blue stem wheat—the output is about 10 per cent of the total marketed wheat in the United States. Now, we take that price from the agricultural man on the spot. The other prices we take from the daily reports, as published in these localities, on that particular grade of wheat.

Now, for instance, when we get these things, we take the output of two years, 1927 and 1929, and we average them, and we take the average of those two years as being the total marketable wheat. Now, in 1927, we produced 878,374,000 bushels of wheat. The sales by the farmers, according to the agricultural figures, was 728,000,000 bushels. That is the figure we take. We take the commodity that enters into commerce. In 1929 they produced 850,965,000, and there were sold 655,000,000. Now, our weights of average are those two years. Then we take the price to-day and multiply it by that weight—

Mr. GOLDSBOROUGH. The weight of a given commodity?

Mr. STEWART. The weight in a given commodity. We take the average of the prices in these six markets and multiply them by the weight, which represents the amount sold in the markets, and that is carried across. We do that with everything else, every other thing we do. We take our weights, either from the census, taking the average output for 1927 and 1929 as our weight, and then we apply the same prices to that as the weight.

We add then the imports of wheat, which is not a great amount, but in some things the imports are important; so we make the same rule all the way through. In a great many things, the census gives the quantity in a conveniently stated item or unit of production; that is our weight. We take the 1927 and 1929 census, add them, and divide by two, and get the average for those two years as our weight, on boots and shoes, for instance. There are a few things that we consider of sufficient importance, that the census does not give the unit of production. Take, for instance, such things as window shades, the census gives the value but does not give the number. Considering that window shades were of sufficient importance, we take the value as shown by the census for 1927, which was \$37,081,937; and the census of 1929, which was about \$37,000,000. That is the factory price, the price that the manufacturers get for them.

In general discussions of the matter with people who handle that kind of business, we find that the wholesale price is about 10 per cent in excess of the manufacturers' price; that is, the wholesaler must add 10 per cent more than he pays the manufacturer. We add them and we divide by two, and we get the average wholesale value, total value, for that year. Now, then, we take our price, the ascertained price of window shades of a certain description, and we add those. We take the average of those for the two years, and divide them into the lump wholesale price, and get the weight. Now, this average price is not used again, except to get your weight; that is all.

Those are the three methods by which we secure our weight. This latter one is probably less than 10 per cent of the things that we carry. Again, of course, we add the imports.

I do not know that there is anything else you want.

Mr. GOLDSBOROUGH. Mr. Stewart, what number of commodities did you start out with when you began making up the index?

Mr. STEWART. As I remember—I do not know that I have that with me, but it was along about 70 in number.

Mr. GOLDSBOROUGH. On what basis were the increases made in number?

Mr. STEWART. The general fact that the first one was not sufficiently comprehensive, we jumped to 104, as I remember, then to 270, then to 404, then to 550; and now we come to what I suppose you are driving at.

Mr. GOLDSBOROUGH. Yes.

Mr. STEWART. It was claimed by most of the economists, or at least some few of them, and very violently by some of them, that we were overweighted with farm and food products; that we had too much farm products. We had 67 items; we had 11 of grain, wheat, corn, and other grains; we had 12 of livestock, and 44 of other farm products. They claimed we were doing the heaviest weighting with farm and food products and other raw materials; that if we had more consumer goods, as they call them, that is, manufactured things ready for use—that if we had more of those, or less of the raw materials, we would have a better index. I added 234, practically all consumers' goods. That changed the index, which is something between 5 and 6 per cent, about 6 per cent.

Mr. GOLDSBOROUGH. Well, now, the influence brought to bear on the bureau, were they simply scientific influences or was the influence of a political nature, or a combination?

Mr. STEWART. I never had any political influence brought to bear on me, that I know of.

Mr. GOLDSBOROUGH. That has never entered into the picture, up to this time?

Mr. STEWART. No; never.

Mr. GOLDSBOROUGH. I want you to understand, Mr. Stewart, that I had never heard there had been any, but I wanted to know, because as we progress with this thing, that is going to enter into it.

Mr. STEWART. The whole question was whether or not the stuff that I was carrying was going down faster than it would if we had more of the consumers' goods, and I wanted to know as well as anybody else, and I added 234 articles.

Mr. GOLDSBOROUGH. Mr. Prall, have you any question?

Mr. PRALL. What is this index used for now, for what purpose?

Mr. STEWART. So far as the Bureau of Labor Statistics is concerned, its interest at the outset was purely as the Aldrich report states, to get some measure of the purchasing power of wages. The whole essence of wages is a question of nominal and real wages, and that was what it was started for. It had been kept up as a general index of prices for that purpose largely, because the retail price index is—at least, we thought was—too cramped, carrying at first 22 items of food then and now, I believe, 43. We did not believe that was sufficient. In other words, our retail price index is food, and food only, so far as our monthly statements are concerned.

Now, our general cost of living index, which takes in a wider range of retail prices, is only gathered once in six months, and it is too slow. Of course, it has a wide use that has come from the bureau's wholesale prices, and was because for years and years there were not any other—that is, no other official wholesale price index now; but there was only a few, a very few, private concerns that had them. I think Bradstreet's or Dun's, I do not remember which, had one.

Mr. GOLDSBOROUGH. As I understand Mr. Prall's question, it is directed as to what particular use is the index put, at this time, what it is used for; who uses it and for what purpose?

Mr. STEWART. Well, it is used in all commercial and financial circles; it is used by all economists and universities. It may be that some of them put out their own, but they are based on this. We give prices to a dozen concerns that issue indexes of their own.

Mr. PRALL. You give this information which is not available from any other Government office?

Mr. STEWART. Yes.

Mr. PRALL. And for general information?

Mr. STEWART. General information. Then, of course, it is an index of employment more or less.

Mr. PRALL. I wondered if it was used for that particular purpose by any organizations, or any lines of business, or as a guide on any purpose of that kind, and I imagined it was.

Mr. STEWART. It is used by practically all of them.

Mr. PRALL. I would like to ask Mr. Stewart, with his long experience in dealing with these commodities and the prices of them, what his opinion is of this bill, H. R. 10517, and what its effect would be, if enacted into law, on the unemployment situation.

Mr. STEWART. Well, of course, Mr. Chairman, if I answered that question at all, I would have to answer it as an individual, because I do not feel officially in opinions; I have not any index of opinions.

Mr. GOLDSBOROUGH. Mr. Stewart indicated the other day that he would prefer not to go into that.

Mr. STEWART. I simply would want to preface it by that, that anything I would say on it is an individual opinion.

Mr. PRALL. I think your personal views would be enlightening and would be appreciated by the committee. I do not want you to bind your department in any way by your answer.

Mr. STEWART. Well, of course, I could not bind the department nor the bureau on it. I simply wonder whether the bill would accomplish what it seems to be aiming at.

Mr. PRALL. Then you must have some belief.

Mr. STEWART. I have.

Mr. PRALL. I would like to know it. I would like for you to tell us.

Mr. STEWART. I simply wonder whether you are going to get what you say you want from the parties in whose hands you are placing it.

Mr. GOLDSBOROUGH. That is an interesting question.

Mr. STEWART. Whether you delegate the power, delegate to any person, committee or commission, the power, to put us within their power, we will continue to be in their power.

Mr. PRALL. You think that the concrete is about as good as the man who mixes it?

Mr. STEWART. Yes.

Mr. BUSBY. Mr. Stewart, you told us how you carried wheat through the process of finding the wholesale commodity price; did you take each of the 784 commodities included in your collection, through a similar process?

Mr. STEWART. Yes.

Mr. BUSBY. Attributed to the particular type of commodity with which you are dealing?

Mr. STEWART. Yes. Now, apart from wheat—well, I do not think, just now, of any other commodity in which we can go to a government department or bureau and get the information that we want as to the brands that would control, that would indicate the general prices. Now, on other things, we have to go to the manufacturer who produces them and ask them the question: "Of the two or three different things now that you fellows make, which nearer indicates the trend of prices of that commodity, or that group of commodities?"

Mr. BUSBY. And you do that, if I understand you correctly, and you follow the course of each of these commodities, and at the end of the week, at stipulated times, you announce the spread of that commodity in relation to the purchase price of the dollar in 1926?

Mr. STEWART. Yes.

Mr. BUSBY. Now, you have carried, or after you shall have carried all of those commodities through all of the weeks of this year, you find, if I understand correctly, the average of the prices of those individual commodities?

Mr. STEWART. Yes.

Mr. BUSBY. Then by combining all of the commodities treated that way, or dealt with in that way, you obtain what you call the wholesale commodity price index, by combining all the commodities and striking such an average as will give you the proper index to the price of all of them taken together, do you?

Mr. STEWART. The index number is simply a tribute to the American determination to put the history of the universe on a posted weight. We must have one figure which means everything, and the index comes as near that thing as it is possible to come.

Mr. BUSBY. I take it that the one figure that you obtain through that process is the composite center of gravity, the price of all of them, if I might use that term?

Mr. STEWART. As nearly as it is humanly possible to get it.

Mr. BUSBY. Now, it has been asked you what the commercial organizations think of the findings of the Bureau of Labor Statistics in that regard.

Mr. STEWART. I hoped somebody would ask me that question, so I brought this along. In the hearings before the subcommittee on manufactures, of the United States Senate, the hearings were on S. 6215, of the Seventy-first Congress.

Mr. BUSBY. What page of the hearings do you refer to?

Mr. STEWART. Page 86. Mr. Sloan was on the witness stand. Mr. Sloan is vice president of the Standard Statistics Co. of New York, a statistical organization of high standing, who does not do anything along this line, and has not any ax to grind. I want to quote this:

The CHAIRMAN. Mr. Sloan, can you give us a picture of the course of the wholesale prices during the past five years?

Mr. SLOAN. We have used and tested out all of the generally recognized indexes of commodity prices, and we believe the Bureau of Labor series to be the best and the most trustworthy. I have brought a chart of that series from 1913 to date, and along with it I have run the Bradstreet index of commodity prices, and while a little more sensitive, by being more heavily weighted with raw materials than the Bureau of Labor Statistics, but it is virtually impossible to find a better price index than the Bureau of Labor operates.

Mr. BUSBY. So, if I understand that correctly, Mr. Sloan replied that, by being familiar with all of the statistical indexes relating to the prices of commodities, he regards that of the Bureau of Labor Statistics as the foundation of the others, and perhaps superior to any of them?

Mr. STEWART. He says:

It is virtually impossible to find a better price index than the Bureau of Labor Statistics.

Mr. BUSBY. Now, why did the Bureau of Labor Statistics abandon the 1913 price level and adopt that of 1926 instead, if you have a reason, or no reason at all; I would like to hear you.

Mr. STEWART. We carried the 1913 base until it seemed to me that we were in an entirely new commercial, industrial, and economic world; I believed that 1913 was a thing of the past.

Mr. BUSBY. Let me ask at this point. Is not it a fact that, since 1913, the modes of transportation, the means of communication, the accessibility of nation to nation, because of that improvement in the means of communication and transportation is entirely changed?

Mr. STEWART. It has changed; the standard of living has changed, and everything has changed.

Mr. BUSBY. And is it not your opinion that we are entering on a more desirable basis, and were on a more desirable, from 1922 to 1929, from the standpoint of having better housing facilities, and better means of doing business, and more modern methods in every line than we had in 1913, that warranted the change of the commodity prices, or the commodity price level, from that time to what prevailed in 1926? I just merely want to suggest that, and get your view, briefly, on that subject.

Mr. STEWART. The assumption that 1913 would ever return was certainly not believed to have any foundation at that time. Now, I have been asked by a number of people this question: Since your wholesale price has gotten back to 1913, even a little below it, why not go back to 1913? The answer is that, until it is ascertained that the present situation is to be hopelessly permanent, which I am not willing to admit as yet, at least yet, any return to the 1913 base would at least put the bureau in position of accepting things as they are, and saying "What is all of this fuss about? The dollar to-day is the dollar of 1913; and what is all of this about?" Now, if this is to be a permanent situation and you want to stabilize it here, stabilize it at 1913, if you dare.

Mr. GOLDSBOROUGH. It would take 25 years for the country to recover.

Mr. STEWART. It never would recover. It would have to rock back to where we were in 1913; our standards of living would be shot to pieces, and all of your new inventions since then would die, because we could have no more things than we had in 1913.

Speaking of this, I want to say that the Bureau of Labor Statistics' price is the price on things, on values; and I want to say that I hope you will get away from this confusion of terms, that is, the interchange of the word "value" and the word "price." The value of a thing is its life-sustaining power, its use in food and shelter and things of that kind. Now, price is something entirely different. To illustrate, a loaf of bread is valued at the amount of human energy it will produce, and the amount of human life it will sustain, and that does not alter whether your price is 4 cents or 15 cents. The value is in the thing itself; the price is in the symbols, mostly; and the question of price is a question of the flow of currency. Of course, Mr. Chairman, the cost of a medium of exchange, the cost of the energy required to get a medium of exchange, has got to be taken out of the price exchange.

Mr. BUSBY. I believe that is all I care to ask, Mr. Chairman.

Mr. STEWART. Now, on this 1926, I want to give you a chart of the 1926 price level, and the purchase price of the money. You will see there——

Mr. BUSBY. Let me suggest, Mr. Stewart, that those just simply be introduced as supplementing your statement. I think that the picture presented by these charts will give a much better picture—I mean that the information contained in these charts will give a much better picture to the reader of your testimony than he could possibly get from any words.

Mr. STEWART. Well, I want to introduce this 1926 chart; and to say that the average of 1914 to 1931 is 100.5 upon the 1926 basis——

Mr. GOLDSBOROUGH. For a period of 17 years?

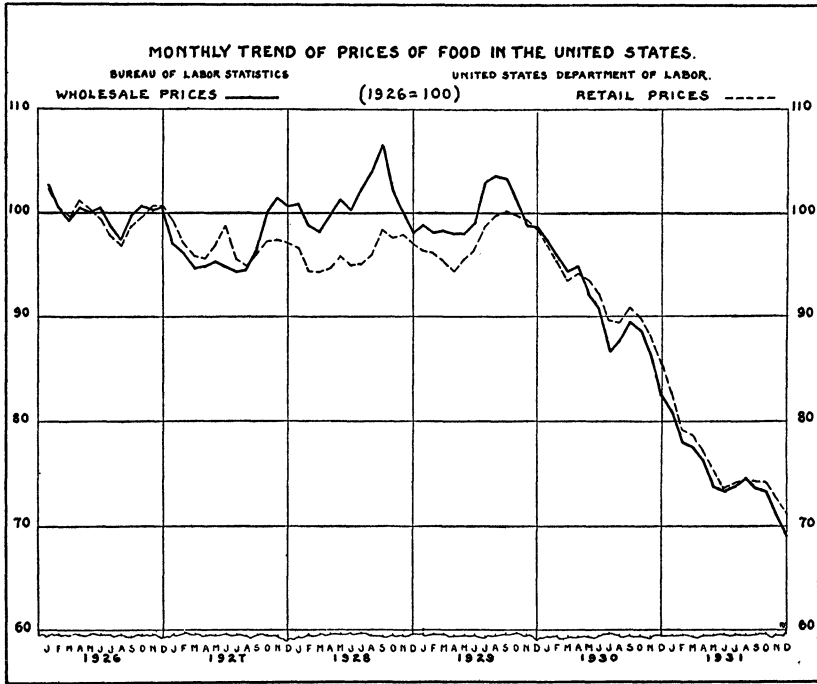
Mr. STEWART. Seventeen years; yes. The 1926 base only varied five-tenths of 1 per cent from the average of 1914 to 1931. The other figures are figured out here.

Mr. BUSBY. Suppose we offer these three together?

Mr. GOLDSBOROUGH. Very well.

The accompanying chart shows the monthly trend of food prices both wholesale and retail in the United States, according to index numbers as computed by the Bureau of Labor Statistics of the United States Department of Labor. For this purpose the retail food index has been converted to the average for the year 1926 as 100.0, the base used by the bureau in computing the index number of wholesale prices.

Per cent that farm products are of all commodities, both as to number and estimated quantity values. Column 1 represents the percentage that the groups are of all commodities when 784 series are used, and column 2 when 550 series are used.



Estimated value in exchange, 1926

| Group | Per cent of all commodities | |
|--------------------|-----------------------------|------------------|
| | 784 price series | 550 price series |
| Farm products..... | 17.20 | 21.25 |
| Foods..... | 24.23 | 22.53 |

Commodities included in groups

| Group | Per cent of all commodities | |
|--------------------|-----------------------------|------------------|
| | 784 price series | 550 price series |
| Farm products..... | 8.55 | 12.18 |
| Foods..... | 15.56 | 18.00 |

NUMBER OF COMMODITIES INCLUDED IN THE WHOLESALE COMMODITY PRICE INDEX COMPUTED BY THE BUREAU OF LABOR STATISTICS, BY GROUPS AND SUBGROUPS OF COMMODITIES.

The following tabulation shows, by subgroups and groups of commodities, the number of items included in the index number of Wholesale Commodity Prices as computed and issued by the Bureau of Labor Statistics of the United States Department of Labor.

The first tabulation is based upon the present index, which includes 784 price series. Tabulation No. 2 will give the differences as occurring in the different groups of commodities between the allocation into the groups of the 550 series and the 784 series:

| | | | |
|------------------------------|-----|---------------------------------|-----|
| Farm products..... | 67 | Foods—Continued. | |
| Grains..... | 11 | Other foods..... | 36 |
| Wheat..... | 6 | Beverages..... | 3 |
| Corn..... | 2 | Coffee..... | 2 |
| Other grains..... | 3 | Fish..... | 6 |
| Livestock and poultry..... | 12 | Sugar..... | 2 |
| Cattle..... | 5 | Vegetable oil..... | 6 |
| Hogs..... | 2 | Other foods..... | 17 |
| Sheep..... | 3 | Hides and leather products..... | 41 |
| Poultry..... | 2 | Hides and skins..... | 7 |
| Other farm products..... | 44 | Hides..... | 3 |
| Cotton..... | 3 | Skins..... | 4 |
| Eggs..... | 7 | Leather..... | 7 |
| Fruits..... | 5 | Sole (oak)..... | 2 |
| Hay..... | 3 | Other leather..... | 5 |
| Milk..... | 3 | Boots and shoes (factory).... | 21 |
| Seeds..... | 4 | Children's..... | 4 |
| Vegetables (fresh)..... | 6 | Men's..... | 11 |
| Wool..... | 9 | Women's..... | 6 |
| Other farm products..... | 4 | Textile products..... | 113 |
| Foods..... | 122 | Clothing..... | 20 |
| Butter, cheese, and milk.... | 24 | Collars..... | 2 |
| Butter..... | 18 | Handkerchiefs..... | 4 |
| Cheese..... | 3 | Hats..... | 2 |
| Milk..... | 3 | Shirts..... | 2 |
| Cereal products..... | 28 | Suits..... | 4 |
| Bread..... | 5 | Trousers..... | 3 |
| Cereal breakfast foods.... | 3 | Other clothing..... | 3 |
| Crackers..... | 2 | Cotton goods..... | 35 |
| Flour..... | 11 | Drilling..... | 2 |
| Meal (corn)..... | 2 | Duck..... | 2 |
| Rice..... | 2 | Flannel..... | 2 |
| Other cereals..... | 3 | Muslin..... | 4 |
| Fruits and vegetables..... | 20 | Print cloth..... | 2 |
| Fruit (canned)..... | 6 | Sheeting..... | 5 |
| Fruit (dried)..... | 6 | Tire fabric..... | 2 |
| Fruit (fresh)..... | 1 | Yarn (carded)..... | 5 |
| Vegetables (canned)..... | 7 | Other cotton goods..... | 9 |
| Meats..... | 14 | Shirting..... | 2 |
| Beef..... | 3 | Knit goods..... | 9 |
| Pork..... | 6 | Hosiery..... | 5 |
| Poultry..... | 2 | Underwear..... | 4 |
| Other meats..... | 3 | | |

Textile products—Continued.

| | |
|-------------------------------------|----|
| Silk and rayon..... | 15 |
| Rayon..... | 4 |
| Silk..... | 8 |
| Yarns (thrown)..... | 3 |
| Woolen and worsted goods... 18 | |
| Dress goods..... | 6 |
| Overcoating..... | 2 |
| Suiting..... | 5 |
| Yarn..... | 3 |
| Other woolen and worsted goods..... | 2 |
| Other textile products..... 16 | |
| Leather (artificial)..... | 2 |
| Rope..... | 3 |
| Thread..... | 2 |
| Twine..... | 3 |
| Yarns..... | 2 |
| Other textile products..... | 4 |
| Fuel and lighting..... 24 | |
| Anthracite coal..... | 3 |
| Bituminous coal..... | 3 |
| Coke..... | 4 |
| By-product..... | 3 |
| Other..... | 1 |
| Electricity..... | 1 |
| Gas..... | 1 |
| Petroleum products..... 12 | |
| Fuel oil..... | 2 |
| Gasoline..... | 5 |
| Kerosene..... | 2 |
| Petroleum (crude)..... | 3 |
| Metals and metal products... 130 | |
| Agricultural implements... 31 | |
| Harrows..... | 3 |
| Plows..... | 3 |
| Rakes..... | 3 |
| Tractors..... | 2 |
| Other agricultural implements..... | 20 |
| Motor vehicles..... | 7 |
| Iron and steel..... 64 | |
| Bar iron..... | 2 |
| Bars..... | 4 |
| Bolts..... | 4 |
| Ore iron..... | 2 |
| Pig iron..... | 7 |
| Pipe..... | 3 |
| Rivets..... | 2 |
| Saws..... | 2 |
| Sheets..... | 3 |
| Wire fence..... | 4 |
| Other iron and steel..... | 31 |

Metals and metal products—Con.

| | |
|---------------------------------|----|
| Nonferrous metals..... 20 | |
| Rods..... | 2 |
| Sheets..... | 3 |
| Wire..... | 2 |
| Other nonferrous..... | 13 |
| Plumbing and heating..... 8 | |
| Boilers..... | 2 |
| Tubs..... | 2 |
| Other..... | 4 |
| Building materials..... 86 | |
| Brick and tile..... 12 | |
| Brick..... | 6 |
| Tile..... | 5 |
| Other..... | 1 |
| Cement..... | 1 |
| Lumber..... | 20 |
| Lath..... | 2 |
| Lumber..... | 18 |
| Paint and paint materials... 29 | |
| Paint prepared..... | 6 |
| Paint materials..... | 23 |
| Other building materials... 24 | |
| Board..... | 2 |
| Glass..... | 4 |
| Lime..... | 2 |
| Prepared roofing..... | 4 |
| Other..... | 12 |
| Chemicals and drugs..... 89 | |
| Chemicals..... 52 | |
| Acids..... | 10 |
| Alcohol..... | 2 |
| Ammonia..... | 2 |
| Baking powder..... | 2 |
| Calcium compound..... | 4 |
| Coal-tar colors..... | 4 |
| Sodium compound..... | 5 |
| Other..... | 23 |
| Drugs and pharmaceuticals... 21 | |
| Acid..... | 2 |
| Other..... | 19 |
| Fertilizer materials..... 16 | |
| Other..... | 10 |
| Fertilizer..... | 6 |

| | | | |
|-----------------------------|----|--------------------------------|----|
| House furnishing goods..... | 61 | Miscellaneous..... | 52 |
| Furnishings..... | 40 | Automobile tires and tubes.... | 4 |
| Blankets..... | 3 | Cattle feed..... | 4 |
| Carpets..... | 3 | Paper and pulp..... | 11 |
| Cutlery..... | 2 | Boxboard..... | 3 |
| Floor covering..... | 4 | Paper..... | 4 |
| Irons, electric..... | 2 | Wood pulp..... | 4 |
| Oilcloth..... | 3 | Rubber (crude)..... | 3 |
| Sewing machines..... | 2 | Other miscellaneous..... | 30 |
| Stoves..... | 4 | Batteries..... | 2 |
| Tableware..... | 7 | Caskets..... | 2 |
| Other..... | 10 | Matches..... | 2 |
| Furniture..... | 21 | Oil (cylinder)..... | 2 |
| Bedroom..... | 7 | Oil (neutral)..... | 2 |
| Dining room..... | 3 | Rubber heels..... | 2 |
| Kitchen..... | 4 | Soap..... | 5 |
| Living room..... | 3 | Tobacco products..... | 5 |
| Office..... | 4 | Other..... | 8 |

AVERAGE INDEX NUMBERS MADE BY COMBINING CERTAIN SPECIFIED YEARS

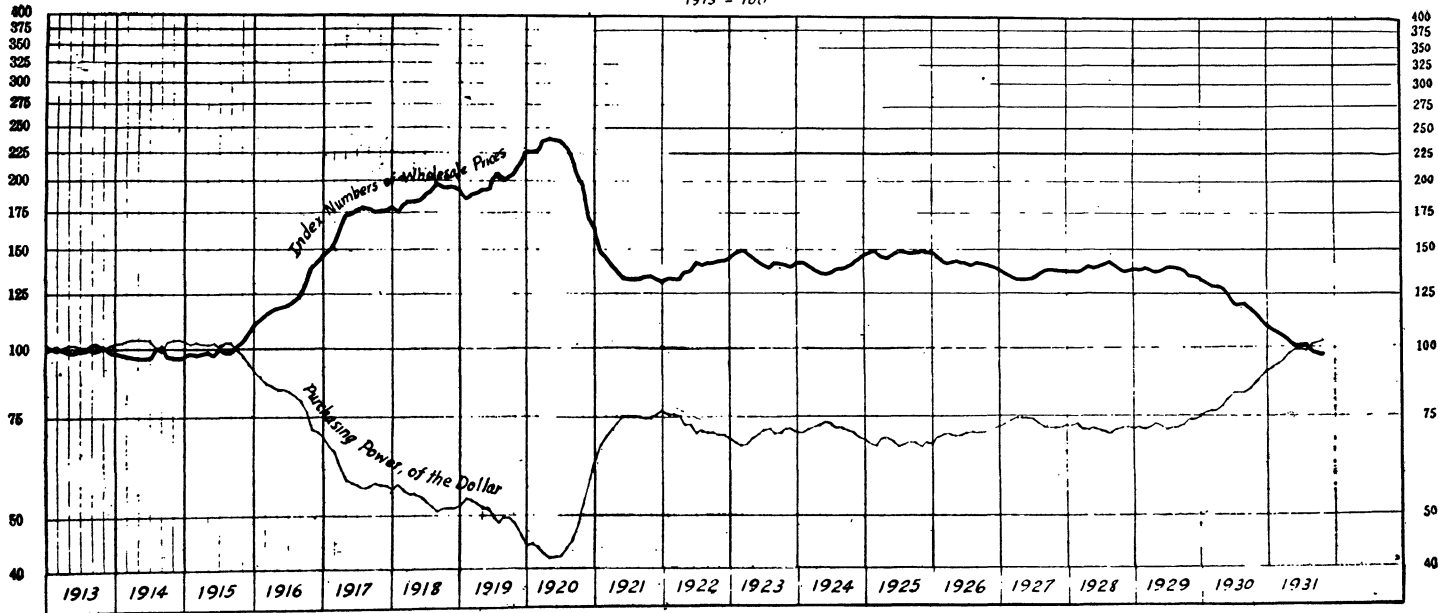
The following tabulation shows the average index numbers as issued by the Bureau of Labor Statistics of the United States Department of Labor using the average for the year 1926 as 100. The range of years as designated includes the index number for the first and last year stated in such range. The averages as shown are simple arithmetic averages of the indexes as published. The two series of averages are made to show the difference between such averages based on 784 price series as now used by the bureau and on 550 price series as formerly used.

| Years | Average indexes | | Years | Average indexes | |
|-------------------|-----------------|-----------|-------------------|-----------------|-----------|
| | 784 items | 550 items | | 784 items | 550 items |
| 1914 to 1931..... | 100.5 | 100.5 | 1925 to 1928..... | 98.9 | 99.2 |
| 1914 to 1929..... | 103.1 | 103.2 | 1923 to 1925..... | 100.7 | 100.7 |
| 1914 to 1928..... | 103.6 | 103.6 | 1923 to 1926..... | 100.6 | 100.6 |
| 1915 to 1931..... | 102.4 | 102.4 | 1922 to 1926..... | 99.8 | 99.8 |
| 1915 to 1929..... | 105.4 | 105.5 | 1920 to 1929..... | 103.8 | 104.1 |
| 1916 to 1931..... | 104.4 | 104.4 | 1921 to 1930..... | 97.0 | 97.2 |
| 1917 to 1931..... | 105.7 | 105.7 | 1914 to 1919..... | 101.8 | 101.8 |
| 1922 to 1931..... | 94.6 | 94.6 | 1914 to 1918..... | 94.4 | 94.4 |
| 1927 to 1931..... | 89.4 | 89.4 | 1915 to 1919..... | 108.5 | 108.5 |
| 1929 to 1931..... | 84.9 | 84.6 | | | |

Mr. STEWART. Here are two charts, showing the commodity price index, and the purchasing power of the dollar. I would like to put those in.

Mr. GOLDSBOROUGH. Without objection, that may go in. (The charts referred to are as follows:)

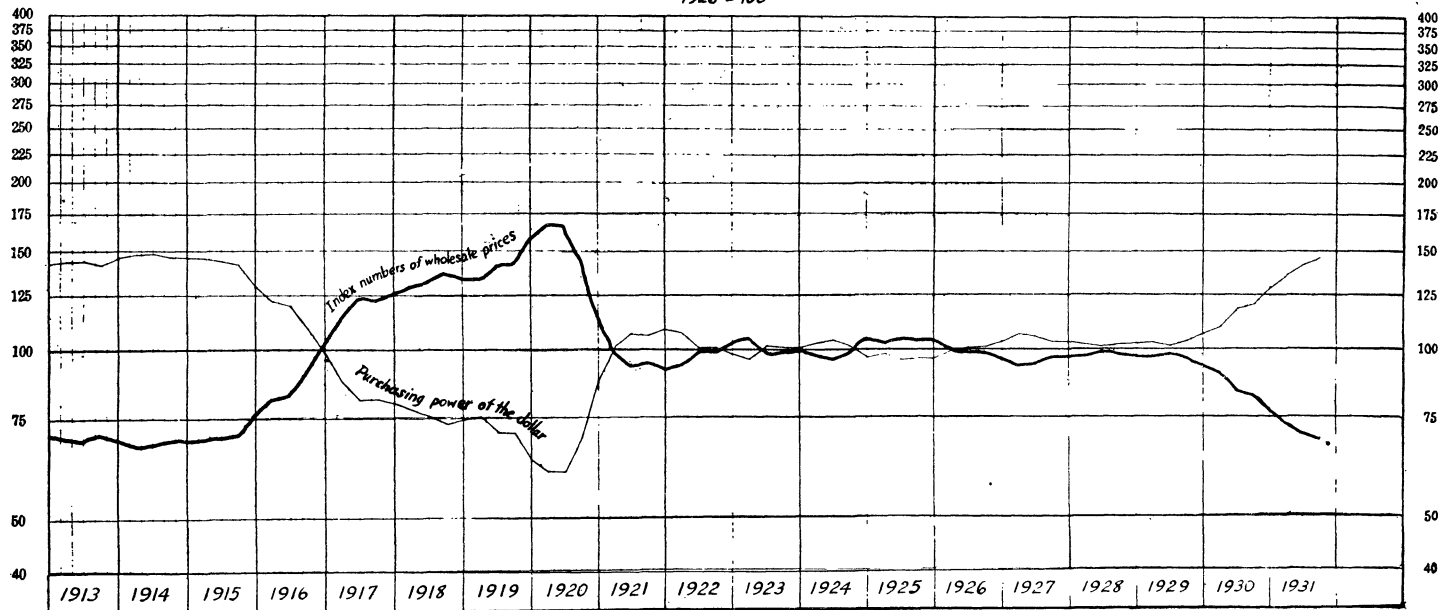
Index Numbers of Wholesale Prices, and Purchasing Power of the Dollar
 1913 = 100



STABILIZATION OF COMMODITY PRICES

Index Numbers of Wholesale Prices and Purchasing Power of the Dollar

1926 = 100



Mr. GOLDSBOROUGH. Mr. Stewart, Mr. Prall has suggested that it would be interesting to the committee and Congress to just have a list of the articles making up the 732, so if you will give it to use, we can insert it in the record.

Mr. STEWART. I will be glad to give it to you later, when we can get a corrected copy. We would like to insert it in the record.

(The list referred to is as follows:)

The following table shows a list of the items now comprising the index number of wholesale commodity prices as compiled and issued by the Bureau of Labor Statistics of the United States Department of Labor, arranged according to groups and subgroups of commodities. In addition to the description of the items, the market for which the quotations are secured is shown, together with the unit generally used in the trade for such commodities, and the quantities used as weighting factors in computing said index numbers. The present weighting factors were introduced in the computations beginning with January, 1932.

The total aggregate value of all commodities for the year 1926, using the complete list of items, is \$54,736,484,000. This aggregate value is the total of the weighted aggregate value of the 784 commodities.

Quantities used as weights in constructing index numbers of wholesale prices

[Introduced in computations beginning with January, 1932. Average quantity marketed in 1927-1929]

GROUP I.—FARM PRODUCTS

| Commodity | Quantity (000 omitted) |
|---|------------------------------|
| GRAINS | |
| Barley, feeding, Chicago..... | bushels..... 113,303 |
| Corn, No. 2, contract, Chicago..... | do..... 187,825 |
| Corn, No. 3, mixed, Chicago..... | do..... 281,738 |
| Oats, No. 2, white, Chicago..... | do..... 288,790 |
| Rye, No. 2, Chicago..... | do..... 35,134 |
| Wheat, No. 2, red winter, Chicago..... | do..... 85,701 |
| Wheat, No. 2, hard, Kansas City..... | do..... 253,433 |
| Wheat, No. 1, northern spring, Minneapolis..... | do..... 110,748 |
| Wheat, No. 2, dark northern spring, Minneapolis..... | do..... 110,748 |
| Wheat, No. 1, hard winter, Portland..... | do..... 71,543 |
| Wheat, No. 2, red winter, St. Louis..... | do..... 80,254 |
| LIVESTOCK AND POULTRY | |
| Cattle, calves, good to choice, vealers, Chicago..... | 100 pounds..... 15,404 |
| Cattle, cows, fair to good, Chicago..... | do..... 15,740 |
| Cattle, cows, good to choice, Chicago..... | do..... 31,480 |
| Cattle, steers, fair to good, Chicago..... | do..... 15,740 |
| Cattle, steers, good to choice, Chicago..... | do..... 31,480 |
| Hogs, fair to choice, heavy butchers, Chicago..... | do..... 31,865 |
| Hogs, fair to choice, light butchers, Chicago..... | do..... 95,595 |
| Sheep, ewes, native, fair to best, Chicago..... | do..... 3,006 |
| Sheep, lambs, western, fair to good, Chicago..... | do..... 10,524 |
| Sheep, wethers, fed, poor to best, Chicago..... | do..... 1,503 |
| Poultry, live fowls, Chicago..... | pounds..... 801,750 |
| Poultry, live fowls, New York..... | do..... 801,750 |
| OTHER FARM PRODUCTS | |
| Beans, dried, New York..... | 100 pounds..... 10,726 |
| Cotton, middling, Galveston..... | pounds..... 5,583,481 |
| Cotton, middling, New Orleans..... | do..... 1,450,255 |
| Cotton, middling, New York..... | do..... 217,538 |
| Eggs, fresh, western, firsts, Boston..... | dozen..... 209,122 |
| Eggs, fresh, firsts, Chicago..... | do..... 534,642 |
| Eggs, fresh, extra firsts, Cincinnati..... | do..... 61,158 |
| Eggs, fresh, candled, New Orleans..... | do..... 63,131 |
| Eggs, fresh, firsts, New York..... | do..... 826,623 |
| Eggs, fresh, extra firsts, Philadelphia..... | do..... 191,366 |
| Eggs, fresh, No. 1 extras, San Francisco..... | do..... 86,806 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP I.—FARM PRODUCTS—Continued

| Commodity | Quantity (000 omitted) |
|--|--------------------------------|
| OTHER FARM PRODUCTS—continued | |
| Apples, fresh, Baldwins, Chicago..... | bushels.. 14, 523 |
| Apples, fresh, Baldwins, New York..... | barrels.. 9, 604 |
| Apples, fresh, medium grade, Portland, Oreg..... | boxes.. 73, 785 |
| Lemons, California, choice to fancy, Chicago..... | do.. 7, 409 |
| Oranges, California, choice, Chicago..... | do.. 39, 687 |
| Hay, Alfalfa, Kansas City..... | net tons.. 9, 092 |
| Hay, clover, mixed No. 1, Cincinnati..... | do.. 4, 219 |
| Hay, timothy, No. 1, Chicago..... | do.. 3, 433 |
| Hops, prime to choice, Pacifics, Portland, Oreg..... | pounds.. 32, 972 |
| Milk, fluid, Chicago..... | 100 pounds.. 119, 043 |
| Milk, fluid, New York..... | do.. 238, 086 |
| Milk, fluid, San Francisco..... | do.. 39, 681 |
| Peanuts, Norfolk..... | pounds.. 769, 726 |
| Seeds, alfalfa, Kansas City..... | 100 pounds.. 347 |
| Seeds, clover, Chicago..... | do.. 1, 554 |
| Seeds, flaxseed, Minneapolis..... | bushels.. 40, 378 |
| Seeds, Timothy, Chicago..... | 100 pounds.. 589 |
| Tobacco, leaf, warehouse..... | do.. 14, 512 |
| Onions, Chicago..... | do.. 10, 701 |
| Potatoes, sweet, Philadelphia..... | $\frac{5}{8}$ bushel.. 91, 680 |
| Potatoes, white, Boston..... | 100 pounds.. 41, 951 |
| Potatoes, white, Chicago..... | do.. 56, 311 |
| Potatoes, white, New York..... | do.. 22, 428 |
| Potatoes, white, Portland, Oreg..... | do.. 40, 660 |
| Wool, foreign, grease basis, Argentine, crossbreds, $\frac{1}{4}$ blood, Boston..... | pounds.. 104, 798 |
| Wool, foreign, scoured basis, Australian, Geelong, 56's, Boston..... | do.. 42, 553 |
| Wool, foreign, grease basis, Montevideo, one-fourth blood 50's, Boston..... | do.. 52, 795 |
| Wool, Ohio, grease basis, fine clothing, Boston..... | do.. 49, 126 |
| Wool, Ohio, grease basis, fine dealine, Boston..... | do.. 18, 422 |
| Wool, Ohio, grease basis, half blood, Boston..... | do.. 24, 563 |
| Wool, Ohio, grease basis, medium grades, Boston..... | do.. 30, 704 |
| Wool, Territory, scoured basis, staple, fine and fine medium, Boston..... | do.. 45, 617 |
| Wool, Territory, scoured basis, half blood, Boston..... | do.. 45, 617 |

GROUP II.—FOODS

| BUTTER, CHEESE, AND MILK | |
|--|----------------------|
| Butter, creamery, Boston, extra..... | pounds.. 44, 678 |
| Butter, creamery, Boston, firsts..... | do.. 156, 374 |
| Butter, creamery, Boston, seconds..... | do.. 22, 339 |
| Butter, creamery, Chicago, extra..... | do.. 128, 555 |
| Butter, creamery, Chicago, extra firsts..... | do.. 449, 943 |
| Butter, creamery, Chicago, firsts..... | do.. 64, 278 |
| Butter, creamery, Cincinnati, as to score..... | do.. 61, 116 |
| Butter, creamery, New Orleans, fancy..... | do.. 18, 967 |
| Butter, creamery, New Orleans, choice..... | do.. 44, 257 |
| Butter, creamery, New York, extra..... | do.. 141, 622 |
| Butter, creamery, New York, firsts..... | do.. 495, 675 |
| Butter, creamery, New York, seconds..... | do.. 70, 811 |
| Butter, creamery, Philadelphia, extra..... | do.. 45, 521 |
| Butter, creamery, Philadelphia, extra firsts..... | do.. 159, 324 |
| Butter, creamery, Philadelphia, firsts..... | do.. 22, 761 |
| Butter, creamery, St. Louis, extra..... | do.. 111, 696 |
| Butter, creamery, San Francisco, extra..... | do.. 20, 864 |
| Butter, creamery, San Francisco, firsts..... | do.. 48, 682 |
| Cheese, whole milk, Chicago..... | do.. 339, 751 |
| Cheese, whole milk, New York..... | do.. 162, 797 |
| Cheese, whole milk, San Francisco..... | do.. 41, 925 |
| Milk, condensed, New York..... | cases.. 9, 946 |
| Milk, evaporated, New York..... | do.. 37, 290 |
| Milk, fluid, Chicago. (Duplicated in farm products.) | |
| Milk, fluid, New York. (Duplicated in farm products.) | |
| Milk, fluid, San Francisco. (Duplicated in farm products.) | |
| Milk, powdered, plant..... | pounds.. 145, 329 |
| CEREAL PRODUCTS | |
| Bread, Chicago, loaf before baking..... | pounds.. 2, 649, 387 |
| Bread, Cincinnati, loaf before baking..... | do.. 353, 252 |
| Bread, New Orleans, loaf before baking..... | do.. 362, 548 |
| Bread, New York, loaf before baking..... | do.. 5, 438, 216 |
| Bread, San Francisco, loaf before baking..... | do.. 501, 989 |
| Cereal breakfast foods, corn, packaged, factory..... | cases.. 10, 732 |
| Cereal breakfast foods, oatmeal, New York..... | 100 pounds.. 7, 814 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP II.—FOODS—Continued

| Commodity | Quantity (000 omitted) |
|--|------------------------------|
| CEREAL PRODUCTS—continued | |
| Cereal breakfast foods, wheat, packaged, delivered.....cases.. | 13, 644 |
| Crackers, soda, New York.....pounds.. | 637, 130 |
| Crackers, sweet, delivered.....do..... | 637, 130 |
| Flour, rye, white, Minneapolis.....barrels.. | 1, 700 |
| Flour, wheat, first clears, Buffalo.....do..... | 7, 948 |
| Flour, wheat, standard patents, Buffalo.....do..... | 23, 845 |
| Flour, wheat, short patents, Kansas City.....do..... | 18, 546 |
| Flour, wheat, straights, Kansas City.....do..... | 6, 182 |
| Flour, wheat, second patents, Minneapolis.....do..... | 8, 243 |
| Flour, wheat, standard patents, Minneapolis.....do..... | 24, 728 |
| Flour, wheat, patents, Portland, Oreg.....do..... | 4, 710 |
| Flour, wheat, short patents, St. Louis.....do..... | 5, 299 |
| Flour, wheat, straights, St. Louis.....do..... | 1, 766 |
| Flour, wheat, standard patents, Toledo.....do..... | 16, 485 |
| Hominy grits, white, mill.....100 pounds.. | 2, 316 |
| Macaroni, Chicago.....pounds..... | 748, 273 |
| Meal, corn, white, mill.....100 pounds.. | 10, 072 |
| Meal, corn, yellow, fancy, Philadelphia.....do..... | 10, 072 |
| Pretzels, bulk, delivered.....pounds..... | 40, 498 |
| Rice, Blue Rose, medium to good, head, clean, New Orleans.....do..... | 945, 083 |
| Rice, Honduras (Edith), medium to choice, head, clean, New Orleans.....do..... | 315, 028 |
| FRUITS AND VEGETABLES | |
| Beans. (Duplicated in farm products.).....dozen cans.. | 6, 532 |
| Fruits, canned, apples, cannery.....do..... | 7, 303 |
| Fruits, canned, apricots, cannery.....do..... | 3, 353 |
| Fruits, canned, cherries, cannery.....do..... | 20, 028 |
| Fruits, canned, peaches, cannery.....do..... | 7, 813 |
| Fruits, canned, pears, cannery.....do..... | 18, 090 |
| Fruits, canned, pineapples, cannery.....do..... | 32, 610 |
| Fruits, dried, apples, evaporated, packers.....pounds..... | 39, 673 |
| Fruits, dried, apricots, evaporated, packers.....do..... | 10, 962 |
| Fruits, dried, currants, cleaned, packers.....do..... | 36, 597 |
| Fruits, dried, peaches, evaporated, packers.....do..... | 393, 620 |
| Fruits, dried, prunes, California, 50's to 60's, packers.....do..... | 429, 458 |
| Fruits, dried, raisins, seedless, packers.....do..... | |
| Fruits, fresh, apples, Chicago. (Duplicated in farm products.).....dozen cans.. | 63, 072 |
| Fruits, fresh, apples, New York. (Duplicated in farm products.).....do..... | |
| Fruits, fresh, apples, Portland, Oreg. (Duplicated in farm products.).....do..... | |
| Fruits, fresh, bananas, Jamaica, 9's, New York.....bunches..... | |
| Fruits, fresh, lemons. (Duplicated in farm products.).....do..... | |
| Fruits, fresh, oranges. (Duplicated in farm products.).....do..... | |
| Vegetables, canned, asparagus, 2½, large, cannery.....dozen cans.. | 4, 904 |
| Vegetables, canned, baked beans, 18-ounce, cannery.....do..... | 35, 090 |
| Vegetables, canned, string beans, No. 2, New York.....do..... | 21, 346 |
| Vegetables, canned, corn, No. 2, factory.....do..... | 26, 848 |
| Vegetables, canned, peas, No. 2, New York.....do..... | 30, 413 |
| Vegetables, canned, spinach, No. 2½, cannery.....do..... | 7, 277 |
| Vegetables, canned, tomatoes, No. 3, New York.....do..... | 41, 692 |
| Vegetables, fresh, onions. (Duplicated in farm products.).....do..... | |
| Vegetables, fresh, potatoes, sweet. (Duplicated in farm products.).....do..... | |
| Vegetables, fresh, potatoes, white, Boston. (Duplicated in farm products.).....do..... | |
| Vegetables, fresh, potatoes, white, Chicago. (Duplicated in farm products.).....do..... | |
| Vegetables, fresh, potatoes, white, New York. (Duplicated in farm products.).....do..... | |
| Vegetables, fresh, potatoes, white, Portland, Oreg. (Duplicated in farm products.).....do..... | |
| MEATS | |
| Beef, cured, New York.....barrels (200 pounds).. | 769 |
| Beef, fresh, carcass, Chicago.....pounds..... | 2, 131, 236 |
| Beef, fresh, carcass, New York.....do..... | 4, 262, 472 |
| Lamb, fresh, Chicago.....do..... | 542, 452 |
| Mutton, fresh, dressed, New York.....do..... | 135, 241 |
| Bacon, Chicago.....do..... | 652, 267 |
| Hams, Chicago.....do..... | 652, 267 |
| Mess pork, New York.....barrels (200 pounds).. | 5, 031 |
| Pork sides, clear, Chicago.....pounds..... | 503, 115 |
| Pork sides, rough, Chicago.....do..... | 503, 115 |
| Pork, fresh (composite price), Chicago.....do..... | 5, 676, 019 |
| Poultry, dressed, Chicago.....do..... | 391, 573 |
| Poultry, dressed, New York.....do..... | 1, 001, 925 |
| Veal, fresh, good, Chicago.....do..... | 847, 764 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP II.—FOODS—Continued

| Commodity | Quantity (000 omitted) |
|--|------------------------------|
| OTHER FOODS | |
| Beverages, ginger ale, plant..... | cases 19, 478 |
| Beverages, grape juice, plant..... | do 1, 848 |
| Beverages, plain soda, factory..... | do 185, 069 |
| Cocoa beans, New York..... | pounds 466, 068 |
| Cocoa, powdered, delivered..... | do 192, 274 |
| Coffee, Brazilian grades, Rio, No. 7, New York..... | do 231, 387 |
| Coffee, Brazilian grades, Santos, No. 4, New York..... | do 1, 125, 547 |
| Copra, coast, New York..... | do 510, 963 |
| Eggs. (Duplicated in farm products.) | |
| Fish, canned, salmon, pink, No. 1, tall, cannery..... | dozen cans 15, 504 |
| Fish, canned, salmon, red, No. 1, tall, cannery..... | do 8, 571 |
| Fish, cod, pickled, cured, Gloucester, Mass..... | 100 pounds 545 |
| Fish, herring, pickled, New York..... | pounds 65, 036 |
| Fish, mackerel, salt, New York..... | do 18, 626 |
| Fish, smoked, salmon, Alaska, New York..... | do 8, 888 |
| Glucose, 42° mixing, New York..... | 100 pounds 11, 445 |
| Jam, grape, plant..... | pounds 300, 194 |
| Lard, prime, contract, New York..... | do 1, 913, 836 |
| Molasses, New Orleans, fancy, New York..... | gallons 36, 477 |
| Oleomargarine, standard, uncolored, Chicago..... | pounds 313, 097 |
| Oleo oil, extra, Chicago..... | do 125, 563 |
| Peanut butter, Chicago..... | do 117, 572 |
| Pepper, black, New York..... | do 26, 806 |
| Salt, American, medium, Chicago..... | barrels (280 pounds) 28, 917 |
| Starch, corn, New York..... | pounds 332, 189 |
| Sugar, granulated, New York..... | do 12, 197, 070 |
| Sugar, raw, 96° New York..... | do 10, 700, 518 |
| Tallow, edible, Chicago..... | do 59, 956 |
| Tea, Formosa, fine, New York..... | do 89, 267 |
| Tomato soup, cream, medium, cannery..... | dozen cans 48, 421 |
| Vegetable oil, cocoanut, New York..... | pounds 669, 826 |
| Vegetable oil, corn, New York..... | do 149, 514 |
| Vegetable oil, cottonseed, New York..... | do 1, 521, 830 |
| Vegetable oil, olive, New York..... | gallons 10, 839 |
| Vegetable oil, peanut, mill..... | pounds 13, 360 |
| Vegetable oil, soybean, New York..... | do 20, 964 |
| Vinegar, cider, New York..... | gallons 71, 517 |

GROUP III.—HIDES AND LEATHER PRODUCTS

| BOOTS AND SHOES FACTORY | |
|---|-----------------|
| Children's, child's, gun metal high cut..... | pairs 6, 686 |
| Children's little boy's tan calf bal..... | do 16, 743 |
| Children's, misses', gun metal, polish..... | do 17, 390 |
| Children's, youth's, gun metal blucher..... | do 23, 678 |
| Men's, calf, black blucher..... | do 11, 917 |
| Men's, calf oxford, 1 B black..... | do 6, 810 |
| Men's black, calf, oxford, 2 B..... | do 6, 810 |
| Men's, dress, medium grade oxford, black, calf..... | do 6, 810 |
| Men's, elk, blucher, chocolate..... | do 11, 917 |
| Men's, gun metal, blucher..... | do 6, 810 |
| Men's mahogany, chrome, bal..... | do 6, 810 |
| Men's side leather, oxford, black..... | do 6, 810 |
| Men's tan, side leather, oxford..... | do 6, 810 |
| Men's, vici kid, black..... | do 11, 917 |
| Men's work, medium grade, black..... | do 11, 917 |
| Women's, colored calf..... | do 16, 829 |
| Women's, black, kid, McKay sewed, oxford..... | do 16, 829 |
| Women's, black, kid, pump..... | do 16, 829 |
| Women's, patent, D'Orsay pump, black..... | do 16, 829 |
| Women's patent, 4-eye, tie, black..... | do 42, 072 |
| Women's, patent-leather pump, black..... | do 16, 829 |
| HIDES AND SKINS | |
| Hides, country, cow, Chicago..... | pounds 376, 896 |
| Hides, packers' heavy, native steer, Chicago..... | do 376, 896 |
| Hides, packers' heavy, Texas steer, Chicago..... | do 376, 896 |
| Skins, calf, No. 1 country, Chicago..... | do 185, 891 |
| Skins, goat, Brazil, New York..... | do 148, 989 |
| Skins, kip, No. 1, country, Chicago..... | do 67, 945 |
| Skins, sheep, packers', Chicago..... | pelts 37, 522 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP III—HIDES AND LEATHER PRODUCTS—Continued

| Commodity | Quantity (000 omitted) |
|--|------------------------------|
| LEATHER | |
| Chrome, calf, B grade—Chrome calf, C grade (net composite price) tannery.....square feet | 189,951 |
| Glazed kid, top grade, Boston.....do | 244,238 |
| Harness, California oak, general market.....pounds | 15,020 |
| Side, chrome tanned, black, B grade, Boston.....square feet | 177,197 |
| Sole, scoured backs, oak, Boston.....pounds | 69,109 |
| Sole, sides, oak, Boston.....do | 69,109 |
| Sole, union backs, steers, New York.....do | 103,664 |
| OTHER LEATHER PRODUCTS | |
| Belting, leather, plant.....feet | 221,737 |
| Gloves, men's, factory.....dozen pairs | 988 |
| Gloves, women's, factory.....do | 988 |
| Harness (composite price), factory.....sets | 586 |
| Suit cases (composite price), factory.....each | 4,015 |
| Traveling bags (composite price), factory.....do | 4,015 |

GROUP IV.—TEXTILE PRODUCTS

| CLOTHING | |
|---|-----------|
| Collars, soft, delivered.....dozen | 3,231 |
| Collars, starched, factory.....do | 2,717 |
| Handkerchiefs, cotton, men's, plain, New York.....do | 25,684 |
| Handkerchiefs, cotton, women's, plain, New York.....do | 25,852 |
| Handkerchiefs, linen, men's, plain, New York.....do | 6,121 |
| Handkerchiefs, linen, women's, plain, New York.....do | 14,540 |
| Hats, men's finished, factory.....do | 698 |
| Hats, men's unfinished, factory.....do | 1,397 |
| Overalls, with bib, 220, denim, delivered.....dozen suits | 6,634 |
| Overcoats, men's, youth's, double-breasted, 30-ounce wool, factory.....each | 3,249 |
| Shirts, men's dress, factory.....dozen | 10,923 |
| Shirts, men's work, medium weight, blue chambray, delivered.....do | 6,236 |
| Suits, boys', 4-piece, New York.....each | 6,078 |
| Suits, men's, 3-piece, 13-ounce blue serge, Chicago.....do | 6,698 |
| Suits, men's, 4-piece, 15-ounce blue serge, New York.....do | 6,698 |
| Suits, youths', 4-piece, 15-ounce blue serge, New York.....do | 8,931 |
| Topcoats, 18-ounce, single-breasted, Chicago.....do | 3,249 |
| Trousers, boys', knee, all-wool, New York.....dozen pairs | 885 |
| Trousers, men's dress, 12½-serge, New York.....pairs | 21,307 |
| Trousers, men's work, khaki, factory.....dozen pairs | 2,374 |
| COTTON GOODS | |
| Broadcloth, 128 by 68 bleached, mercerized, 35 to 36 inches, mill.....yards | 289,557 |
| Damask, table, mercerized, 58-inch, mill.....do | 21,231 |
| Denims, Massachusetts, 28-inch, mill.....do | 334,762 |
| Drillings, brown, series 1, 30-inch 2½ yards to the pound, mill.....do | 201,647 |
| Drillings, brown, series 2, 30-inch 2.85 yards to the pound, mill.....do | 201,647 |
| Duck, 8-ounce, army, mill.....do | 182,314 |
| Duck, wide, 36-inch, mill.....do | 40,892 |
| Flannel, bleached, 4½ yards to pound, mill.....do | 219,735 |
| Flannel, unbleached, 8-ounce, mill.....do | 219,735 |
| Gingham, 27-inch, mill.....do | 263,174 |
| Muslin, bleached, Fruit of the Loom, mill.....do | 62,680 |
| Muslin, bleached, Lonsdale, mill.....do | 62,680 |
| Muslin, bleached, Rough Rider, mill.....do | 62,680 |
| Muslin, bleached, Nainsook, Wamsutta, mill.....do | 62,680 |
| Osnaburg, 7-ounce, 30-inch mill.....do | 175,811 |
| Percale, mill.....do | 284,084 |
| Print Cloth, 27-inch, mill.....do | 358,331 |
| Print Cloth, 38¼-inch, mill.....do | 1,343,745 |
| Sateen, filling, black, 36-inch, New York.....do | 351,323 |
| Sheeting, bleached, series 1, 10/4 mill.....do | 117,776 |
| Sheeting, bleached, series 2, 10/4 mill.....do | 117,776 |
| Sheeting, brown, series 1, 36-inch, mill.....do | 392,586 |
| Sheeting, brown, series 2, 4/4, mill.....do | 392,586 |
| Sheeting, brown, series 3, 4/4, mill.....do | 392,586 |
| Shirting, madras, 36-inch, mill.....do | 174,329 |
| Shirting, percale, 35 to 36 inch, mill.....do | 174,329 |
| Ticking, 32-inch, mill.....do | 50,917 |
| Tire fabric, bidrs., 10-5, carded, mill.....pounds | 34,480 |
| Tire fabric, cord, 23-4-3, carded, mill.....do | 192,933 |
| Towelings, 18-inch, New York.....yards | 341,777 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP IV.—TEXTILE PRODUCTS—Continued

| Commodity | Quantity (000 omitted) |
|---|------------------------------|
| COTTON GOODS—continued | |
| Yarn, carded, northern, 10/1 cones, mill..... | pounds.. 131, 209 |
| Yarn, carded, northern, 22/1 cones, mill..... | do..... 131, 209 |
| Yarn, carded, southern, single warp, 40/1, spinning, mill..... | do..... 131, 209 |
| Yarn, carded, twisted, 20/2, weaving, mill..... | do..... 131, 209 |
| Yarn, carded, twisted, 40/2, weaving, mill..... | do..... 131, 209 |
| KNIT GOODS | |
| Hosiery, cotton, men's, combed yarn, mill..... | dozen pairs.. 19, 396 |
| Hosiery, cotton, women's, mercerized, 220 needle, mill..... | do..... 9, 243 |
| Hosiery, men's, silk, mercerized top, heel, and toe, 240-needle, 12-thread, mill..... | do..... 11, 135 |
| Hosiery, women's, pure silk, full-fashioned, 7-thread, 39 to 42 gauge, mill..... | do..... 26, 230 |
| Hosiery, women's, rayon and silk, full-fashioned, mill..... | do..... 10, 727 |
| Underwear, cotton, men's, shirts and drawers, mill..... | dozen garments.. 7, 114 |
| Underwear, cotton, women's, union suits, mill..... | dozen suits.. 7, 859 |
| Underwear, men's, woolen, shirt and drawers, mill..... | dozen garments.. 377 |
| Underwear, men's, union suits, woolen, mill..... | dozen suits.. 747 |
| SILK AND RAYON | |
| Rayon, 150, first quality, New York..... | pounds.. 27, 768 |
| Rayon, 150, second quality, New York..... | do..... 27, 768 |
| Rayon, 300, first quality, New York..... | do..... 27, 768 |
| Rayon, 500, second quality, New York..... | do..... 27, 768 |
| Silk, raw, Canton, double extra A, cracks, New York..... | do..... 3, 349 |
| Silk, raw, China, steam flature, fourth category, New York..... | do..... 10, 047 |
| Silk, raw, Japan, double extra cracks, New York..... | do..... 50, 226 |
| Silk, raw, Japan, 13-15, New York..... | do..... 16, 742 |
| Silk, spun, domestic, 62/1, New York..... | do..... 1, 991 |
| Silk, spun, domestic, 60/2, New York..... | do..... 1, 991 |
| Silk, spun, imported 200/2, first quality, New York..... | do..... 594 |
| Yarns, thrown, crepe-twist, 3 and 4 thread, New York..... | do..... 2, 634 |
| Yarns, thrown, Organizine, 2-thread, New York..... | do..... 1, 021 |
| Yarns, thrown, Tram, 3-thread, New York..... | do..... 8, 129 |
| WOOLEN AND WORSTED GOODS | |
| Dress Goods, women's, broadcloth, 9½-ounce, mill..... | yards.. 20, 120 |
| Dress goods, women's, crepe, 54-inch, mill..... | do..... 20, 120 |
| Dress goods, women's, flannel, 54-inch, mill..... | do..... 20, 120 |
| Dress goods, women's, French serge, 54-inch, mill..... | do..... 20, 120 |
| Dress goods, women's, serge, 36-inch, cotton warp, mill..... | do..... 33, 027 |
| Dress goods, women's, Sicilian cloth, 54-inch, cotton warp, mill..... | do..... 22, 018 |
| Flannel, 54-inch, 7-ounce, mill..... | do..... 1, 708 |
| Overcoating, heavy, mill..... | do..... 30, 180 |
| Overcoating, top, mill..... | do..... 30, 180 |
| Suiting, serge, 11-ounce, 56-58-inch, mill..... | do..... 20, 120 |
| Suiting, serge, 16-ounce, mill..... | do..... 20, 120 |
| Suiting, uniform serge, fine grade, 12-ounce, mill..... | do..... 20, 120 |
| Suiting, uniform serge, medium grade, 12-ounce, mill..... | do..... 20, 120 |
| Suiting, unfinished worsted, 13-ounce, mill..... | do..... 20, 120 |
| Trousing, cotton warp, 7-ounce 36-inch, mill..... | do..... 19, 816 |
| Yarn, ¾'s, crossbred stock, white, mill..... | pounds.. 45, 471 |
| Yarn, ¾'s, half-blood, weaving, mill..... | do..... 45, 471 |
| Yarn, ¾'s, fine weaving, mill..... | do..... 45, 471 |
| OTHER TEXTILE PRODUCTS | |
| Burlap, 40-inch, 10½-ounce, mill..... | yards.. 919, 989 |
| Hemp, manila, New York..... | pounds.. 142, 316 |
| Jute, raw, medium grades, New York..... | do..... 154, 768 |
| Leather, artificial, heavy, napped back, mill..... | yards.. 33, 977 |
| Leather, artificial, light, drill back, mill..... | do..... 22, 125 |
| Rope, cotton, awning, New York..... | pounds.. 27, 750 |
| Rope, pure manila, ¾-inch, New York..... | do..... 94, 828 |
| Rope, sisal, ¾-inch, New York..... | do..... 27, 635 |
| Sisal, Mexican, New York..... | do..... 283, 933 |
| Thread, (cotton), 6-cord, mill..... | spools.. 4, 173, 094 |
| Thread, linen shoe, 10's, New York..... | pounds.. 3, 091 |
| Twine, cotton, No. 1, wrapping, mill..... | do..... 75, 098 |
| Twine, binder, standard mill..... | 50-pound bales.. 3, 816 |
| Twine, hard fiber, New York..... | pounds.. 83, 684 |
| Yarns, jute No. 1, mill..... | do..... 46, 788 |
| Yarns, jute No. 2, mill..... | do..... 46, 788 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP IV.—TEXTILE PRODUCTS—Continued

| Commodity | Quantity (000 omitted) |
|---|------------------------------|
| ANTHRACITE COAL | |
| Chestnut, composite price on tracks, destination..... gross tons.. | 30, 440 |
| Egg, composite price on tracks, destination..... do..... | 7, 515 |
| Pea, composite price on tracks, destination..... do..... | 21, 237 |
| BITUMINOUS COAL | |
| Mine run, composite price on tracks, destination..... net tons..... | 253, 290 |
| Prepared sizes, composite price on tracks, destination..... do..... | 147, 837 |
| Screenings, composite price on tracks, destination..... do..... | 103, 435 |
| COKE | |
| Beehive, oven, Connellsville, furnace..... net tons..... | 4, 989 |
| By-product, Alabama, Birmingham..... do..... | 12, 174 |
| By-product, New Jersey, Newark, delivered..... do..... | 36, 521 |
| By-product, Portsmouth, Ohio, foundry..... do..... | 1, 000 |
| ELECTRICITY | |
| Electricity (composite price), general market..... 100 kilowatt-hours.. | 862, 740 |
| GAS | |
| Manufactured and natural combined (composite price), general market..... M cubic feet.. | 467, 800 |
| PETROLEUM PRODUCTS | |
| Fuel oil, Oklahoma, refinery..... barrel..... | 221, 407 |
| Fuel oil, Pennsylvania, refinery..... gallon..... | 7, 670, 045 |
| Gasoline, California, refinery..... do..... | 4, 091, 592 |
| Gasoline, Oklahoma, refinery..... do..... | 2, 340, 390 |
| Gasoline, Pennsylvania, refinery..... do..... | 5, 237, 237 |
| Gasoline, north Texas, refinery..... do..... | 4, 697, 147 |
| Gasoline, natural, Oklahoma, refinery..... do..... | 1, 918, 272 |
| Kerosene, standard, refined, New York..... do..... | 1, 179, 323 |
| Kerosene, water white, refined, refinery..... do..... | 1, 179, 323 |
| Petroleum, crude, California, well..... barrel..... | 311, 981 |
| Petroleum, crude, Kansas-Oklahoma, well..... do..... | 673, 060 |
| Petroleum, crude, Pennsylvania, well..... do..... | 37, 847 |

GROUP VI.—METALS AND METAL PRODUCTS

| AGRICULTURAL IMPLEMENTS | |
|--|----------------|
| Binder, grain, factory..... | each..... 53 |
| Cultivator, factory..... | do..... 100 |
| Drill, grain, factory..... | do..... 45 |
| Engine, 3-horsepower, factory..... | do..... 96 |
| Forks, hay, factory..... | dozen..... 303 |
| Harrow, disk, factory..... | each..... 108 |
| Harrow, spike-peg tooth, factory..... | do..... 264 |
| Harrow, spring tooth, factory..... | do..... 114 |
| Harvester-thresher, combined, factory..... | do..... 17 |
| Hoes, factory..... | dozen..... 102 |
| Loader, hay, factory..... | each..... 26 |
| Mower, hay, factory..... | do..... 110 |
| Picker, corn, factory..... | do..... 5 |
| Planter, corn, factory..... | do..... 45 |
| Plow, tractor, factory..... | do..... 99 |
| Plow, walking, 1-horse (composite price), factory..... | do..... 140 |
| Plow, walking, 2-horse (composite price), factory..... | do..... 123 |
| Pumps, factory..... | do..... 472 |
| Rakes, hand, factory..... | dozen..... 303 |
| Rake, self-dump, factory..... | each..... 45 |
| Rake, side-delivery, factory..... | do..... 20 |
| Separator, cream, factory..... | do..... 176 |
| Sheller, corn, factory..... | do..... 4 |
| Shovels, factory..... | dozen..... 311 |
| Spades, factory..... | do..... 311 |
| Spreader, manure, factory..... | each..... 62 |
| Thresher, grain, factory..... | do..... 13 |
| Tractor, 10/20 horsepower, factory..... | do..... 40 |
| Tractor, farm, 15/30 horsepower, factory..... | do..... 99 |
| Wagon, 2-horse, factory..... | do..... 46 |
| Windmill, factory..... | do..... 64 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP VI.—METALS AND METAL PRODUCTS—Continued

| Commodity | Quantity (000 omitted) |
|---|------------------------------|
| AUTOMOBILES | |
| Buick, f. o. b. | each 310 |
| Cadillac, f. o. b. | do 25 |
| Chevrolet, f. o. b. | do 1, 136 |
| Dodge, f. o. b. | do 189 |
| Ford, f. o. b. | do 1, 932 |
| Packard, f. o. b. | do 62 |
| Trucks (composite price), f. o. b. | do 622 |
| IRON AND STEEL | |
| Angle bars, mill. | 100 pounds 10, 978 |
| Augurs, New York. | each 3, 093 |
| Axes, factory. | dozen 135 |
| Bar iron, best refined, Philadelphia. | 100 pounds 2, 017 |
| Bar iron, common refined, Pittsburgh. | do 2, 017 |
| Barrels, steel, factory. | each 17, 823 |
| Bars, concrete reinforcing, ¾-inch and larger, mill. | 100 pounds 19, 553 |
| Bars, merchant, steel, Pittsburgh. | do 101, 344 |
| Bars, sheet, mill. | gross tons 3, 334 |
| Bars, steel, cold-finish, mill. | do 1, 187, 442 |
| Billets, steel, re-rolling, Pittsburgh. | gross tons 2, 593 |
| Boiler tubes, 2 to 2¼ inches, Pittsburgh. | feet 284, 774 |
| Bolts, machine, ½ by 6 inches, mill. | per 100 6, 074 |
| Bolts, plow, ¾ by 2 inches, mill. | do 15, 782 |
| Bolts, stove, Pittsburgh. | do 117, 758 |
| Bolts, track, mill. | per 100 pounds 4, 536 |
| Butts 3½ by 3½ inches, factory. | dozen pairs 9, 885 |
| Cans, sanitary, No. 3, factory. | thousands 8, 727 |
| Castings, malleable, plant. | gross tons 5, 772 |
| Chisels, New York. | each 1, 621 |
| Files, factory. | dozen 6, 997 |
| Hammers, carpenters, 1-pound, delivered. | do 461 |
| Hatchets, delivered. | do 268 |
| Knives, corn. | dozen 4, 056 |
| Knobs, door. | pairs 63, 879 |
| Locks, mortise, 3½ inches, New York. | each 98, 393 |
| Nails, wire, in kegs, Pittsburgh. | per 100 lbs 14, 334 |
| Ore, iron, mesabi, Bessemer, lower lake ports. | gross tons 17, 825 |
| Ore, iron, mesabi, non-Bessemer, lower lake ports. | do 53, 774 |
| Pig iron, basic, furnace. | do 2, 362 |
| Pig iron, Bessemer, Pittsburgh. | do 297 |
| Pig iron, ferromanganese, furnace. | do 360 |
| Pig iron, foundry, No. 2, northern, Pittsburgh. | do 2, 241 |
| Pig iron, foundry, No. 2, southern, Birmingham. | do 2, 241 |
| Pig iron, malleable, furnace. | do 1, 818 |
| Pig iron, Spiegeleisen, furnace. | do 113 |
| Pipe, cast-iron, 6-inch, New York. | net tons 1, 937 |
| Pipe, black steel, ¾-inch, Pittsburgh. | 100 feet 25, 319 |
| Pipe, galvanized, steel, ¾-inch, mill. | do 11, 161 |
| Planes, jack, New York. | each 766 |
| Platos, steel, tank, Pittsburgh. | pounds 9, 826, 808 |
| Rails, steel, open-hearth, mill. | gross tons 2, 766 |
| Rivets, large, ¼-inch and up, Pittsburgh or Cleveland. | 100 pounds 5, 760 |
| Rivets, small, ¼-inch and smaller, Pittsburgh. | do 385, 086 |
| Rods, wire, Pittsburgh. | gross tons 730 |
| Saws, cross-cut, 6 foot, Philadelphia. | each 3, 399 |
| Saws, hand, 26-inch, Philadelphia. | dozen 248 |
| Scrap, steel, Chicago. | gross tons 2, 708 |
| Sheet, auto body, No. 20, mill. | pounds 2, 066, 886 |
| Sheets, galvanized, No. 24, mill. | do 2, 721, 735 |
| Sheets, steel, No. 27, box annealed, mill. | pounds 5, 799, 127 |
| Skelp, grooved, Pittsburgh. | 100 pounds 13, 401 |
| Spikes (track equipment), ¾-inch and larger, mill. | do 3, 714 |
| Strips, steel, cold rolled, Pittsburgh. | pounds 1, 110, 876 |
| Structural steel, mill. | 100 pounds 90, 970 |
| Terneplate, No. 8, I. C., mill. | boxes (of 200 lbs.) 1, 254 |
| Tie plates, steel, mill. | 100 pounds 8, 803 |
| Tin plate, Pittsburgh. | do 37, 976 |
| Vises, solid box, 50 pounds, New York. | each 1, 557 |
| Wire, fence, annealed, plain, Pittsburgh. | 100 pounds 18, 755 |
| Wire, fence, barbed, galvanized, mill. | do 4, 347 |
| Wire, fence, galvanized, No. 9, Pittsburgh. | do 5, 185 |
| Wire, fence, woven, Pittsburgh. | net tons 451 |
| Wood screws, 1-inch, New York. | gross 74, 306 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP VI.—METALS AND METAL PRODUCTS—Continued

| Commodity | Quantity (000 omitted) |
|--|------------------------------|
| NONFERROUS METALS | |
| Aluminum, New York..... | pounds 343, 827 |
| Antimony, New York..... | do 26, 751 |
| Babbitt metal, delivered..... | do 62, 300 |
| Brass rods, yellow, round only, 5/8 to 2 3/4 inches, mill..... | do 216, 653 |
| Brass sheets, yellow, mill..... | do 399, 008 |
| Brass tubes, yellow, base sizes, mill..... | do 133, 584 |
| Brass wire, yellow, No. 8, round, mill..... | do 59, 448 |
| Copper, ingot, electrolytic, refinery..... | do 2, 651, 469 |
| Copper rods, drawn, 1 to 3 1/4 inches, round only, mill..... | do 337, 152 |
| Copper, sheets, hot rolled, New York..... | do 220, 343 |
| Copper, wire, No. 8, mill..... | do 422, 468 |
| Lead, pig, desilverized, New York..... | do 1, 585, 996 |
| Lead pipe, New York..... | 100 pounds 818 |
| Nickel, ingot, New York..... | pounds 55, 821 |
| Quicksilver, domestic, New York..... | flasks of 76 pounds 35 |
| Silver, bar, fine, New York..... | ounces 60, 881 |
| Solder, delivered..... | pounds 85, 150 |
| Tin, pig, New York..... | do 177, 327 |
| Zinc, sheets, Illinois..... | 100 pounds 1, 425 |
| Zinc, slab, pig, New York..... | pounds 1, 218, 228 |
| PLUMBING AND HEATING | |
| Boilers, heating, New York..... | each 416 |
| Boilers, range, 30 gallons, galvanized, Chicago..... | do 713 |
| Closets, water, without fittings, Pittsburgh..... | do 1, 617 |
| Lavatories, plant..... | do 1, 590 |
| Radiation, steam or water system, New York..... | square feet 152, 831 |
| Sinks, 8-inch back, with apron and drainboard, factory..... | each 1, 503 |
| Tubs, bath, 6-foot, no fittings, factory..... | do 1, 154 |
| Tubs, laundry, 2-part, cement, without trap, Chicago..... | do 243 |

GROUP VII.—BUILDING MATERIALS

| | |
|---|--------------------------|
| BRICK AND TILE | |
| Blocks, concrete, plant..... | each 185, 126 |
| Brick, common, building, plant (composite price)..... | thousand 6, 348 |
| Brick, fire, clay, straights, Pittsburgh..... | do 913 |
| Brick, front, New York, light-colored..... | do 2, 266 |
| Brick, paving, 3 1/2-inch, St. Louis..... | do 337 |
| Brick, sand-lime, plant..... | do 299 |
| Brick, silica, standard, carlots, plant..... | do 270 |
| Tile, drain, New York..... | thousand linear feet 290 |
| Tile, floor, unglazed, factory..... | square feet 18, 982 |
| Tile, hollow, building, Chicago..... | blocks 472, 412 |
| Tile, roofing, cement, Illinois..... | squares 369 |
| Tile, wall, glazed, white, New York..... | square feet 36, 116 |
| CEMENT | |
| Portland (composite price), plant..... | barrel 171, 926 |
| LUMBER | |
| California redwood, 4/4, New York..... | M feet 528 |
| Cedar, bevel siding, red, mill..... | do 307 |
| Chestnut, Cincinnati..... | do 269 |
| Cypress, shop, St. Louis..... | do 571 |
| Douglas fir, No. 1, common sheathing, mill..... | do 6, 424 |
| Douglas fir, No. 2 and better, drop siding, mill..... | do 2, 141 |
| Gum, plain, sap, St. Louis..... | do 1, 106 |
| Hemlock, northern, No. 1, Chicago..... | do 2, 073 |
| Maple, hard, No. 1, Chicago..... | do 794 |
| Oak, plain, white, No. 1, common, Cincinnati..... | do 2, 278 |
| Pine, white, No. 2, Buffalo..... | do 1, 335 |
| Pine, yellow, flooring, mill..... | do 4, 143 |
| Pine, yellow, timbers, mill..... | do 6, 905 |
| Pine, western yellow, Ponderosa, No. 1, common, mill..... | do 3, 043 |
| Poplar, No. 1, Cincinnati..... | do 379 |
| Spruce, eastern, Boston..... | do 548 |
| Lath, Douglas fir, No. 1, mill..... | thousands 1, 406 |
| Lath, pine, yellow, No. 1, mill..... | do 1, 879 |
| Shingles, cedar, red, mill..... | do 2, 971 |
| Shingles, Cypress, mill..... | do 5, 125 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP VII.—BUILDING MATERIALS—Continued

| Commodity | Quantity (000 omitted) |
|--|----------------------------------|
| PAINT AND PAINT MATERIALS | |
| Enamel, Chicago..... | gallons..... 17, 157 |
| House paint, inside, flat, all colors, New York..... | do..... 36, 811 |
| House paint, outside, white, gloss, Chicago..... | do..... 49, 082 |
| Deck and porch paint, all colors, Chicago..... | do..... 6, 135 |
| Roof and barn paint, red, Chicago..... | do..... 6, 135 |
| Varnish, builders' floor, bulk, 5's, Chicago..... | do..... 51, 562 |
| Barytes, western, New York..... | net tons..... 344 |
| Colors, black bone, powdered, New York..... | pounds..... 57, 055 |
| Colors, black carbon, New York..... | do..... 282, 436 |
| Colors, iron oxide, black, dry, New York..... | do..... 131, 400 |
| Colors, lampblack, velvet, New York..... | do..... 10, 198 |
| Colors, Prussian blue, New York..... | do..... 4, 391 |
| Butyl acetate, New York..... | do..... 29, 215 |
| Ethyl acetate, anhydrous, New York..... | do..... 56, 939 |
| Chrome green, New York..... | do..... 15, 328 |
| Chrome yellow, dry, New York..... | do..... 14, 613 |
| Copal, gum, Manila, New York..... | do..... 37, 519 |
| Lead, red, dry, New York..... | do..... 74, 140 |
| Lead, white, in oil, New York..... | do..... 300, 438 |
| Litharge, commercial, New York..... | do..... 145, 095 |
| Lithophone, domestic, New York..... | do..... 387, 251 |
| Oil, chinawood, New York..... | do..... 104, 664 |
| Oil, linseed, raw, New York..... | do..... 764, 701 |
| Putty, commercial, New York..... | do..... 100, 667 |
| Rosin, B grade, New York..... | barrel of 280 pounds..... 4, 456 |
| Shellac, T. N., New York..... | pounds..... 40, 127 |
| Turpentine, southern, New York..... | gallons..... 36, 270 |
| Whiting, commercial, imported, New York..... | 100 pounds..... 2, 698 |
| Zinc oxide, leaded, grades, New York..... | pounds..... 335, 438 |
| PLUMBING AND HEATING | |
| Duplicated in metals and metal products. | |
| STRUCTURAL STEEL | |
| Duplicated in metals and metal products. | |
| OTHER BUILDING MATERIALS | |
| Asphalt, bulk, refinery..... | net tons..... 5, 281 |
| Bars, reinforcing. (Duplicated in metals and metal products.)..... | |
| Board, plaster, Chicago..... | 1,000 square feet..... 307 |
| Board, wall, 48 inches wide, Chicago..... | do..... 1, 113 |
| Butts. (Duplicated in metals and metal products.)..... | |
| Doors, white pine, 5-panel, No. 1, delivered..... | each..... 16, 791 |
| Frames, door, white pine, Chicago..... | per set..... 5, 270 |
| Frames, window, western pine, Chicago..... | do..... 5, 270 |
| Glass, plate, 3 to 5 square feet, New York..... | square feet..... 66, 717 |
| Glass, plate, 5 to 10 square feet, New York..... | do..... 66, 717 |
| Glass, window, single A, jobbers' price..... | per 50 square feet..... 4, 418 |
| Glass, window, single B, jobbers' price..... | do..... 4, 418 |
| Gravel, building (composite price), plant..... | net tons..... 80, 666 |
| Knobs, door. (Duplicated in metals and metal products.)..... | |
| Lime, building, common (composite price), plant..... | net tons..... 1, 979 |
| Lime, hydrated (composite price), plant..... | do..... 1, 441 |
| Locks. (Duplicated in metals and metal products.)..... | |
| Nails, wire. (Duplicated in metals and metal products.)..... | |
| Pipe, black steel. (Duplicated in metals and metal products.)..... | |
| Pipe, cast-iron. (Duplicated in metals and metal products.)..... | |
| Pipe, galvanized. (Duplicated in metals and metal products.)..... | |
| Pipe, lead. (Duplicated in metals and metal products.)..... | |
| Pipe, sewer, delivered, New York..... | feet..... 189, 597 |
| Plaster, Chicago..... | net tons..... 3, 637 |
| Prepared roofing, individual shingles, factory..... | squares..... 5, 950 |
| Prepared roofing, medium, factory..... | do..... 19, 643 |
| Prepared roofing, slate surface, factory..... | do..... 15, 596 |
| Prepared roofing, strip shingles, factory..... | do..... 6, 727 |
| Roofing, slate, sea green, quarry..... | do..... 474 |
| Sand, building (composite price), plant..... | net tons..... 43, 244 |
| Sash, window (only), 2 lights, white pine, delivered..... | each..... 34, 000 |
| Sheet, copper. (Duplicated in metals and metal products.)..... | |
| Sheet, zinc. (Duplicated in metals and metal products.)..... | |
| Stone, crushed, 1½-inch, New York..... | cubic yards..... 52, 423 |
| Tar, pine, kiln burned, New York..... | gallons..... 438, 261 |
| Terneplate. (Duplicated in metals and metal products.)..... | |
| Wire, copper. (Duplicated in metals and metal products.)..... | |
| Wood screws. (Duplicated in metals and metal products.)..... | |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP VIII.—CHEMICALS AND DRUGS

| Commodity | Quantity (000 omitted) |
|---|------------------------------|
| CHEMICALS | |
| Acid, acetic, 28 per cent, New York | 100 pounds 913 |
| Acid, boric, New York | pounds 22, 198 |
| Acid, carbonic, New York | do 81, 265 |
| Acid, muriatic, 20°, works | 100 pounds 3, 560 |
| Acid, nitric, 42°, works | do 627 |
| Acid, oleic, distilled, New York | pounds 56, 470 |
| Acid, phosphoric, 50 per cent, U. S. P., New York | do 26, 579 |
| Acid, salicylic, U. S. P., New York | do 6, 693 |
| Acid, stearic, triple pressed, New York | do 42, 610 |
| Acid, sulphuric, 66°, works | tons 5, 475 |
| Alcohol, nonpotable, denatured, works | gallons 101, 315 |
| Alcohol, nonpotable, wood, refined, New York | do 6, 517 |
| Aluminum sulphate, commercial, works | 100 pounds 6, 631 |
| Ammonia, anhydrous, New York | pounds 214, 619 |
| Aqua ammonia, 26°, New York | do 38, 213 |
| Anilin oil, New York | do 14, 394 |
| Arsenic, white, powdered, New York | do 57, 645 |
| Baking powder, 1-pound can, New York | do 104, 045 |
| Baking powder, 10-pound can, Chicago | do 104, 045 |
| Benzene, works | gallons 24, 860 |
| Bleaching powder, works | 100 pounds 2, 064 |
| Borax crystals, New York | tons 85 |
| Calcium, acetate, New York | 100 pounds 1, 386 |
| Calcium, arsenate, New York | pounds 29, 300 |
| Calcium, carbide, New York | do 338, 902 |
| Calcium, chloride, solid, 73-75 per cent, works | tons 489 |
| Coal tar colors, black, direct, New York | pounds 22, 857 |
| Coal tar colors, brown, sulphur, New York | do 26, 540 |
| Coal tar colors, indigo, paste, New York | do 43, 765 |
| Coal tar colors, jet, nigrosine, New York | do 15, 166 |
| Coppera t, works | tons 60 |
| Copper sulphate, New York | 100 pounds 716 |
| Copra. (Duplicated in foods.) | |
| Creosote oil, grade 1, works | gallons 189, 680 |
| Formaldehyde, works | pounds 39, 116 |
| Logwood, extract, solid, New York | do 16, 882 |
| Napthalene flakes, New York | do 66, 981 |
| Pine oil, steam distilled, new York | gallon 2, 811 |
| Potash caustic, 88 to 92 per cent, works | pounds 15, 201 |
| Quebracho extract, solid, 63 per cent, New York | do 208, 898 |
| Sal soda, works | 100 pounds 1, 173 |
| Salt cake, ground, works | tons 231 |
| Salt, granulated, Chicago | do 4, 048 |
| Soda ash, light, 58 per cent, works | 100 pounds 32, 946 |
| Soda, bicarbonate, works | do 2, 617 |
| Soda, caustic, works | do 13, 063 |
| Sodium silicate, 40 per cent, works | do 10, 961 |
| Sodium sulphide, 30 per cent, crystals, New York | do 805 |
| Sulphur, crude, mines | tons 2, 257 |
| Tallow, packers, prime, Chicago | pounds 414, 901 |
| Toluene, pure, works | gallon 14, 426 |
| Vegetable oil, coconut and corn. (Duplicated in foods.) | |
| Vegetable oil, palm kernel, New York | pounds 56, 518 |
| Vegetable oil, palm, niger, New York | do 210, 864 |
| Vegetable oil, soybean. (Duplicated in foods.) | |
| DRUGS AND PHARMACEUTICALS | |
| Acid, citric, domestic, crystals, New York | pounds 8, 914 |
| Acid, tartaric, crystals, New York | do 8, 334 |
| Alcohol, grain, New York | proof gallon 10, 463 |
| Caffine, contract, 1,000 pound lots, New York | pounds 431 |
| Camphor, Japanese, refined slabs, New York | do 7, 199 |
| Castor oil, medicinal, New York | do 62, 807 |
| Chlorine, liquid, works | 100 pounds 2, 350 |
| Chloroform, U. S. P., New York | pounds 3, 027 |
| Cream of tartar, powdered, New York | do 7, 514 |
| Epsom salts, U. S. P., New York | 100 pounds 772 |
| Glycerin, chemically pure, New York | pounds 108, 168 |
| Iodine, resublimed, New York | do 874 |
| Menthol, imported, New York | do 325 |
| Opium, U. S. P., New York | do 157 |
| Peroxide of hydrogen, U. S. P., New York | gross (4-ounce bottles) 193 |
| Phenol, U. S. P., New York | pounds 12, 484 |
| Potassium iodide, New York | do 487 |
| Quinine, sulphate, domestic, New York | ounces 3, 472 |
| Soda phosphate, commercial, New York | 100 pounds 2, 509 |
| Strychnine, alkaloid, crystals, New York | ounces 434 |
| Zinc chloride, granular, New York | pounds 66, 211 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP VIII.—CHEMICALS AND DRUGS—Continued

| Commodity | Quantity (000 omitted) |
|--|------------------------------|
| FERTILIZER MATERIALS | |
| Ammonia sulphate, bulk, ex vessel, ports.....net tons..... | 706 |
| Bones, ground, Chicago.....do..... | 80 |
| Phosphate rock, Florida, land pebble, mines.....do..... | 3,923 |
| Potash, kainit, 14 to 16 per cent, New York.....do..... | 100 |
| Potash, manure salts, 20 per cent, New York.....do..... | 375 |
| Potash, muriate, 80 to 85 per cent, New York.....do..... | 319 |
| Potash, sulphate, 90 to 95 per cent, New York.....do..... | 83 |
| Soda nitrate, 95 per cent, New York.....100 pounds..... | 11,419 |
| Superphosphate, Baltimore.....tons..... | 2,483 |
| Tankage, Chicago.....net tons..... | 346 |
| FERTILIZER, MIXED | |
| Middle Atlantic.....net tons..... | 720 |
| Middle West.....do..... | 665 |
| New England.....do..... | 227 |
| South Atlantic 8-3-3.....do..... | 1,885 |
| South Atlantic, other.....do..... | 1,885 |
| South Central and Southwest.....do..... | 1,108 |

GROUP IX.—HOUSE-FURNISHING GOODS

| | |
|---|---------|
| FURNISHINGS | |
| Blankets, cotton, colored, Boston.....pairs..... | 18,969 |
| Blankets, cotton warp, 3½ pounds, factory.....do..... | 7,026 |
| Blankets, wool, 4 to 5 pounds, factory.....pounds..... | 10,754 |
| Carpets, Axminster, factory.....yards..... | 36,225 |
| Carpets, Brussels, factory.....do..... | 7,782 |
| Carpets, Wilton, factory.....do..... | 13,481 |
| Comforters, wool filled, sateen covered, factory.....each..... | 4,619 |
| Cutlery, carvers, 8-inch, factory.....pairs..... | 1,501 |
| Cutlery, knives and forks, factory.....gross..... | 486 |
| Floor covering, felt base printed, factory.....square yards..... | 57,120 |
| Floor covering, felt base rugs, 9 by 12 feet, factory.....each..... | 4,641 |
| Floor covering, linoleum, inlaid, D gage, factory.....square yards..... | 24,015 |
| Floor covering, linoleum, plain, B gage, factory.....do..... | 25,872 |
| Irons, electric, automatic, factory.....each..... | 973 |
| Irons, electric, nonautomatic, factory.....do..... | 1,945 |
| Ironers, electric, automatic, 30-inch roll, on stand, factory.....do..... | 48 |
| Oilcloth, shelf, 12-inch, factory.....pieces (of 24 yards)..... | 2,045 |
| Oilcloth, table, 5/4 factory.....pieces (of 12 yards)..... | 4,362 |
| Oilcloth, wall, 5/4, plain tints, factory.....do..... | 1,238 |
| Pails, galvanized iron, 10-quart, factory.....gross..... | 87 |
| Pillow cases, 64 square, plain, 36 by 45 inches, mill.....dozen..... | 943 |
| Sewing machines, electric (composite price), factory.....each..... | 316 |
| Sewing machines, treadle (composite price), factory.....do..... | 400 |
| Shades, window, 36-inch, oil, Chicago.....dozen..... | 5,874 |
| Sheets, bed, plain, 64 square, 81 by 99 inches, mill.....do..... | 226 |
| Stoves, cooking, coal (composite price), factory.....each..... | 626 |
| Stoves, cooking, electric (composite price), factory.....do..... | 143 |
| Stoves, cooking, gas (composite price), factory.....do..... | 984 |
| Stoves, cooking, oil (composite price), factory.....do..... | 269 |
| Tablecloths, mercerized, colored border, 64 by 64 inch, mill.....do..... | 2,655 |
| Tableware, dinner sets, 100-piece, semivitreous, factory.....sets..... | 613 |
| Tableware, dinner sets, 104-piece, vitreous, factory.....do..... | 511 |
| Tableware, nappies, glass, 4-inch, common, factory.....dozen..... | 119,146 |
| Tableware, pitchers, glass, ½-gallon, common, factory.....do..... | 19,859 |
| Tableware, plates, white granite, 7-inch, factory.....do..... | 4,255 |
| Tableware, teacups and saucers, white granite, factory.....do..... | 4,255 |
| Tableware, tumblers, 8 to 10 ounce, factory.....do..... | 119,102 |
| Tubs, galvanized iron, factory.....do..... | 523 |
| Vacuum cleaners, electric with attachments, delivered.....each..... | 1,234 |
| Washing machines, electric.....do..... | 817 |
| FURNITURE | |
| Bedroom, beds, metal (composite price), factory.....do..... | 3,774 |
| Bedroom, beds, wood (composite price), factory.....do..... | 1,081 |
| Bedroom, benches (composite price), factory.....do..... | 1,085 |
| Bedroom, chairs (composite price), factory.....do..... | 1,090 |
| Bedroom, dressers and vanities (composite price), factory.....do..... | 1,081 |
| Bedroom, mattresses, 50-pound, layer felt (composite price), factory.....do..... | 11,366 |
| Bedroom, springs, bed, coil (composite price), factory.....do..... | 5,566 |
| Dining room, buffets, china cabinets and servers (composite price), factory.....do..... | 983 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP IX.—HOUSE-FURNISHING GOODS—Continued

| Commodity | Quantity (000 omitted) |
|---|------------------------------|
| FURNITURE—continued | |
| Dining room, chairs (composite price), factory.....sets (of six) .. | 980 |
| Dining room, tables (composite price), factory.....each .. | 983 |
| Kitchen, cabinets (composite price), factory.....do..... | 849 |
| Kitchen, chairs (composite price), factory.....dozen..... | 848 |
| Kitchen, refrigerators (composite price), factory.....each .. | 818 |
| Kitchen, tables (composite price), factory.....do..... | 851 |
| Living room, chairs (composite price), factory.....do..... | 1, 510 |
| Living room, davenport (composite price), factory.....do..... | 1, 508 |
| Living room, tables (composite price), factory.....do..... | 1, 511 |
| Office furniture, arm side chair (composite price), factory.....do..... | 508 |
| Office furniture, arm swivel chair (composite price), factory.....do..... | 702 |
| Office furniture, flat-top desks (composite price), factory.....do..... | 277 |
| Office furniture, typewriter desks (composite price), factory.....do..... | 122 |

GROUP X.—MISCELLANEOUS

| AUTOMOBILE TIRES AND TUBES | |
|---|----------|
| Tires, balloon (composite price), factory.....each .. | 49, 554 |
| Tires, cord (composite price), factory.....do..... | 16, 518 |
| Tires, truck and bus (composite price), factory.....do..... | 606 |
| Tubes, inner tubes (composite price), factory.....do..... | 72, 449 |
| CATTLE FEED | |
| Bran, Minneapolis.....net tons .. | 3, 282 |
| Meal, cottonseed, Memphis.....do..... | 2, 582 |
| Meal, linseed, New York.....do..... | 761 |
| Middlings, standard, Minneapolis.....do..... | 3, 282 |
| PAPER AND PULP | |
| Box board, chip, mill.....net tons .. | 1, 375 |
| Box board, manila-lined chip, mill.....do..... | 1, 375 |
| Box board, 85# test liner, mill.....do..... | 1, 375 |
| Paper, book, mill.....100 pounds .. | 28, 341 |
| Paper, newsprint, rolls, contract, destination.....net tons .. | 3, 669 |
| Paper, tissue, white, No. 1, mill.....reams .. | 62, 716 |
| Paper, wrapping, manila, No. 1, jute, mill.....100 pounds .. | 31, 523 |
| Wood pulp, chemical, sulphate, domestic, mill.....do..... | 10, 261 |
| Wood pulp, chemical, sulphite, domestic, news grade, unbleached, mill.....do..... | 29, 758 |
| Wood pulp, mechanical, No. 1, mill.....net tons .. | 294 |
| Wood pulp, soda fiber, bleached mill.....100 pounds .. | 2, 499 |
| RUBBER | |
| Crude, cusber, No. 3, New York.....pounds .. | 115, 828 |
| Crude, latex crepe, first, New York.....do..... | 115, 828 |
| Crude, plantation, ribbed, smoked sheets, New York.....do..... | 926, 622 |
| OTHER MISCELLANEOUS | |
| Barrels, wooden, 50-gallon tierce, Chicago.....do..... | 17, 727 |
| Batteries, radio A, dry, delivered.....do..... | 686, 079 |
| Batteries, storage, auto factory.....do..... | 11, 875 |
| Caskets, metal (composite price), adult size, destination.....do..... | 145 |
| Caskets, wooden, covered (composite price), adult size, destination.....do..... | 958 |
| Cigar boxes, wooden, cedar venser, factory.....100 boxes .. | 962 |
| Matches, regular (composite price), factory.....cases .. | 5, 685 |
| Matches, safety, factory.....gross boxes .. | 11, 534 |
| Mirrors, plate glass, beveled, 12 by 22 inches, Chicago.....each .. | 17, 890 |
| Oil, cylinder, Oklahoma, refinery.....gallons .. | 365, 988 |
| Oil, cylinder, Pennsylvania, refinery.....do..... | 365, 988 |
| Oil, neutral, Gulf coastal, refinery.....do..... | 365, 988 |
| Oil, neutral, Pennsylvania, refinery.....do..... | 365, 988 |
| Pipe covering, asbestos, 1-inch, Chicago.....linear feet .. | 987, 434 |
| Rubber heels, men's (composite price), delivered.....dozen pairs .. | 12, 731 |
| Rubber heels, women's (composite price), delivered.....do..... | 12, 731 |
| Rubber hose, garden, 5/8-inch, delivered.....feet..... | 126, 653 |
| Shipping cases, pine, adult size, delivered.....each .. | 650 |
| Soap, chips, New York.....pounds .. | 380, 870 |
| Soap, laundry, Cincinnati.....cases .. | 18, 266 |
| Soap, laundry, Philadelphia.....do..... | 18, 266 |

Quantities used as weights in constructing index numbers of wholesale prices—Con.

GROUP X.—MISCELLANEOUS—Continued

| Commodity | Quantity (000 omitted) |
|--|------------------------------|
| OTHER MISCELLANEOUS—continued | |
| Soap, powder, laundry, New York.....pounds.. | 494, 997 |
| Soap, toilet, New York.....cases.. | 14, 072 |
| Starch, laundry, New York.....pounds.. | 775, 107 |
| Tobacco, cigarettes (composite price), destination.....thousands.. | 111, 111 |
| Tobacco, cigars (composite price), destination.....do..... | 7, 869 |
| Tobacco, plug, New York.....pounds.. | 101, 831 |
| Tobacco, smoking, 1-ounce bags, New York.....gross.. | 25, 973 |
| Tobacco, snuff, delivered.....cases.. | 6, 028 |
| Wax, paraffin, crude, white, barrels, Oklahoma.....pounds.. | 699, 971 |

TABLE No. 2

The following table shows the number of commodities added to the list of 550 items formerly comprising the index number of wholesale commodity prices, in order to increase the number to 784 items. This list of added commodities is given by groups only:

| | |
|----------------------------------|-----|
| Foods..... | 24 |
| Hides and leather..... | 1 |
| Textile products..... | 40 |
| Fuel and lighting materials..... | 1 |
| Metals and metal products..... | 51 |
| Building materials..... | 39 |
| Chemicals and drugs..... | 15 |
| House furnishings..... | 26 |
| Miscellaneous..... | 27 |
| Total..... | 234 |

Mr. STEWART. The question was raised this morning about the trend of employment, and the trend of wholesale price index.

Mr. BUSBY. Mr. Stewart, I am sure that is entirely covered in the pamphlet introduced by Mr. White; and what I was particularly interested in was what you have already stated, the method by which you arrived at the whole commodity index price.

Mr. STEWART. All right.

Mr. GOLDSBOROUGH. Mr. Stewart, we appreciate very much your kindness and consideration in coming down here for two or three days, and giving this information, which will be most useful to the committee and the Congress and the country. I think it is generally understood among business men and economists that the index number of the Bureau of Labor statistics in Washington is the standard of the country.

Mr. STEWART. I am very glad indeed to have had a chance to be here.

STATEMENT OF SAMUEL B. PETTENGILL, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF INDIANA

Mr. PETTENGILL. Mr. Chairman and gentlemen of the committee, I can not add anything to the technical information, but it is my judgment that this is about the first fundamental constructive step this Congress has attempted yet. I am thoroughly convinced that if the commodity and wage levels are stabilized anywhere near their

present levels, that we are in for at least one or two decades of economic peonage and great social unrest.

The great problem right now is the question of taxes. Are we going to raise taxes, with commodity values going down, and wage values going down out of which, alone, taxes can be paid? You are simply increasing the burden constantly, because the people are unable to pay their taxes, and the farmers' loans are going into default, because the people can not pay their taxes. I am very much interested in this whole problem. I want to present my good friend, Mr. Dan Fisher, from New Parish, Ind., a dirt farmer, and a dirt farm banker. You gentlemen may have heard the old saying that the toad beneath the harrow knows exactly where each tooth point goes, and Mr. Fisher represents the men who know exactly where the tooth point goes; Mr. Fisher.

STATEMENT OF D. H. FISHER, NEW PARISH, IND.

Mr. FISHER. The reason I just asked to stand is, I have difficulty in talking when I am seated, but even then I can not say much when I am standing.

Mr. GOLDSBOROUGH. I am the same way.

Mr. FISHER. I want to thank you gentlemen, in behalf of the people whom I represent, for having the privilege of coming before you. I suppose that you, of course, would like to know why I am here. I would say that, in the first place, I am a member of the board of directors, representing the largest national farm loan association, I think, in the United States. That does not mean so much. There are 115 national farm loan associations in Indiana connected with the Louisville Federal Land Bank; there are 400 in the 4 States connected with this bank. There are as many land banks, I believe, as there are Federal reserve banks.

The board of directors, considering conditions that we are having now, have come to this conclusion: That under the present conditions, the farmers who owe debts are bankrupt; it is absolutely impossible for them to pay what they owe with the money they get from what they have to sell.

I am also connected with our county bankers' association; and I might say, right here, that you sometimes hear that there are encouraging signs, hopeful signs of things getting better, and one of them that has been advanced is this: There are not as many banks closing as there have been before. Yet, gentlemen, actually, to-day, all of the banks in my county and the adjoining counties are virtually closed during the last few weeks; that is, we have gone on a restricted basis, and we will not allow people to draw out 1 cent of their savings account, or certificate, and only 1 per cent a week on the checking account; and I understand that there are 500 banks in our Federal reserve district, and there are 12 Federal reserve districts we do not know how many there might be in all.

Now, then, when it was known that our good Congressman had asked me to come down and make a statement before this committee, immediately the farmers gathered in, and the bankers from our adjoining cities called me, and asked me to come, and they kindly consented to pay my expenses, if I would only go, and they said this: "You can't make it too strong." The bankers said: "What are we

going to do? We are not paying the people their money; we have not got it to pay; we can not collect from the people, because they are not getting anything for their commodities to pay with; and what are we going to do?"

I tell you folks, here, I have been listening, gentlemen, and I want to say this—I can not use the language that you used—"I am only just one man that is being divested of his all, and my people are;" and if it was not for the dire need and distress of our people, I would not have the nerve to come before—

Mr. GOLDSBOROUGH. Just proceed in your own way. We understand that all you are trying to do is to be helpful.

Mr. FISHER. That is the idea, so it does not make any difference in what kind of words I use; and even if I give the accent at the wrong place, you folks, will iron it out.

Mr. BUSBY. We are all from the country. I assure you of that.

Mr. FISHER. What I was going to say is, you know, I have been reading the financial papers, and the Wall Street Journal, and find they boast of our valuable dollar and what it will buy the world over; and yet, gentlemen, that American dollar is robbing us of our homes, labor of work, causing disaster the world over, and even threatening the safety of our own country; and not until we get that dollar down from its high position, to where it becomes a useful medium of exchange, will we be successful.

Now, I know this: When I used to go to school, they told me that the money question and the money situation was a very delicate, sensitive thing; that we had to have supervisory restrictions and limitations over the money situation or things would go wrong. Now, we admit that is true, and I want to emphasize that pretty soon, when I go from these things and emphasize some other things, so you will know what I am trying to get at. Now, my belief is that we have a destructive limitation and supervision instead of constructive, and we had hoped to see that some constructive measure would be put forward. Now, as I said, last summer when I was reading these papers at one time I noticed that the Wall Street Journal came out and said that our President had said that conditions were going to get better after we had the moratorium to Germany; and the fact that the papers came out so hopefully caused prices to go up, and then they dropped back again further than they were before. In other words, when I read that in those papers I could not understand why there was so many false starts and dropping back again; but the fact is simply, as I see it, that all of these things that were being proposed were destructive instead of constructive.

I notice even now that they say that there is a well-organized group there, and when things start to go up they will begin to short sell and bring them all down again. Gentlemen, as I see it, there will not be any short selling under the plan you are putting forward to bring the commodity prices up; they will keep on going up to where you want to stabilize them. So, all of these things we are talking about will vanish when we get a constructive plan on foot.

Now, then, gentlemen, if you will let me to go back just a little bit, I am going to refer to some things that you may well understand, but I want to remind you of them.

Mr. BUSBY. Let me suggest something: We are familiar with all that newspaper stuff, and if you will get right down to your conclu-

sions on things, we will follow you right along, and that will be helpful to those who read the statement you are going to make dealing with the trouble, and the proposed remedy. We are glad all that newspaper stuff is behind us, and most of us who have read it want to forget it.

Mr. FISHER. In the first place, I guess we all understand this: That cheap money makes high prices, and high money makes low prices. About 40 years ago I was in New Mexico—I also traveled some in old Mexico—and a Mexican came into the store where I was working and paid \$2 for an article that we, with our money, paid \$1 for. That is just simply to show you that, the cheaper the money, the more we get for our articles.

I might also give you a little illustration given to the boys and girls in a certain school, and that was this: We were talking about the more money that we have in circulation, the cheaper money becomes and the higher the commodity prices become, and I asked the boys and girls in the school if they knew that all of the money was in the hands of a few, and they answered and said they knew where quite a little bit of it was. Now, I said, if all of the money was there, and the United States was to be sold for cash, to the lowest bidder, at auction, and if these buyers, who had all the money, would send only one man down with \$1, what would it bring? Some of the boys thought it was \$1, and some said 1 cent. If that were so, the man would still have 99 cents to apply on the balance of the world. But, listen, what I meant to bring forth is this: That the less money we have, the higher the prices of our commodities that we have become. If there was more money in your hands, the commodity prices, and the prices of real estate, would go up.

Now, in 1907, as you remember, when we had a kind of money panic and a bank failed in New York, and the country banks became alarmed and drew their money from that point, the banks there could not let that money go all at once and refused to let it go, and Chicago also refused to let it go; and as you remember, as a result, as the money went out of circulation, prices again began to go down, and millions of dollars were lost, because the money was not in circulation, and all the advantage was lost. You remember that they said, at that time: "We must have a money system where that never can occur again, which afterward terminated in the Federal-reserve system." They were a long time in getting something satisfactory; but in 1913, I was in a bankers' convention in Indianapolis, and Senator Owen, one of the authors of this bill—

Mr. GOLDSBOROUGH. You mean the Federal reserve act?

Mr. FISHER. Yes. And he told us what a fine thing this was going to be, and told us about the Federal-reserve banks and the Federal Reserve Board, and he said:

Now, then, we are going to make it possible so we will never again have a money panic; whenever you have a good note, you can take that good note over here to the Federal-reserve bank and get the money on it, and when you are through with that money, you can take that money to the Federal reserve-bank and the money can be retired; and as a result, the money will have stretched overnight, in that particular deal.

He also told us, I think, that the money would be shifted about from one district to another, wherever it was needed, and money was going to be available wherever and whenever it would be needed the most, and at a rate of interest adapted to that condition or emergency.

Well, now, if it has gone into effect as he told us then, there could not be any possible way but what it would have been a great benefit. Last summer, however, when they were beginning to lend money in the New York Federal reserve district at 1½ per cent, when apparently they were not needing it or wanting it, yet in our particular district it was 2½ per cent, and then they said we did not have any notes that were eligible that we could use; and as the result we could not get any benefit from it, even at the higher rate of interest. So we were practically made to feel that the Federal reserve bank system was not working as it was intended.

Now I have been at the Federal reserve bank five times during the last year and tried to impress upon them this need, but they just simply told me they were not convinced yet that it was necessary.

Now I am going to come closer to the point. The reason why I was so impressed by the little use, as you know, as was being made of the Federal reserve banks until the war time, was that then we had to have an enormous amount of money in order to carry on the war. They had a county committee that would allot or apportion each one there, as you remember, of the Liberty loans that were to be subscribed for through any particular bank. It happened that they made our allotment quite a bit higher than the others in that county. However we did not dare say anything about it, because if we had said much they would have said that we were pro-German; and as a result we suffered them to subscribe over 51 per cent of the resources of our bank, and the next high in our county was 25 per cent. I am simply calling your attention to this because we were up against it, and we did not know what to do, because so much money was going to go out of our bank all at once. The Federal reserve agent came to see us and told us:

Now you do not have to get nervous. All you have to do is to take your notes over to the correspondent bank, or to the Federal reserve bank, and they will give you the money necessary for use.

So that was done, and people who were induced to put their money into these bonds, borrowed money from the banks; and we, in turn, of course, took those notes to the Federal reserve bank and got the money, and put it in circulation. As the money went into circulation, the prices began to go up, and the value of money went down. Then it was that prices, as they went up, and there was not much equilibrium between the two. Then, for some reason or other, the slogan was started: "Start deflating currency," and "Down with the high cost of living."

You can very easily understand I am not a politician, because, when people said: "That will never do; that will be killing the goose that laid the golden egg. We have got this great big debt caused by the law, and we must have a lot of money, in order to pay that debt." Now, if they are going to retire that money from circulation and leave that big debt on us, it will be impossible to pay it, but it seems as though that was the slogan of both parties, put it in their platforms; but that year I did not vote for either party, simply because I did not care to vote for something that I did not want. But now, here is the result: As soon as that régime went into office, when the bank examiner came into our bank, he said, "You have got too many loans here; you have got to get them paid." I do not know whether that is good banking or not, when a bank stands on its own foundations;

it is just simply losing the money that is deposited through its own customers, but he said: "Here, you have got these notes in the Federal reserve bank, and you have got to get them paid," and he gave us 60 days to get them down to a certain point, and 90 days to get them down lower. We had to compel these farmers to come in and pay those notes, and as those notes were being paid the money was being retired from circulation. The farmers could not pay it themselves, so they had to borrow it elsewhere, borrow from the life insurance companies, and later from the Federal land banks. In other words, as this money was retired from circulation, the debt was not paid, but the money was retired from circulation, because they did not have anything to pay with, and commodity prices went down.

Now, it is an illustration that is not to the penny, or the cent, but it shows about how it went, the approximate prices. You know, when we had plenty of money 20 francs of French money would buy over \$2 worth of stuff. The French would pay 20 francs for a bushel of wheat, but when our money went out of circulation, the European money, the foreign money, would only buy half as much here. In other words, they could still pay 20 francs for a bushel of wheat but that only meant \$1 to our farmer.

Consequently the farmer, who was compelled to sell in a low market and buy in a high market, immediately began to receive \$1 when he had to pay out \$2; and those conditions have gone on from bad to worse, until to-day, it is terrible. I just went to our own market to find out what the price was from the peak time until now. At that time the peak price was \$3.30 a bushel, for wheat, and now in our home market it is 47 cents; and the rye, \$1.90 then, and now 3 cents; corn then was—it is lower right now, most of these are, than what I have here, but that was here a few weeks ago—oats, \$1, and now 18 cents; corn, \$1.60, and now 26 cents; eggs, 60 cents a dozen, now 20 cents a dozen; hogs, then, 23 cents, now 4 cents; butter, 72 cents, now 38 cents, and that is lower now, too; but anyway, 80 per cent of the farmer's income was taken away from him from the peak; and as a result, as we see it, he had less than one-fifth, or a drop of 80 per cent, in income, and many of the farmers tell us they really got less.

When the farmer pays 5 per cent to 7 per cent interest on all his debts, he is really compelled to pay from 25 per cent to 35 per cent, because he has to sell five times as many commodities, in order to meet those obligations; and if he has incurred a debt of \$5,000, it really is \$25,000, because he has to sell five times as many of his commodities.

It may be easy to say it is impossible to pay \$5 with \$1, or even \$2 with \$1, and I might say it is, too, but those are the figures in our own market.

I was telling our good Congressman about the conditions until I supposed that he got rather tired of it, and he said: "Mr. Fisher, why do you not go to some professor of economics at Purdue, and tell them to see what they think of your plan?" I had a daughter going to school there. I did call on one man there, who was supposed to be the one I was to talk to, and I had a nice conference with him. When I told him that the present dollar was worth about 30 cents of what it was a year ago, he said, "Are you not too low, Mr. Fisher?" He said, "Our table here shows that it is worth about 70 cents." What I would like to impress here is, it is impossible for the Govern-

ment to give the real condition of the farmer by taking the prices as they are. For example, when I told him I thought it was about 30 cents, and he said the statistics showed it was 70 cents, I asked him how they determined it, and he said, "Well, we take the prices from the terminals"—for example, they would go to Chicago, where the price at that time was 80 cents. Well, I said, "Now, we will find out about how that works with us." I said, "The farmers are getting 65 cents." Now, the farmers, to-day, are actually getting less than what the people on the section and in the factory can get \$1.25 a day for a 10-hour day. So we might say that the farmers are getting about 10 cents a day for their labor. Now, they bring that wheat to that market with us, our local market, and have to pay the high transportation prices to the terminals, and we find that the railroads are getting from 25 to 40 cents out of it. Subsequently, they have to pay that high price; so we only get 65 cents; and as you see, right there, there would be 15 cents loss on the farmer's dollar.

Then, again, when we talked about the article that the farmer buys, the manufactured goods, he told me that they secured the wholesale prices at the manufacturer's point; and by securing the wholesale prices from the manufacturing point, they are again suffering at least the transportation charges existing; and the prices as you will note them have the high transportation charges, and the high overhead and selling prices, and all of those things; so that, at least, he lost another 15 cents; and Professor Lloyd, with whom I was talking, told me that certainly was true; and when we began to figure on the prices as rapidly as they were going down, he admitted to me that, at least, after these figures are compiled by them, after we got through, there was at least another 10-cent loss. So that we were safe, instead of saying that the farmer's dollar was worth 70 cents, it really was worth only 30 cents.

I simply refer to that so as to show that the farmer has gone down more rapidly than anybody else. Here is another condition of where the farmer was compelled to sell in a low market, and buy in a high market. Labor says, "We are not going to go down," and they were able to keep those prices up; and by the foreign immigration restrictions, they were even able to keep out the foreign competition, that the farmer had to compete with; and they were able to keep prices up as long as the demand for labor was great enough. So they keep up with the same high prices very much as had existed before the depression of 1921.

What I want to get across, gentlemen, is this: That this depression is not a 1931 depression for a farmer, or a 1930 or 1932 depression; but it is a continuous depression with the farmer; he has been lowered all of the time, as is shown here by the year book that we will refer to later on.

Mr. GOLDSBOROUGH. We are familiar with that.

Mr. FISHER. All right. Now, the manufacturer, you know, keeps up with the tariff laws and—

Mr. GOLDSBOROUGH. Mr. Fisher, you know this subcommittee, year after year, is working on these problems and right familiar with the general situation. Now the country is in a critical condition, and what we are interested in, and what you are interested in, is the remedy. We understood you to say, a few moments ago, that you felt you could give us the remedy, or that you could give us informa-

tion that would help us to work out the remedy, and that is really the problem that is confronting the subcommittee.

Mr. FISHER. All right, we will leave all the other things out then.

Mr. GOLDSBOROUGH. I tell you frankly that beginning in 1921, when Gov. W. P. G. Harding came before this committee, we have had the various ramifications of the relative position of the farmer and of industry; we are really very familiar with it.

Mr. FISHER. Well, then, here in this bill that is being considered now—I have just looked over that bill, although I have read over Mr. Busby's speeches, and they sound very good to me—this bill also looks very good to me. In the first place, however, as was brought out in the discussion here before, we can not leave it to the same board that we are leaving it to now. We are leaving it completely at their discretion, whatever they think; and it must be mandatory; there must be the imposition on them to stabilize their prices, and keep them there, because, otherwise, we would be no better off than what we were before. That is one thing; and then another thing, we spoke about the price level of 1926. Now, then, this price level of 1926, if you put it there, the farmer was low at that time. If you will notice here, the farmer dropped down below, and very much more so than what the Government statistics will show. Another thing, labor was up here, but the farmer was lower. Now, the difference is much more apparent. This is the 1930 yearbook, page 585. If prices could be raised, or if we could get prices where there was an equilibrium of all the incomes, so that no one class would be at a disadvantage, it certainly would be a great thing to stabilize the prices as suggested in this bill; but as I say, it must not be left to anyone's discretion, but it must be compulsory; otherwise, I fear that we will have conditions very much as we are having them to-day.

Now, there is one other thing that I am very much interested in, and my idea is this: That the cause of this depression is because one-third of the people, who are the greatest buyers, have had the disadvantage; and two-thirds of the people have been prospering at the disadvantage or at the expense of the other one-third; and, then, now, this one-third is to be brought up on a level with the others; and if we do that, and stabilize our prices, then we remove the cause, and the remedy will be right here, as I see it. Of course, there are your construction bills like the Frazier bill and the Wheeler bill, and all of those would help; but upon reading it over, it seems to me that this would perhaps be the better plan.

Mr. BUSBY. In saying this, you refer to H. R. 10517, introduced by Mr. Goldsborough?

Mr. FISHER. Yes. Now, I do not want to take up any more of your time. If you have any questions, I will be glad to answer them.

Mr. GOLDSBOROUGH. Mr. Fisher, the condition of agriculture, since 1920, has been the most appalling problem that I have ever known anything about. I come, myself, from an agricultural district, Mr. Busby also does, Mr. Prall is from New York, but he is just as sympathetic with this situation as anybody, because, as a matter of fact, he has a terrible unemployment situation confronting him in his city, and one condition reflects on the other. Now, the subcommittee understands fully why you are so earnest. It has been impossible, in my judgment, for any farmer to balance his budget for the last 10 years. That is my judgment about it, and that is one of

the things that we are terribly earnest about, in trying to bring out some legislation which will raise and stabilize commodity prices. We appreciate very much your coming before the committee, and we hope we can do something to help the situation in your locality, as well as everywhere else in the United States.

Mr. BUSBY. I might add that we realize it is almost absolutely impossible for farmers or anybody else who produce commodities and you have to sell them in the market at the present time to meet the obligations that were made four or five years ago: because those obligations, whether made four or five years ago, or recently—

Mr. GOLDSBOROUGH. Some of them were made 10 or 15 years ago. Some of those mortgages were put on at the high war-time prices.

Mr. BUSBY. I realize that, and are renewed time after time, and are the same old mortgages created back immediately after the war, and sometimes prior to the war. We realize all that, and the conditions you have called attention to. The picture you have presented in regard to those conditions we do not feel is at all overdrawn; and we are intending to try to do something to stabilize prices, so that the farmers and the other people can better themselves.

STATEMENT OF HON. O. B. BURTNESS, REPRESENTATIVE IN CONGRESS FROM THE FIRST DISTRICT OF NORTH DAKOTA

Mr. BURTNESS. Mr. Chairman and gentlemen of the committee, my name is O. B. Burtness, and I represent the first congressional district of North Dakota, and have been in Congress since March 4, 1921.

I do not believe that the record, as yet, includes the actual figures upon which the Bureau of Labor Statistics has worked out the chart which Mr. Stewart submitted. If I understand it correctly, the chart that he referred to, of which I have copies with me and which I would have asked to be inserted in the record if they had not been inserted already, are a chart showing the index numbers of wholesale general commodity prices from 1913 to 1931, and the chart showing conversely the purchase price of the dollar from 1913 to 1931, inclusive; and the composite of those two charts, one superimposed on the other, the photostatic copy thereof was submitted for the record. There is no need, of course, of any further insertion in that respect; but I know that, in my study of this question, there are not any figures which I like to have before me and use as often as the index numbers as prepared by the Bureau of Labor Statistics, of which the graphs on the costs are a graphic picture. I therefore, wonder, Mr. Chairman, whether you would care to have copies of those figures put into the record for reference. The first sheet I hand you is simply the general figures given annually down to and including 1931.

As all of you know how the Bureau of Labor Statistics has proceeded, it is only the figures since 1913 which are weighted figures. The bureau also has a mimeographed form, No. 4924, showing the figures from 1890 to 1931 by the various classifications, but I do not think they are of enough importance to go in. To come on down to a more recent period, however, their Form 4314 gives those figures from the year 1913 down to date. The copy I have is corrected up to February, 1932.

Mr. GOLDSBOROUGH. Mr. Burtness, we wanted to have Mr. Stewart tell the subcommittee just how he worked out his charts, but I do not think, myself, that it is worth while to burden the record with these charts, which are easily accessible, and which we are all very familiar with.

Mr. BURTNESS. I know the committee is very familiar with them. It is largely a question of how much of a textbook you want to make of the record, for people who are studying the question. This subcommittee is, of course, familiar with it. I thought these figures would be very valuable and would be referred to time and again by the members of the House, who might want to study the bill or the general problem. These charts, of course, tell the story graphically and at a glance better than anything else with which we are familiar.

Here [pointing to the chart] is a tremendous fall shown by this chart under our present unstabilized dollar. There [indicating] you had a gradual increase in prices from 1915 to 1920. I doubt whether many people realize that, from 1914 to May, 1920, the price level went up more than 145 per cent—that is, from point 68.1 to 167.2; and that then within a year that increase which had come gradually over a period of five years had dropped more than 42 per cent from the peak, and dropped down to 96.2 [indicating on chart].

It is interesting to note from this chart that the low, before the present depression started, but since the war, was 91.4 in January, 1922; in 1926 it was 100; and by September, 1929, the index was 96.1. Therefore, during that period of time, say, from January, 1922, up to and including 1928, when many people say that there was a general stabilization of the price level, the fact is that prices were not anywhere nearly completely stabilized, and the purchasing power of the dollar varied very substantially during that time, sometimes as much as one per cent, or as much as one and one-half per cent a month, which, if carried through for an entire year might amount to 12 per cent. I have forgotten now the exact maximum difference in the index during that period, but as I recall it now, there was a difference between the highest and the lowest month, during that period of so-called approximate stabilization of as much as 13 points. Of course, as has already been testified, we are now confronted with a situation that during the period from September, 1929, to the present time, you have a drop from point 96.1 to 66.3, or over 30 per cent, and from 1926 to February, 1932, more than 33½ per cent. In other words, the dollar has been bloated more than 50 per cent since 1926.

Mr. BUSBY. What do you attribute that to, Mr. Burtness?

Mr. BURTNESS. Well, I presume that the statement by Doctor King this morning is as complete an answer as can be given.

Mr. BUSBY. I thoroughly agree to that.

Mr. BURTNESS. But in referring to the testimony given by the last witness, as he plainly stated, and as the members of this committee know, in so far as the farmers' indebtedness is concerned, most of that has been carried from the war, and has been simply renewed through the past years; and so, in so far as they are concerned, if you check up the figures given by the Bureau of Labor Statistics, you will find that the farm price reaching its highest point in May, 1920—

Mr. PRALL. Is not that true of all mortgages, all over, of all kinds?

Mr. BURTNESS. I think it is.

Mr. PRALL. The savings banks, I think, find that is true, and the life-insurance companies also.

Mr. BURTNES. That is true quite generally of long-term obligations, where the security accepted is real-estate security; but, of course, involved in this question is not only the long time securities, but also the short-time securities. So I recognize the viewpoint presented by some of the witnesses here already, and which, apparently, from some observations made; Doctor Fischer may also refer to. It seems that some consideration must in fairness be given also to the deferred payments which have not existed as long as back to the war times; but in so far as the war-time obligations of the farmer is concerned, which I started to point out, as shown by the price index, from the high point of agricultural prices, in May, 1920, to February, 1932, the reduction is more than 59 per cent. In other words, that debt has been bloated, if to be paid in dollars of the purchasing power or size of to-day, about two and one-half times. That burden becomes unbearable.

Mr. PRALL. How does the price to the consumer, Mr. Burtness, the drop in the price to the consumer of all of these farm products, compare with the drop in prices to the farmers?

Mr. BURTNES. Not anywhere nearly to the same extent. In fact, that picture is given you at a glance, in the table prepared by the Bureau of Labor Statistics which I handed to the chairman, which shows the price index by various classifications. Of course, that table does not clearly show the complete picture since the war time at a glance, because of the fact that a new base was adopted in 1926; and of course, if the base adopted in 1926, so far as agricultural prices were concerned, accepted the prices of 1926 as the base at 100, you must compare that figure with what it was during the war. If it is compared with the pre-war price of farm products, of course you find a decided drop up to 1926. They have to accept some base, it does not make any difference which, but in order to get the relative situation, the figures must be obtained from about 1913 or at least from the war period and compared with the present index. The raw materials have fallen a great deal more than the finished products.

There are several reasons for that, in addition to those that have been given here. One is the fact that certain overhead expenses in processing and manufacturing remained the same. Regardless of the fact that manufacturers may sell some of their commodities near former prices, the volume has decreased and the cost of processing, and so on, must be borne on such smaller volume; another is the further fact that labor has not come down in accordance with the cost of raw materials; another that taxes and interest have been constant, or practically so, and many other important factors of that kind. Then there is also the matter of custom controlled prices on many of the commodities which the consumer buys. We go into the grocery store, into the drug store, the hardware store and places of that kind, and we buy commodities now that we have gotten accustomed to paying 5 cents, 25 cents, or \$1 for, and the price is maintained, so far as the customer is concerned. Often we do not expect them to be less than heretofore. Then, undoubtedly, there are also some prices that are controlled because of a monopoly, practically speaking, that may be producing them; because they are subject in some cases, to trade agreements successful in keeping those prices up. Hence raw

materials have dropped much more quickly and further than finished products.

But, of course, we are dealing simply with the general commodity price levels in this type of legislation and I am entirely willing, for the purpose of this legislation, to assume that those that are down too low and those that are up too high, on the present basis, will, so to speak, wash each other out. The general commodity price level now is too low and we must try to determine what the price level should be increased to in order to do substantial justice as between the debtor and creditor classes. On the question as to what point they should go, I have a definite suggestion: I think we must come down to a principle, and the only principle that I can think of that is fair and just to all concerned is that of trying to arrive at the stage on which the bulk—I do not care what you call it, the greater part, or the bulk, or the center of gravity—but we will say the center of gravity on which existing indebtedness was created. Now, that may require a good deal of investigation, it could never be arrived at with mathematical precision but it would seem as if it could be arrived at with some reasonable degree of fairness. My curbstone notion is that the 1926 base is probably approximately fair, but even if July 1, 1929, were accepted as the level to restore, it is only a little more than three points below the 1926 level; and I, for one, would not argue or dispute the exact percentage with anybody. What we all need is prompt and substantial relief. But the thought that I had in that connection, in order to bring out some notions that I thought could well be given consideration in connection with the Goldsborough bill, 10517, were included in my bill 10487, in which the mandate to the Federal Reserve Board is to the effect that they shall immediately raise the price level not less than 25 per cent, or more than 30 per cent, above the stage at which it would stand at the time the act would go into effect; coupled with a further instruction to determine, by the aid of all possible information that they can obtain, the stage of the level on which the greater part of the then existing debts had been contracted, public and private debts both included, and then, promptly thereafter, raise the level to such stage, if the stage for which the first mandate is given should not be as high as that stage. That is a detail I am not particular about, although I deem it sound and proper; but if anyone should ask why the 1926 level, if it be the one reported in legislation, I would want to be able to answer: "Because it is the level, as nearly as we know, that is fair to debtors and creditors alike, in that it is the level upon which the bulk of the existing indebtedness was actually contracted."

Mr. BUSBY. I think you have in mind adjusting this thing with the view to the debts and obligations; why not adjust it with a view to a fair level, that would give the people of the country a proper plane or condition on which they should continue? It is not a question of debtor or creditor, necessarily, but the welfare of the people as a whole a fair condition of living. Why should it not be placed on a plane where the buying power of the dollar should be adjusted on the commodity basis, by direction, also? Would not that be better than the question of debtor and creditor?

Mr. BURTNESS. Of course, as I see it, it is the fluctuations that create the difficulty, that create the unfairness of the present un-stabilized dollar. If there had been no fluctuation recently we could

properly stabilize on the present level. But the fluctuations have been tremendous. These are unfair to creditors and debtors. The estimate made by Doctor King was that \$40,000,000,000 were lost because of the inflation, and then the deflation during the war period. The harm was done because of the increase and the decrease in prices and therefore in all debts payable in the future.

Mr. BUSBY. Do you think that is brought about by our basic monetary set-up?

Mr. BURTNESS. Why of course. There is no question in the world about that; and that is why I am very much pleased to see that this bill recognizes both of the two theories with reference to monetary legislation, which most of the stabilized money adherents feel should be recognized. In the first and second sections it recognizes the fact that the quantity of credit, the amount of credit available, influences the level price, but I am even much more pleased with the fact that you have adopted as a bill for the basis of your general consideration here, one that also goes to the very quality of the dollar, itself.

Mr. BUSBY. After all is said and done, and after all of the arguments are made for and against it, and assuming that we all understand what the actual condition is with regard to the prices of commodities and the inability to pay debt with the commodities at the present prices, and their unfair relation to the obligations, bonds, debts, private debts, and all of the kind, especially those that have been in existence for years—after those things are understood, have you not told the whole story in your last statement that these two propositions are the ones that should be and ought to be considered, and that practically covers the phase of what we are trying to do?

Mr. BURTNESS. The two must be synchronized together, but I am one of those who believe that in the attempt to control the quantity of credit through discretion, by managing it, or anything of that kind, must of necessity only be temporary, and that no commission, enjoying such discretion, can, for a long time, maintain the volume of credit so as to keep the dollar at a strictly stable basis, and one stable enough to maintain stability in the price level, without being drawn either down or up to the actual value of the gold actually backing the monetary unit itself. That value is the magnet, it is there, eventually, regardless of the amount of credit that exists. You can not permanently provide stability, by simply pricing gold, and then giving somebody in authority the discretionary power to provide debt media for business. Prices will eventually seek the level of the value of the commodity in which the monetary unit is redeemable; and that is why, I, for one, believe that the only way in which this question can be solved for the future, is to take into consideration the economic fact that gold is just one commodity, and one commodity which is subject to economic laws and must vary in actual exchange value, or whatever you want to call it, as distinguished from price, just like any other commodity is valued, depending upon the supply and demand, and other factors involved. Here we have a statute, a Federal statute, under which one commodity is price-fixed, namely, gold; and then we try to use that measure as the only measure for the price of all of the other commodities. That must result in dire results.

Mr. BUSBY. The trouble with your quantitative, or credit part of your money, is that the speed with which it moves, that is, the velocity

of it, often upsets the arrangement, because, at some times, credit will move much more rapidly than it does at other times; and it is possible for a small amount of outstanding credit to do maybe two or three times the business that it will do at other times. That is the trouble with the quantitative part of our money, is it not?

Mr. BURTNESS. Well, that is one of the serious troubles involved, of course.

Mr. BUSBY. That is the thing that keeps it from being regulated, or keeps it unregulated, because it gets fast at times and slow at others.

Mr. BURTNESS. Of course, when you speak about regulation, that implies also that the regulation must be turned over to human minds, and becomes subject to the frailties thereof as well as possible interest in the results.

Mr. BUSBY. No; I do not mean that. I mean the automatic regulation of the amount of credit to the need of business, that it will do that thing without any tampering with, or control; it naturally gets out of relation, because it moves fast sometimes, faster than it does at others. Confidence makes it move and doubt makes it shrink.

Mr. BURTNESS. Of course, as to which is the cause and which is the effect of its moving fast or slow, becomes another question.

Mr. BUSBY. The result is the same.

Mr. BURTNESS. Yes; the result will be the same. Now, reference has been made, at difference times, to what can be accomplished through the Reconstruction Finance Corporation and the Glass-Steagall bill. I voted for those bills. I interjected at least a few comments, when others were speaking, which would indicate that I, at least, felt that those bills would tend toward what I want to call it, "reflation." I just heard that word the other day and it is a good one. As I say, looking at it from the viewpoint of the people of our country, the weakness of both of those bills, their possible failure in doing very substantially what is hoped from them, really arises from this fact: It comes because of the fear and timidity in the mind of the local bankers. The local bankers, all through every section of the country, have had a serious time during these past few years—we all realize that—due solely to this falling price level, which means that the securities that they have accepted have become worthless, or nearly so, or at least have become not guilt-edge securities, or rather not appropriate securities, because the personal property or the real estate that they have mortgages on could not find a ready market at the prices which existed at the time the securities were taken. Because of that situation, there has been the fear of runs on banks, and they have felt that it is absolutely necessary for them to maintain large reserves, so as to meet a run. They don't want their statement to show they have borrowed money. They, therefore, don't use the enlargement of the eligible paper that can be rediscounted at the Federal reserve banks.

The individual banker in a community, when he is approached by someone who wants to borrow money, who needs it, who has fair security in that community, is naturally told by the banker: "Well, now, why should I assume this additional burden?" And the question then immediately comes to his mind: "Can I loan money to this man and then rediscount that paper, and have the fact that I am borrowing show upon my statement?" That alarms him and may spread alarm in the community.

The weakness of both those acts, as I see it, is the fact that there will be too many people who will be afraid to make use of it; and I am wondering, too, whether that may not be the one difficulty with reference to any proposal to simply inflate the credit media, as such, of the country.

Mr. BUSBY. Do you refer to that provision in this bill, or do you refer to the legislation that we have already passed?

Mr. BURTNES. I have reference first to the legislation you have already passed; but I also raise the same query with reference to the power that is proposed to be given to the Federal Reserve Board under this bill, and many similar bills that have been introduced. That is, whether under the mandate that is to be given to the Federal Reserve Board to conduct its business and all the powers which it possesses, in such a way as to restore the price level of a few years ago, and it is contemplated, of course, that they would be restored, as I understand it, through allowing ample credit, enough inflation, whatever you want to call it, so as to bring those prices back. In order to accomplish that the people, the public, of this country will have to be first willing to invest or spend the money to make use of it; and I am not at all certain that the public is, as yet, ready—in so far as the public must operate through the banking institutions—is as yet ready to accept the privileges that may be given them under this type of law, the privileges that have already been given them under the reconstruction act and under the Glass-Steagall bill.

Mr. PRALL. Do you think that the people are ready, and perhaps the banks are not?

Mr. BURTNES. I think the people are ready, but you have hit the point exactly. I am afraid that the banks are not ready to do so. Something more is needed.

As I have already indicated, I do hope that whatever legislation we do write into the act will carry with it provisions so that the purposes of the authority in section 3 can be carried out. I think that, after all, becomes a fundamental business device that you will have to use, if you actually want to stabilize the price level.

Mr. GOLDSBOROUGH. The theory of this legislation, in so far as it is emergency legislation is concerned, is this: Under the Glass-Steagall bill, the Federal Reserve Board have ample resources to do a tremendous amount of buying, if they wanted to do it.

Mr. PRALL. Pardon me, Mr. Chairman. You do not mean to say that—do you mean to say, I should say, that they wanted to do, or perhaps their bankers advised them to do, their banker advisers want them to do? You did not want to add that to it, did you?

Mr. GOLDSBOROUGH. Not right now. Will you read me the question.

(Thereupon the reporter read the pending question as before recorded.)

Mr. BURTNES. I assume that is the theory.

Mr. GOLDSBOROUGH. Now, my theory is something like this: If this legislation passes, the Federal Reserve Board, if they are in sympathy with it, can announce in every newspaper in the United States: "We have \$10,000,000,000 of Federal reserve notes, and we can issue them, if we want to do it. We have been instructed by Congress to raise the price level to the 1926 price level; it is their responsibility, and not ours. We propose to do that which they have

told us to do, and we are going out into the market, and we are going to buy Government bonds at the rate of \$25,000,000 a day every business day until the 1926 price level is reached. That is going to be our policy, and we announce that publicly; and we represent society economically."

Now my idea is that, immediately upon that announcement of a policy, and when they begin to work under it, and the people believe they are going to do it, that would immediately restore the banking confidence in the United States, to begin with, and immediately put in the market everybody who has a dollar, and that it would automatically start the factories going; that the retailer would buy from his wholesaler, because he would be afraid that the prices would rise; the wholesaler would buy from the manufacturer, and the factories would start, and the people would go to work. You may say that is too optimistic. Not at all. What we are confronted with is a deadly emergency, which is getting worse every day; and you have got to give the situation the sort of medicine that it requires, and have the courage to do it, and then when the time comes, have the courage to stop it. That was the conception that was in my mind when this bill was drawn.

Mr. BURTNESS. I am in entire sympathy, of course, not only with your conception, but I also have largely agreed with you as to what the possible result will be if the Federal Reserve Board makes up its mind to carry the law into effect. I am, however, not quite as confident, perhaps, as you seem to be, that the Federal Reserve Board, by offering to accept rediscounts, or even by saying that they are going out to buy bonds, or anything else, can always get what they want; because there are always two sides to a transaction of that sort.

Mr. BUSBY. If they offer the price, they can get the bonds?

Mr. BURTNESS. Yes; temporarily, at a price.

Mr. GOLDSBOROUGH. Society might have to take a little loss; but what we want to do is to resume——

Mr. BURTNESS. If they raise the price high enough, they can do it.

Mr. BUSBY. Expressions of fear and doubt, I do not think ought to enter into the minds of any of us, concerning the thing we are trying to do; that is, proposing it, but doubting its effect.

Mr. BURTNESS. I would not hesitate particularly, but the point I am wanting to make in that regard is this: That if an inflation of that sort at a time when gold is as scarce as it is now, when most of the world is trying to get gold, and when there has been a tendency, for two or three years, for that gold to become dearer and dearer, as reflected in our bloated dollar, it ought to be accompanied so as to insure the desired results, and I therefore *insist* that it be accompanied by an immediate decrease in the weight behind the gold dollar; so that there would not be a tendency for these two things to be fighting against each other, but that they should synchronize and work together.

Mr. GOLDSBOROUGH. That is in the bill.

Mr. BUSBY. We have both of them in the same bill.

Mr. BURTNESS. The mandate in the bill, of course, as I understand it, is not to change the price of gold, unless——

Mr. BUSBY. The board is authorized to raise the price.

Mr. BURTNESS. I think that should not be the last possible device but the first thing that should be done, and, of course, I—

Mr. GOLDSBOROUGH. You remember, Mr. Burtness, what was done when the Glass-Steagall Act was being passed through Congress was this: Very distinguished Senators proclaimed almost daily that the legislation was not to be used for the purpose of inflation.

Mr. BURTNESS. Those statements seriously minimized the possible good effects of the acts already passed.

Mr. GOLDSBOROUGH. The consequence was that the public, instead of being assured, were made to feel, in great part, "What is the use?"

Mr. BURTNESS. I know I asked questions on the floor of the House, to bring out the thought on the part of the members of this committee, that it was to be used to help increase the price level; and I think that is the fair import of the speeches made on the floor of the House by the members of the committee, that that was the real intent and I still think that was the intent of both the acts referred to.

Mr. BURTNESS. After having approved the principle of weight control in section 3 of the chairman's bill, H. R. 10517, I now want to raise a few queries about it for your consideration, some of which I deem of considerable importance.

Mr. GOLDSBOROUGH. All right.

Mr. BURTNESS. I am wondering—I have not been able to think it through—whether the enactment of section 3 would not, of necessity, require other legislation either amending or repealing or modifying some of the present provisions of law. For instance, the question of our existing redemption provisions in gold, at the present weight, of the money that is outstanding; and the question, too, of whether or not if you put the powers contemplated by section 3 into an act any change must be made with reference to existing coinage laws—that is, whether you must not discontinue coining of gold. I assume that your position is that inasmuch as the power given by section 3 is only to the Federal Reserve Board, and not to the Treasury, that that may not be needed?

Mr. GOLDSBOROUGH. My theory is this, Mr. Burtness, that except as to contracts which have been made in gold, there is no question about the constitutionality of that legislation.

Mr. BURTNESS. I do not think there would be any serious question about the constitutionality of it, even in reference to contracts with "current weight and fineness" clauses.

Mr. GOLDSBOROUGH. I do not think it violates any contract or interferes with any coinage matter whatever; that the contracts have been made specifically in relation to gold of a certain weight and fineness, and the weight of the dollar changes in an emergency, and then there would be a lawsuit between—

Mr. BURTNESS. It would have to be settled by the court, but the point I am making is, that you are giving authority here to raise or lower, under certain conditions, the official price of gold. Still, the law with reference to the number of grains of gold remains the same as now, and likewise the law with reference to redemption.

I therefore suggest that when you go into executive session you give careful consideration to whether you should not also provide that redemption shall hereafter be in the amount of gold as determined from time to time by the changed price. I do not see how you can avoid it if power to change the price is granted.

Assuming that to be correct, I come to a very important matter, namely, the necessity of one provision to avoid speculation in gold, more particularly to avoid a raid on the Treasury either while the bill is enacted or at any time when people get the notion that the price paid for gold will be increased. In my bill H. R. 21, I am proposing a new section to cover the matter. I cover that fully in my prepared statement so will not say more about it till that point is reached.

Of paramount importance, however, is my strong conviction that the powers conferred by section 3 should be granted not to the Federal Reserve Board but to the Treasury or a proper governmental bureau directly responsible to Congress and the country. Witnesses here have in most cases doubted whether the board has heretofore attempted to stabilize. In any event, if it has, the job has been bungled. Apparently the members don't want it, they say they can not do it. Why force it on to them?

Even if I had absolute confidence not only in the ability, the lack of bias or prejudice, and the desire of the board to effect stabilization of the price level through the exercise of discretion in changing the weight of the dollar (the price of gold), I should not want to turn it over to an institution of a profit-sharing nature. Indeed it should not be discretionary with anyone but automatic and tied up specifically with a price index selected by Congress. If you do not want to go as far as my bills, I at least urge that you instruct the Treasury to change the price from time to time as shown by the Bureau of Labor Statistics.

I desire to thank you for your consideration, and without taking further time will ask leave to present for the record a formal statement prepared before the opening of the hearings on my bills, H. R. 20 and H. R. 21.

Following such statement I would like to have inserted another statement by D. J. Tinnes of Grand Forks, N. Dak., the author of the bill H. R. 20, dealing with that proposed. Mr. Tinnes was anxious to appear in person but was unable for financial reasons to incur the expense involved in coming here. I assure you he is a through student of monetary stabilization.

Mr. GOLDSBOROUGH. They will be received and printed in the appendix and thus preserve continuity of presentation here.

Mr. BURTNESS. That will be satisfactory.

Mr. GOLDSBOROUGH. The subcommittee wants to thank you most sincerely for the interest you have taken in this legislation, not only at the present, but the interest you have taken in the years past, which have been of such assistance to Congress and the country, in bringing the matter up to its present position of being an immediate legislative possibility.

Mr. BURTNESS. I appreciate what you have said, Mr. Chairman, and thank you for the privilege of cooperating.

Mr. GOLDSBOROUGH. To-morrow afternoon, the House considers the sales-tax feature of the tax bill, and we shall all have to be on the floor. So we are going to meet at 10 o'clock to-morrow morning and close at 12. At that time, the subcommittee will announce as to whether we will have further hearings this week,

(Thereupon the committee adjourned to meet at 10 o'clock a. m. to-morrow, Tuesday, March 22, 1932.)

STABILIZATION OF COMMODITY PRICES

TUESDAY, MARCH 22, 1932

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON BANKING AND CURRENCY,
Washington, D. C.

The subcommittee met, pursuant to adjournment, at 10 o'clock a. m., in the committee room, Capitol Building, Hon. T. Alan Goldsborough (chairman) presiding.

Present: Messrs. Goldsborough (chairman), Busby, Prall, Strong, and Beedy.

Mr. GOLDSBOROUGH. The committee will please come to order.

What are your connections, what has been your experience, Mr. Rorty?

STATEMENT OF MALCOLM CHURCHILL RORTY

Mr. RORTY. I was educated as an engineer and spent many years as an executive in telephone and telegraph and cable work.

Mr. GOLDSBOROUGH. What were your connections?

Mr. RORTY. I was connected with the American Telephone & Telegraph Co., the Western Union Telegraph Co., and the International Telephone & Telephone Corporation. During that period I was, for some time, vice president of the Bell Telephone Securities Corporation, and later president of the International Telephone Securities Corporation. As incident to that financial work, I made some special studies of economics and business.

Mr. GOLDSBOROUGH. Are you in active business now?

Mr. RORTY. Retired, except for some consulting work at the present time, financial consulting work.

Mr. GOLDSBOROUGH. Financial consulting work?

Mr. RORTY. Investment work.

Mr. GOLDSBOROUGH. I believe you told me you were now living down in Calvert County.

Mr. RORTY. Calvert County, Md., from the first of the year, will be my official residence.

Mr. GOLDSBOROUGH. Now, Mr. Rorty, I think I sent you a copy of this bill.

Mr. RORTY. Yes; I read the bill.

Mr. GOLDSBOROUGH. Will you proceed, in your own way, please, and when you get through the members of the subcommittee will probably have some matters they would like to talk with you about.

Mr. RORTY. I might begin, Mr. Chairman, by saying that I have been very greatly in sympathy, for many years, with the idea of stabilizing business, which included possibly the general levels of commodity prices and the purchasing power of money, and recently I think I found everyone with whom I have come in contact, both

bankers and economists, and many in the United States, thoroughly convinced of the desirability of attaining a greater stability in the purchasing power of money, and in the general levels of commodity prices. The difficulty seems to me to be that we do not know, with certainty, just how that stabilization might be attained. As far as I can determine from my contacts and conversations, there is, at this time, no one, practically, who has any selfish interest in instability; everyone would want to see stability if we could attain it. On the other hand, we do not find agreement as to how stability in price levels might be arrived at. Therefore, the most careful students of the question, the most careful students of economics, economists, bankers, financial experts, to date do not seem able to agree as to how the stabilization might be attained, although I think they all desire it and would all like to work toward that end. I must confess that I share in this general ignorance; although I have some few impressions, I have some suggestions that I might make, but I do not feel certain as to how the stabilization might be attained.

My impressions regarding the stabilization of the general price levels and the purchasing power of money are: First, that we might operate through the ordinary banking processes, through the raising or lowering of rediscount rates; the purchasing of bonds in the open market, and the sale of Federal reserve bank notes, if we had any positive way of expanding business activities in times of depression. In this thought I would differ from some financial experts, who would contend that the Federal reserve banks, by open-market purchases, carried far enough, might force a rapid rise in the general price levels. I am quite certain that if the Federal reserve banks indulge in open-market purchases to the point of creating a very substantial volume of excess reserves in the member banks, in the hands of the member banks, there surely would come, in due time, a rise in the general price levels. My difference is with those who hold the contrary view as to the time required for this ease of credit to produce a rise in the price levels. Some contend that the rise in the price levels will be almost immediate. My own feeling is that it must take months, perhaps even 1 or 2 or 3 years, if there is an ease of credit, to react on the general price levels. I say this for the reason that I believe a rise in the price levels only comes when some one buys something, and that increased purchasing will come with the ease of credit, or when the entrepreneurs, the business men, the enterprisers, in general, will use that credit, will risk it for good, namely, for the purposes of expanding their existing activities or starting new enterprises.

When that happens, then this credit that has been made easily operates through the business man, the enterpriser—and through his purchases and his new activities—to raise the prices by the increased consumption and business activities in general.

So my feeling is that the open-market operations of the Federal reserve banks, the creation of excessive reserves in the hands of member banks, the lowering of the rediscount rate, all the various expedients that may be adopted to create a positive ease of credit, can not function immediately and overnight, but it will function in due time. I am quite certain that this ease of credit, if it continues easy long enough, will be equalized, but I believe there is a lag that comes in,

and must come in, by reason of delay on the part of borrowers in using that credit to start new business activities.

Now, that would be my first criticism of this bill, in the sense that the available steps to raise the present deflated wholesale commodity levels of prices, probably are not banking steps; in other words, there must be other activities, if we adhere to the established banking practices, other activities than those of the Federal Reserve Board and of the Federal reserve banks, to raise the price levels; and that activity must be in the direction of a positive stimulation of business activities. In other words, I think we must not only have an ease of credit, and a very positive ease of credit, but a stimulation of the spirit of enterprise on the part of our business men, manufacturers, and all others, who are involved in the carrying on of our business activities. If we can have some positive method of stimulating business activities, then I believe it is the ordinary and usual, perhaps I might say standard, banking expediciencies may be applicable to stabilizing the price levels.

The increased business activities may raise the price level, and the banking expediciencies then may be used to hold the price level relatively stable; but I do not believe that the banking expediciencies that we have now are capable of holding the price level up, in the absence of business activities, and in the presence, if you please, of the paralyzed and hesitating spirit of enterprise. That would be my first criticism of the bill:

That the Federal Reserve Board and the Federal reserve banks, by themselves, as banks and as part of the banking system, could not raise the price level, without some definite stimulus being applied to our banking activities.

I think that, if we had some method of stimulating and regulating business activities, then the standard banking practices could be used to a very large extent; and I think, further than that, that they could be used without any further instruction to the Federal Reserve Board or the Federal reserve banks, to maintain that stabilization.

I think, if I may speak without any particular knowledge at all——

Mr. GOLDSBOROUGH. I do not like to interrupt you, but you say you think that when the price level was raised and the business was resumed they would attempt to stabilize the prices?

I am only speaking from observation, but have you any instances in the past where they have attempted to stabilize?

Mr. RORTY. I only know from contacts with the staffs of the Federal reserve banks, that they are fully alive to the importance of stabilizing the price levels. I do not think they want to assume the responsibility for doing it, by reason of this very feeling that I have expressed: That they may not do it, and they should not assume the responsibility if they can not carry it out; that would be my criticism of the bill as it stands now, that the banks are being asked to do something that they can not do, with one exception—I know Professor Fisher has a question here—I say, when they are doing it with the ordinary established banking practices.

Those I do not think are sufficient to maintain stabilization in prices, in the general price levels, without some concurrent, positive stimulation to business activities.

Now, the second part of the bill, section 3 in particular, does indicate the method whereby, theoretically, and I believe with due

care and application, perhaps, so that in practice, we might be able to stabilize the price level. I do not think we yet know enough of how that method might be applied, or what particular dangers are in it, what safeguards might be necessary, to attempt to apply it in this present emergency. I think that if this suggestion, given an ugly name—this suggestion of debasing currency should go too far, at the present moment, it might do damage to public confidence and financial confidence at a time when we wanted to do as little damage as possible.

From the standpoint of pure economic theory, I will go quite a way in the ultimate consideration of some expedients of this kind, from the standpoint of what should be done now.

Under the present circumstances, I think it would do harm to have that proposition seriously advanced at this moment. My own feeling is that with the ease of credit maintained, and with positive efforts made to stimulate business activities, we will do the best thing that can be done for the country in this emergency, and probably all that can be done; and, as much as I sympathize with the ultimate purpose involved here—and I have worked and talked in favor of stabilization of the general price level and of the purchasing power of money—as much as I am in favor of such stabilization for the future, I am afraid of this particular proposal at this particular time; and I believe that the practical thing to do is to seek measures to stimulate business activities, and use this easy credit.

If we do that, I believe the prices will rise as rapidly as they can; and I have, personally, been working on plans and methods for giving positive stimulus to business activities. I believe that a positive stimulus, plus the ease of credit which the Federal reserve banks are able to supply at this time, with the emergency legislation which has been passed—that that combination will give a rapid rise in price levels as we can attain, and will avoid the dangers that lie in these other proposals.

I would like to put myself clear on the record with the purpose and sentiment of the bill; that I am in favor as to its immediate, practical desirability; but I should be opposed to it making a distinction. That is all I have to say.

Mr. GOLDSBOROUGH. Do you care to say what your view is as to how the business can be affirmatively stimulated.

Mr. RORTY. I did not come here, Mr. Chairman, with the idea of advancing my own particular thoughts on that question.

Mr. GOLDSBOROUGH. You can do it, briefly.

Mr. RORTY. I can do it, very briefly. I think, of all of us, as a matter of practical common sense, experience, can observe that when business is good we have activities and full employment in construction and new capital operations; and that when business is bad, we find construction almost nil, the new capital activities almost nil, no expansion of factories, no merchants putting in new lines of goods, but they are contracting their stocks. I think there is more than a contemporaneous relation there. I believe it is impossible for us to have active business, unless we have activity in new construction, and activity in new capital operations, generally; and I think it is particularly true that—you might say, theoretically, anyway, and for all practical purposes—at any rate, I believe it is true that whenever we have construction activities and activities in new capital

operations, whatever it may be, with the merchant putting in a new showcase, or, if you please, a farmer building a new barn, or road construction, and that is one of them—when we have new construction and new capital activities in full swing, I believe it is practically impossible for us to have depressed business.

Furthermore, I do not believe it is possible at a time like this, or any other time of depressed business, to shift men in large numbers from construction and from new capital operations into activities concerned with the ordinary production of consumption goods; in other words, you can not take a carpenter and make a shoemaker out of him at a time like this. A carpenter is going to stay a carpenter, and by the time we have got this business, we must take him back to work as a carpenter. We can have shifts of a number of carpenters from generation to generation, but not rapidly, not in the course of one year.

Mr. PRALL. Just a minute. The members of the subcommittee—

Mr. RORTY. I was just making that point, that it did not seem possible to shift carpenters into a maker of shoes, if you please, a shoemaker; but it is easy to shift a shoemaker to a carpenter.

Mr. PRALL. With all of the carpenters and plumbers and every other tradesmen out of work, to the extent of eight or nine or ten million, you do not think it would be necessary, do you?

Mr. RORTY. No; I am coming to that point.

Mr. PRALL. With so many men out of work, you do not think you would have to put a carpenter into a shoemaker's job, but that would be only after the time when labor was employed generally.

Mr. RORTY. Yes; then you may have gradual shifts.

Mr. PRALL. We have got nine or ten million men out of work now.

Mr. RORTY. I am making your very point, sir.

Mr. PRALL. All of this theory is very fine, but what are we going to do to put these men back in employment?

Mr. RORTY. That is what I was coming to.

Mr. STRONG. You say when business is good; we all know, when business is good, everything is lovely; but what are you going to do to keep it from getting bad, and when it is bad, make it good.

Mr. RORTY. That is what I am coming to. To have good business, you must have people employed in normal occupations and not to have them unemployed in normal occupations; you can not go back and forth between occupations, as I see it.

Now, to bring people back into their normal occupations I have suggested a thing that, at first sight, I know you will not look very kindly upon, but it will work, and it is this:

When you find people who hire carpenters and hire plumbers and hire men for new capital operations and new construction activities—when you find those men, they are afraid to hire them, afraid to risk it, afraid to risk their money in hiring them, then you have got to take them out of that sphere and put that money into enterprises that will start men back into their normal lines of occupation.

Mr. PRALL. Just how are you going to do that? We know that, everybody knows that.

Mr. RORTY. You agree with that, then, fully?

Mr. STRONG. I might save you a little time by saying that these Congressmen around here are men of normal minds, and come from all over the country, and have really some common information that all men have.

Mr. RORTY. What I was suggesting is a very simple thing: When a man is afraid to risk his money, you can cure his fear with money. In other words, I am proposing specifically, and I have proposed it in this way:

That we subsidize the normal lines of new activities, on the basis of getting bids. In other words, we advertise for bids for the starting of new construction work, and we make one dollar to do the work of \$10. In other words, by spending \$5,000,000,000, which is the sum being proposed here in Washington, for public works, which would start things and start up normal kinds of operations, we simply take \$1,000,000,000 out, and we advertise for bids for the starting of new activities—for instance, a man says he will start \$100,000 worth of work, of purchases of materials and pay rolls, for a 10 per cent bonus. In other words, for \$10,000, you made \$10,000 start \$100,000 worth of work, based on spending it directly out of the Treasury, and—

Mr. STRONG. In other words, your idea is that if the business men are too timid to go ahead and perform their natural, ordinary functions, the Government should give them a bonus to do it?

Mr. RORTY. Is there any other way to do it?

Mr. STRONG. Sure, there is.

Mr. RORTY. I am trying to talk in terms of plain human nature.

Now, suppose this is not a business man, but this is a farmer that wants to put up a barn, and if he wants to put up a barn, he will get his bonus, like everybody else. I believe that will start business and put labor to work.

Mr. STRONG. The trouble is that the farmer has not got anything to start with.

Mr. RORTY. As soon as we get people to work, the farmer will have no trouble. That is the way to cure the farmers' trouble, to get the people back to work; and if you can make \$1,000 start \$10,000 of work, I say that is distinctly better than putting \$1,000 to work and forget the other \$10,000.

Mr. BUSBY. I do not want to divert you, but you are assuming that if somebody had \$1,000 and spent it, that would start \$10,000 to work? That is the old theory about credit expanding about 10 to 1 to the currency put into operation, but I do not see it working out. You are assuming a lot of things that we think are not at all good in foundation.

Mr. RORTY. I am not talking loosely when I say 10 per cent; I am talking about what might happen when things were somewhat the other way. As a matter of fact, I have talked with a number of builders, a number of large contractors, and a number of people who are ready to start new construction, and I find—

Mr. BUSBY. They all want \$1,000?

Mr. RORTY. No, no.

Mr. STRONG. They want the 10 per cent?

Mr. RORTY. No; they say that 5 per cent at the present moment will start any volume of slum reconstruction in the United States.

Mr. STRONG. Who would not, if they were in business, and the desire to have a bonus of 5 per cent to carry on their own business, so as to relieve them from any chance of losing. Very well, where are you going to get the money to do that?

Mr. BUSBY. Where is the bonus coming from? It has got to be Federal money; where is it coming from?

Mr. RORTY. I would say the best thing is to take it right from Tom, Dick, and Harry.

Mr. STRONG. And give it to the contractors?

Mr. PRALL. You ought to sit in somebody's office and see some of the mail on this Federal tax question.

Mr. RORTY. All right. Now, you can start out probably without creating a heavy debt. You can start out with about \$300,000,000 of Federal borrowings for this purpose, and you need about \$50,000,000 a month for a year, and if this works—and it seems it might work—you would have put an end to the depression.

Now, you can start, I am certain, having talked with enough people, that I know that 15 per cent bonus on the new construction work, and it is only paid on your expenses for labor and materials—15 per cent will start almost every work that you want to start in the United States to-day, and it is a cheap way to buy human employment, and that is what you are after; you want to buy employment, and you want to buy it the cheapest way you can. Now, forgetting all of the argument, pro and con, if there is a cheap way to buy employment, use it.

Mr. BUSBY. Did you use that method when you were in business?

Mr. RORTY. When I was in business?

Mr. BUSBY. Yes, sir; when you were at the head of these organizations, did you suggest this type of plan for such organizations?

Mr. RORTY. There was no occasion to suggest them. This is a specific plan for relieving business depressions.

Mr. BUSBY. Financed by the Government.

Mr. RORTY. What?

Mr. BUSBY. Financed by the Government.

Mr. RORTY. To the extent of probably an average of 10 per cent, but it means that the Government, in place of using \$1,000,000 for \$1,000,000 worth of direct relief, will use \$1,000,000 to get \$10,000,000 worth of relief.

Mr. BUSBY. You are assuming an awful lot. I do not follow the logic of your assumptions that you have to assume; but if you are going to assume, why not assume we are out of the depression.

Mr. RORTY. No; for I have checked this out with enough people so that I am fully convinced—

Mr. BUSBY. You can take the \$10,000 theory and bring it to Congress, and with the responsibility on Congress—there is no responsibility on the people that are theorizing with you—and, consequently, we do not get anywhere.

Mr. GOLDSBOROUGH. Especially the man who is going to get the 15 per cent.

Mr. BUSBY. We are running at a deficit of \$2,000,000,000 a year, and halloing for a sales tax, and a deficiency in income, and all that stuff. I can not follow your reasoning.

Mr. RORTY. Well, now, I have been in business for a great many years, and I have learned to check things out a little bit in advance, and I have checked this out and applied the ordinary business operations, and I say, as a matter of business judgment, as the result of talk with people who would be in a position to take advantage of this, who are carrying on orderly operations of this kind, and I am convinced that a 15 per cent bonus would start a great lot of slum reconstruction. I have talked to people that are doing slum reconstruction to-day, and

I have talked with the head of one active section of the labor union, who is doing a lot of work on housing, a member of a labor union, and he showed me how, with 15 per cent, they could finance any amount of work.

Mr. PRALL. The Federation of Labor seems to think this is one of the best ideas that has ever been presented to get us out of this depression.

Mr. RORTY. You mean this particular bill?

Mr. PRALL. Yes, sir; that you object to.

Mr. RORTY. Well, my fear would come in any immediate threatening of changing the gold value of the dollar, the gold content of the dollar. The balance of it is left to the normal banking operations of the Federal reserve bank and—

Mr. GOLDSBOROUGH. Mr. Rorty, as I understand your views, you think that when the price level reaches a given point, a given point of business and general prosperity, in order to avoid overexpansion, and improper expansion, it is necessary to restrain the credit, and that the Federal reserve system has the inherent power to stabilize the price level at that point?

Mr. RORTY. To a very considerable extent, by its open-market sales of securities, and by raising the rediscount rate, it can check the expansion and force a price level.

Mr. GOLDSBOROUGH. Do you believe that there can be a substantial stabilization when the popular level, that is, the price level, which is based on all kinds of business, is reached; that the improper and unhealthy expansion can be restrained by the Federal reserve act?

Mr. RORTY. I think they have very great power in that direction, which it lacks in the reverse direction to force the price level up.

Mr. GOLDSBOROUGH. As I understand your contention, I assume it is something like this: That the people are now frightened and the first thing that must be done is to restore confidence. Am I correct in that assumption?

Mr. RORTY. That is right.

Mr. GOLDSBOROUGH. Your theory of this legislation, in connection with the Glass-Steagall bill or act, is that the Federal reserve system has available nearly \$4,000,000 in gold, which can be translated into nearly \$10,000,000 of Federal reserve notes, and if they were to announce a policy—I say this for the purpose of illustration, because I do not know what their method would be; but if they, after the passage of this legislation, would announce publicly and state to the public through the press of the country that they had been legislatively directed to raise the price level to a given point, and to use all of their powers for that purpose; and that, in pursuance of that direction, they proposed to go out into the open market and buy \$25,000,000 worth of Government securities every business day, until that level was reached, and not to stop until that was done, do you not believe that that would immediately reestablish confidence in the banking and business world? Here is society, as symbolized by the Federal reserve system, and they announce that they are not going to allow this thing to go on any longer, and they have got the power, they have got the resources to stop it, why would not that reestablish confidence among bankers and business men?

Mr. RORTY. My first answer to that would be that it would damage confidence, because that would be evidence that Congress

lacked confidence in the Federal Reserve Board and the Federal reserve banks. The Federal Reserve Board and the Federal reserve banks are afraid to do that to-day.

A great many of them think, as I do, that when you once have a real means of credit, that you can not actually force credit to use it, until you have confidence among the business men to start new operations.

Mr. GOLDSBOROUGH. The great mass of these people do not know the great resources we have. The average business man in my town, and yours, does not understand that we have resources enough to do exactly what we started out to do, under this legislation. Now, when the press announces that, and when their local banker tells them that it is going to be done, when the local banker believes it is going to be done and instead of continuing to contract, begins to lend, then will we not immediately see, from this reestablishment of confidence, a rise in prices?

Mr. RORTY. You must remember, Mr. Goldsborough, there is a little rebound there. There is a distinction between a long continued ease and rebound, that comes from removing the pressure of deflation. We have had a positive pressure deflation that has driven prices down. That is not what is contemplated by this bill, which is a restoration of the old prices. We will get a rebound, I think, rather quickly.

Mr. GOLDSBOROUGH. If there is a reestablishment of the confidence that is needed for this condition, this psychological condition that we are attacking, would not a policy such as you have suggested on the part of the Federal Reserve Board almost immediately reestablish the necessary confidence, and enable the business men, therefore, to get what money they need, and to go on and proceed with their normal business; would not the retailer, who would think the price levels were going to rise—would not he naturally buy from the wholesaler, the wholesaler, put his order into the manufacturer, and the manufacturer open his factory and give labor to the great mass of people which, in the last analysis, is what we are all after?

Mr. RORTY. You are asking me to be a prophet a little bit.

Mr. GOLDSBOROUGH. That is why we are here. We are here to try to find out what this sort of legislation will or will not do.

Mr. RORTY. My feeling is that, in the Federal Reserve Board and the Federal reserve banks, you have a group of trained, skilled men, patriotic men, and men who are just as anxious as you are to improve the situation.

Mr. GOLDSBOROUGH. Neither their patriotism nor intelligence nor character, I am sure, will be questioned in this committee.

Mr. RORTY. I realize that, but what I am getting at follows from the fact that you must give them credit, if you want to help this thing. If you have a contraction, here is a smash. I feel that it is a thing that Congress can do for the price levels and the money system, to-day, is to back up the Federal Reserve Board and the Federal reserve banks, find out what they feel can be done, and I think they probably would say that certain things can be done to enable us to help in the situation. They are just as anxious as you are to see these price levels come up.

Mr. BUSBY. You say they have the power to do these things, and you say they are anxious to do these things—

Mr. RORTY. I do not say they had the power; no. I want to qualify that. They have the power to buy, but whether they will buy is, of necessity—

Mr. BUSBY. We have the result of what they have done, in administering the system. Do you not think results speak much louder than empty words by you or by me, or by anyone else that comments on their disposition, or their information, to use the powers to help the situation in the country to-day? Do you not think that would indicate the Federal Reserve Board's disposition to immediately lend a helping hand?

Mr. RORTY. What you are implying is that they have not done what they should do.

Mr. BUSBY. I am not implying anything; I am telling you physical facts.

Mr. RORTY. Of course, you have to realize that we could have forced the currency off of the gold standard during the recent crisis. That is one of the problems the Federal Reserve Board had to think about.

Mr. BUSBY. I am not commenting on that, and I do not see that you have pointed out any dire result that would happen to the people, if that were to happen.

Mr. RORTY. I think that would have been a very serious blow to the confidence of the United States, a forcing off of the gold standard.

Mr. GOLDSBOROUGH. You have stated that the lowering of the amount of gold in the gold dollar, that is, raising the price, would disturb the confidence in the financial world? I understood you to say that.

Mr. RORTY. It might very easily mean a threat of that kind caused very heavy withdrawals of funds immediately in the United States.

Mr. GOLDSBOROUGH. Do you not know, as a matter of fact, that the average business man and the small banker and the person in the street do not have any information as to what the gold standard is, or why it is helpful or hurtful? This condition you speak of could only enter the minds of very large business men and bankers, who ought to understand there is nothing magical or mysterious—that there is nothing about the gold standard which, in itself, creates prosperity. Do you think that the big business man and the banker of this country know that the only merit there is in any metal standard is because it can act as a restriction, that it is limited in supply and, therefore, prevents unlimited expansion? That is the only possible or conceivable merit in any metal standard, is it not?

Mr. RORTY. I think that is very largely true. Premier Ramsay MacDonald, in England, said he had yet to see a government that he felt could be trusted to manage currency. I think that illustrates what could be done to currency. When you trace back away from the direction which the gold is flowing, the very large element is the fear that the people would be subjected to if a proposal of this kind became imminent. They would feel that, once having broken away from the gold standard, there was no telling what might happen under political pressure, and the fear that possibility may create is a real fear that you must take into consideration at this time. I say that

fear should not be created now. What we want is confidence, and I do not believe fear is necessary at that time.

Mr. GOLDSBOROUGH. Do you know of any confidence there is in this country now among any class of people? Do you know of any class of people, from rich to poor, that has confidence now, in so far as their immediate business transactions are concerned, in the monetary system of the country?

Mr. RORTY. Well, of course there is not, naturally, with the effort you are making, when it shows very little confidence anywhere in anything. I do not believe we can take that as an argument for taking the power out of the hands of the Federal Reserve Board.

Mr. RORTY. I have been fairly familiar, Mr. Chairman, with the arguments pro and con to some extent. I have heard the echoes of the discussion within the Federal reserve bank circles on this matter. In 1930 there was a rather good illustration of the difficulty they got into from attempting to go too far with price stabilization by means of open-market purchases, when the securities market in the spring of 1930, in spite of all appearances to the contrary, had risen to insane heights once more after the 1929 crash. We are absolutely certain to have another serious deflation on account of that unstable period of prices that still existed in 1930. It was not generally realized, but it did exist, because that has been my special study. If the Federal reserve bank in this open-market purchasing were exhausting their power to control the situation at a time when the situation was not controllable, when the condition existed that had to be liquidated, there is danger always in going too far with open-market purchases; it is a single-shot gun, if you please, and when you fire your one cartridge you are rather helpless. Now, that has to be considered in any approach to any problem. There have been so many times during these past two years when it seemed possible to stop the running down of things by bank action that you can not blame the Federal reserve banks for being cautious and not wishing to rush in and exhaust their power in that direction. I am sure I am speaking with some knowledge, and I say there is danger in forcing the heads of the Federal Reserve Board and the Federal reserve banks into a feeling of this kind. I believe that they do appreciate the importance of stabilization; I believe that they are seeking the moment when they can use their power.

I think they are correct in this respect, Mr. Chairman, that the banking tool is only one of the tools that should be used to control business fluctuation and business depression; and I believe that the danger in that attitude is that you expect them to do by banking means things that can not wholly be done by banking means; and I do believe that it will be highly desirable to have our price levels stabilized. I might not go as far as Professor Fischer would go, but I would go along with him perhaps in believing there is much to be gained that way, but I do not believe that is the only tool that can be used; and I think it is the fundamental effect in this bill that the stock of the Federal reserve bank and the Federal Reserve Board have the power to do a full job, and I do not believe they have.

Mr. BEEDY. Do you think section 3 calls for an exercise of any banking powers?

Mr. RORTY. Section 3 authorizes the Federal Reserve Board, as I read it, to change the gold content of the dollar.

Mr. BEEDY. It gives them the special power, but is that what you understand to be a bank's function, changing the value of money?

Mr. RORTY. Well, when it is the broad term, I would say it is not a usual banking term. It could be put in the category of a bank's functions, if you choose.

Mr. BEEDY. We might just as well authorize a special government official, who was a successful business man, with a knowledge of agriculture, to follow the price level and change the value of our money, to regulate it under constitutional provisions. It is not a bank's function to change the power of a nation's business.

Mr. RORTY. I mean in terms of banking and monetary terms; yes.

Mr. BEEDY. I asked that question simply to suggest the thought to you that the intent of Mr. Goldsborough was to combine in this bill the excess not only of the banking functions and powers of the reserve board—

Mr. RORTY. Banking and monetary, both. When I said banking function, I necessarily meant monetary and banking as a whole.

Mr. BEEDY. I think you ought not to carry away with you, or let yourself go out of here, with the thought that this bill confines itself to banking functions; and that, used in the solution of this problem, it is the broad conception of the task that they have.

Mr. RORTY. Yes; I realized that I used the word "banking" too loosely and incorrectly; but what I had in mind, taking the processes as indicated in this bill, I do not think that it would fully cover the ground; nor do I think that you can expect the Federal Reserve Board or the Federal reserve bank, with any such powers, to produce the results aimed at. In other words, I do believe it must be your measure of stimulation of business activity, combined with this monetary and credit—

Mr. BUSBY. Your statement impresses me as being from one who is entirely familiar with the securities field and securities operations.

Mr. RORTY. I worked on that quite a bit, yes.

Mr. BUSBY. Your business connections for many years have been almost wholly with securities organizations?

Mr. RORTY. In later years, yes, I have been in financial and economic work.

Mr. BUSBY. That includes stocks and bonds and such evidences of interest in economic organizations as you might come in touch with in that type of business.

Mr. RORTY. Yes, I have done some advisory work on investment lines.

Mr. BUSBY. On investment lines?

Mr. RORTY. Yes.

Mr. BUSBY. You stated awhile ago there was a great need for further deflation in May, 1930.

Mr. RORTY. The prices of securities, particularly the common shares, were still too high in relation to their fundamental soundness.

Mr. BUSBY. I was impressed with this thought: That that statement must have been made with regard to securities, and wholly disregarding the commodity prices.

Mr. RORTY. I was not thinking of commodity prices; I was thinking of the security market, which was still in the stage where further deflation had to take place.

Mr. BUSBY. You had no thought of a farm commodity, or the ordinary type of merchandise that enters into it?

Mr. RORTY. No, no; those prices were near enough to the normal levels, if we knew what the normal levels were. We knew there was no special need of bringing them down.

Mr. BUSBY. That was in 1930?

Mr. RORTY. Yes.

Mr. BUSBY. They were near enough the normal level? In fact, did you know whether there were not some of them, especially the farm products, that were below the normal level?

Mr. RORTY. Well, I should not attempt to say that.

Mr. BUSBY. You are not familiar with that line of values as you are with the security values, I take it?

Mr. RORTY. No; the main thing in the commodity price level, anyway, is not to have them vary extremely, since the commodity price level had not changed rapidly for some time; and that fact, in itself, made for a normal price level.

Mr. BUSBY. Do you not know that the commodities and things that people can produce with labor and considered the mass of our national wealth, is the one which is more or less handled by professional traders and professional investors, or those who invest their surplus funds in some revenue-bearing stocks or bonds, or like type of evidences of interest?

Mr. RORTY. I should not say that security prices ordinarily are artificial. Ordinarily, they represent certain real value.

Mr. BUSBY. I am interested more in your view of the commodity prices. Of course, all taxes and all interests on investments must be obtained through the commodity route and carried along up to where it is paid out as interest on investments, must it not?

Mr. RORTY. Yes.

Mr. BUSBY. And if we do not have fair commodity prices, we can not ultimately meet the payment of securities?

Mr. RORTY. I quite agree with you that the decline in the commodity price level, such as has taken place, worked a very great hardship and injustice to traders. That is, of course, obvious.

Mr. BUSBY. Well, do you not think that we must necessarily look not to the prices of securities, but to restore the price level of commodities, before this country can ever come out of the financial slump in which it finds itself now engulfed?

Mr. RORTY. I would rather reverse that. I believe that the price level will rise rather rapidly to a very substantial amount—

Mr. BUSBY. You mean of commodities?

Mr. RORTY. Commodities, with the increase in the business activities.

Mr. BUSBY. What business are you talking about?

Mr. RORTY. Business in general; I make no distinction; I talk in times of employment, if you please.

Mr. BUSBY. Well, employed labor produces commodities, though; it does not produce stocks and bonds.

Mr. RORTY. If you have employment and restore the purchasing power, I should expect to see your commodity price level rise.

Mr. BUSBY. Take the individual who is out of employment, he could go out and labor and produce a commodity, whether on the farm, in mining, or building, or whatever he may do; so, basically, commodity values must control all of these other things, must they not? Unless you force the commodity values, you can not expect your business activity to take on new life.

Mr. RORTY. That is just a question of sequence. My impression is that you get a beginning of improvement in business as their commodity prices go up; not that the commodity prices go up and you get an improvement in business.

Mr. BUSBY. I just want to say that I understand now why I could not understand you awhile ago. That is all the questions I have.

My view is that, when the great number of commodities produced in the scheme of things, giving a standing in evaluating our currency, when they look up in the price and the composites of all of those things produced by labor, on the farms and all, are given a better standard when you go to sell them, that necessarily raises business confidence and business activities start out, and you finally go on through to where the security and investment markets have benefited by reason of this beginning, this humble beginning with produce; and that, to my mind, is the only way a raise will ever come out of that lethargic and undependable price condition.

Mr. RORTY. If you looked at the thing in a very homely fashion, as our chairman and myself down in southern Maryland would look at it, I think you would find as a matter of experience and practice and history, that the beginning of the price usually comes with the beginning of business activities, and it is the beginning of the business activities which start the rises in prices, and then the rises in prices again stimulate business activity.

Mr. BUSBY. If we are going to start anything, we have got to stabilize from the commodity price standpoint, instead of the security or investment standpoint.

Mr. RORTY. No question about that. As far as stabilizing securities goes, there is no bearing on this discussion.

What I was trying to do was to make a special point, and that was that I think general experience and common observation shows that every rise in price comes with the beginning of business activity; the business activity starts first.

Mr. PRALL. Where does it begin?

Mr. RORTY. Business activity?

Mr. PRALL. Business activity.

Mr. RORTY. Well, when we talk of it, in terms of common observation, business activity usually begins with liquidation going to the point where someone borrows money to expand his existing activities, or to start new enterprises.

Mr. PRALL. Does not it come with the production of commodities of all kinds? Does it not really begin with the production of commodities and the employment of labor?

Mr. RORTY. I think it always starts with someone getting his courage up to borrow money to start a new enterprise, or expand an existing activity, that is always the beginning of people to act. I think we can say that not as Congressmen or business men, or anything more than the ordinary observers of what is going on.

For instance, some one says that labor is cheaper, and he will build a barn——

Mr. PRALL. You think we are all right if we have luck and things go right? That is what we are waiting for now; everybody has the idea that something is going to happen.

Mr. RORTY. It is a very slow process. I believe, myself, we have come to the point where we can stimulate things by taking a chance and starting something new.

Mr. PRALL. It is all right to talk about people putting money in this thing, or that thing, or the other thing, to take the risk, and all that; but if they have not the money, how are they going to put it in?

Mr. RORTY. Well, when you get your ease of credit, there is a good deal of credit around that can be used.

Mr. GOLDSBOROUGH. You think you could borrow money from a bank now?

Mr. RORTY. You should be able to very shortly, for a great many people can borrow still.

Mr. PRALL. May I ask why you say that we will be able to very shortly?

Mr. RORTY. Because I expect——

Mr. PRALL. What gives you the idea; what do you base your expectation on?

Mr. RORTY. I think these emergency provisions in the bills passed by Congress will operate to give an ease of credit, a positive ease of credit. I believe the last figure showed two rather substantial volumes of purchases, open-market purchases by the Federal-reserve banks. I believe they are buying now.

Mr. BEEDY. Do you think a plentiful volume of money in circulation, available, and low rates of interest, coupled with confidence, have anything to do with renewing business activity?

Mr. RORTY. Very much, but I think it will be rather slow.

Mr. BEEDY. So that the quantity of money in circulation is one factor; the low price of money, the low rate of interest, is another factor, evidence that the deflation has run its course; and the tendency to further flood the market with all kinds of commodities, irrespective of price, is another factor?

Mr. RORTY. Yes.

Mr. BEEDY. All of those things, taken together, and a certain length of time, generate confidence, and then the upward swing starts.

Mr. RORTY. People take a chance to invest money in new operations. That is my observation. I have been through as many panics as most of you, watching them, and doing business through them. Now, the only feeling that I have is, that we have gone so far down, the path back is pretty slow, in view of the suffering that is going on. Next fall, or next winter, we will be seeing still the same pretty distressed condition, even with the best amount of recovery we can have. I believe we are justified in using any positive stimulant to restore business activity.

Mr. BEEDY. Well, now, before we can issue a sufficient quantity of money to meet the needs of business, and quicken confidence, we have to have enough gold back of it, do we not?

Mr. RORTY. I think we have an adequate gold base.

Mr. BEEDY. Well, let us assume that we have an adequate gold base, and the Federal reserve system, at this stage of low interest, is

directed to exercise its powers; that thereafter, not as a matter of discretion, or act when it feels perhaps it is right to act, but right now, because this price level is low, and it goes right out and begins to buy bills and bonds and inject added money into the channels of trade—

Mr. RORTY. Yes.

Mr. BEEDY. It has already lowered its rediscount rate. Now, let us assume that that proves insufficient to start the upward trend in prices, to stimulate business; let us assume we have issued as much money as we can, on the amount of gold that we have, having satisfied the demands of the foreign nations, and then we should find ourselves where the Federal reserve system says: "You see, here is what we told you. You have told us to do these things, and we are unable to do it. We have bought all the Government bonds we can, and all the bills we can. We have got as many notes outstanding as our gold reserve makes possible."

Then we come to the third section and say: "All right, now you are authorized to raise the price of gold." You see what the inevitable consequence of that would be; the nations abroad that have any gold rush it right over here and get the added prices for it. Would not that start an inward flow of gold?

Mr. RORTY. I am not sure it would not be the reverse of that.

Mr. BEEDY. You mean to say that, if the other nations of the world have available gold, and they found that they could get more for it in America than anywhere else, they would not start shipping their gold into America?

Mr. RORTY. What you are doing is reducing the value of the dollar in terms of gold. That is the other side of the picture.

Mr. BEEDY. Reducing the value of our paper, but you are increasing the price of gold that we are willing to pay for with our money.

Mr. RORTY. Well, would you say that?

Mr. BEEDY. Well, I was asking you the question.

Mr. RORTY. The people who send gold here for the purpose—they send gold to buy our securities; but the chances are that the securities that were payable in gold bonds would not be any cheaper in terms of gold.

Mr. BEEDY. Let us assume that the Federal reserve system has gone as far as it can, and that the price level has not shown an upward rise that we anticipated, and now the Federal Reserve Board acts under section 3—

Mr. RORTY. I do not think that would make the gold worth more to foreigners any more than at home in the United States.

Mr. BEEDY. You do not think that would have any tendency to cause the foreign nations to ship some of their gold over here and buy some of our Government securities.

Mr. RORTY. No, I think it might be the contrary; it might cause them to withdraw the balances they had here, in the fear of another contraction or reduction in the gold value of those balances.

Mr. BEEDY. Well, believing that, of course, you can not support this bill.

Mr. RORTY. Well, I think that is rather obvious, possibly. I am not pretending to any superior knowledge, in making that observation, but it seems to me that is what I would do, and what you should do.

Mr. BEEDY. That is your honest point of view.

Mr. RORTY. Yes; and I think it is the ordinary man's observation that, if he had money in a foreign country, for instance, in Germany, if he thought German marks were going down, would he pull out the balances he had there? He certainly would, if he could.

Mr. GOLDSBOROUGH. Now, Mr. Rorty, have you completed your statement?

Mr. RORTY. Yes, sir; thank you.

Mr. GOLDSBOROUGH. The subcommittee wants to thank you very much indeed for going to the trouble and expense of time of coming down to appear before this subcommittee, and I assure you the subcommittee has been helped very much by your testimony.

Professor FISHER. May I ask one or two questions, Mr. Chairman?

Mr. GOLDSBOROUGH. Yes.

Professor FISHER. I have known of Mr. Rorty's plan for a long time. While I do not agree with a great deal that he said this morning, I think he has got a plan that is theoretically sound, but on such different lines from those of this bill that I am wondering whether he has made clear to you all what the points are, and I would like to try to bring that out. Possibly that may be unnecessary, but the points, as I see them, could be checked up with him, and we could see if they are correct. In the first place, I think he has got a memorandum there that you might like to have filed with you. He has been a little modest in developing his plan before you, and stated it very briefly.

In the second place, as I understood him, his main objection to this bill is that it will operate too slowly, and he wants something that will speed up things; he is not waiting.

Mr. GOLDSBOROUGH. That is not what he said, Professor Fisher.

Professor FISHER. Beg pardon?

Mr. GOLDSBOROUGH. That is not what he said. It is not worth while for you to testify for him.

Professor FISHER. No; I am going to ask him.

He wants to get things going fast, instead of waiting for the Federal Reserve——

Mr. GOLDSBOROUGH. I think, probably, Professor Fisher, you had better wait until you testify yourself.

Professor FISHER. That is all.

Mr. STRONG. The trouble with this proposition is, that no Congress would ever adopt it; no Congress would vote money out of the Treasury to give a bonus to a manufacturer to go on and bring prosperity. It might work, but it will not be done.

Mr. GOLDSBOROUGH. I believe, gentlemen, we ought to proceed in the regular order.

Mr. STRONG. Let us go on with our bill.

Mr. GOLDSBOROUGH. We have a representative here of the American Federation of Labor, and I promised him that he could testify this morning.

**STATEMENT OF W. C. HUSHING, LEGISLATIVE REPRESENTATIVE,
AMERICAN FEDERATION OF LABOR**

Mr. HUSHING. Mr. Chairman, I understand, of course, that you gentlemen are in possession of knowledge which is common to the country, as Mr. Strong has said; but in view of the trend of the

hearing this morning, I believe it is up to me to touch on a few of the high spots, as I see them.

Mr. GOLDSBOROUGH. Proceed in your own way, sir.

Mr. HUSHING. Prior to the World War, for a considerable number of years, machinery was being introduced into industry and the workers displaced thereby. New industries were coming along, however, such as the increased production of the automobile, the radio, the dyeing industry, the rayon industry, and so forth; so that a considerable number of those displaced were absorbed by those industries.

The economic situation we are now confronted with was due about the time of the World War, as I see it, but the World War staved it off, and not only this country, but the world, then went production mad. We went abroad and taught those folks over there how to produce goods with our machines.

After the war no more new industries came along, and this surplus of labor displaced by machinery kept piling up, until we came to the present depression, which is worse, worse than it would have been had it happened at the time the World War started.

Now, with all the displacement of workers in the industries, wages were not cut until recently, within the last year, I should say, that began. That meant that the individual worker who was employed, still retained his purchasing power; but the workers in the mass did not, on account of the large number displaced.

Now, practically the same thing happened to the farmer, with this exception: His income was reduced, because the price he was paid for his product decreased.

Now, it may seem a long step from the point I have made to the bill under consideration here, but it is tied up so together that it affects all industry, including the farmer. If the farmer can not get the money to buy things that labor produces, our industries are idle; and if our people are out of work and their purchasing power is decreased, we can not buy goods of the farmer. So it is all tied up, economically, between these two groups; and every time a bill was introduced in Congress which would benefit the farmers we have appeared here in behalf of those bills. We did not always understand the principle involved as well as they did, but we were in favor of them and helped, and Mr. Green, himself, said, before a committee of the Senate, in supporting those bills, that even though we realized that they might result in an increased cost to our industrial workers we favored them.

One of the things that is about to happen, I am afraid, is going to have a terribly adverse effect on this present depression. It may seem to most of you that a reduction in the pay of the Federal employees is of little consequence.

Yesterday we received a letter from Mr. Rainey, and I now want to read one paragraph of that letter to you. This is part of his letter to Mr. Green, which was dated March 19. The paragraph I refer to reads as follows:

A reduction in salaries, I regret to say, is inevitable. It will not mean much, but it will have a psychological effect on the people which will tend to alleviate the resentment and the disturbances which will happen in the near future and which present a grave danger indeed. If I have my way about the reduction of salaries, a man with a salary of \$1,000 a year will suffer a salary reduction of 83

cents a month. I am in favor of graduating reduction so that it will bear heaviest upon the larger salaries and lightest upon the small wage earners. The "spirit of retaliation and reprisal" you mention is abroad in the land to-day, and we must voluntarily yield to it, or make a gesture in that direction, or the result will be disaster.

Now, I agree with Mr. Rainey that this reduction in the pay of the employees of the Government will not amount to much, as he says, and he says 83 cents a month.

Mr. GOLDSBOROUGH. Who is that letter from?

Mr. HUSHING. From Mr. Henry T. Rainey, of Illinois, addressed to Mr. Green, March 18.

Mr. PRALL. May I ask a question?

Mr. GOLDSBOROUGH. Yes.

Mr. PRALL. Is it not true that if the Government brings about a decrease in the salaries and wages of employees, that industry will follow as an excuse; and that, instead of it being confined to Government employees, it will follow throughout the land?

Mr. HUSHING. That is the point I was about to make when I took up the question of the psychological effect.

Mr. BEEDY. Can you think of any other one thing that would accentuate this depression more than that one thing?

Mr. HUSHING. Nothing that I know of; and it is not only going to affect the worker, but it is going to affect the farmer.

Mr. STRONG. Nine-tenths of the Congressmen believe that, but what they are afraid of is that a bill will be brought in here, and they will not be willing to reduce their own salaries and, consequently, they will go on.

Mr. GOLDSBOROUGH. Well, now, Mr. Strong, I do not believe that, if there is any reason for it, there could be a separate bill reducing their salaries, that they would stand in the way of it; but what I am afraid of is, that this bill will be brought in in such a way that we have either got to vote for all of it, or none of it. I do not believe the Members of Congress want to vote for any reduction in these small salaried groups.

Mr. STRONG. I take the position that I would not vote to reduce a man under \$2,500, which leaves me the right to save my face by voting to reduce my own salary; but I do not think you can gain prosperity by reducing salaries.

Mr. HUSHING. Positively not.

Mr. GOLDSBOROUGH. Now, Mr. Hushing, one of the purposes of this bill is to try to approach this depression from the opposite point, instead of reducing wages, instead of cutting down salaries, the purpose of this bill is to enable business quickly to recover its normal function, and for normal prosperity to resume; so all of these other things will be unnecessary.

Mr. HUSHING. Yes. Let me say this to you, Mr. Chairman: You understand, of course, we are not financiers, and it would be foolish for us to come to the Committee on Banking and Currency and endeavor to tell you how this thing should be brought about, but we are in favor of the principles involved here, and we come here and indorse it, stand behind it heartily, and leave it to you gentlemen to figure out the details as to how it shall be made effective.

Mr. BEEDY. Have we interrupted your train of thought?

Mr. HUSHING. No.

Mr. BEEDY. You first spoke of the interdependence of farm and labor, the displace of labor by machinery, and then you came to salaries and its effect upon the industry at large, and the farmer; is that all you were going to say?

Mr. HUSHING. That was about all. I do want to say this: The question to-day is not whether the farmer can get the money to build a new barn, or laborers new houses; the question, first, is where to get something to eat. It is not even where to get money to pay mortgages on homes or farms, the question is, after getting something to eat, to get something to pay taxes, because many of them are losing not only their homes, but their farms on that account. So that, unless something is done, I can not see much opportunity for improvement.

Mr. GOLDSBOROUGH. Well, now, as we understand it, you are authorized to say that the American Federation of Labor is absolutely back of this movement in principle?

Mr. HUSHING. That is right.

Mr. GOLDSBOROUGH. Absolutely back of the purposes of this subcommittee?

Mr. HUSHING. Absolutely.

Mr. STRONG. You want the dollar to be stabilized in purchasing power?

Mr. HUSHING. Absolutely. As I said before, we are not financiers, and we do not know how it can be brought about, but we are willing to leave it up to the committee. That is about all I have to say. I thank you, Mr. Chairman.

Mr. PRALL. Is it not true that the conditions confronting the farmer confront all of the people—

Mr. HUSHING. Positively.

Mr. PRALL. Everywhere?

Mr. HUSHING. Yes; they are tied right together, as I endeavored to explain.

Mr. PRALL. The same mortgages, the same foreclosures, the same living conditions exist everywhere?

Mr. HUSHING. Yes.

Mr. PRALL. And among your members, and the small storekeepers and shopkeepers, and the large industrial plants; that is true, the whole country over, is it not?

Mr. HUSHING. More so than ever before.

Mr. STRONG. And one depressing thing is that the man who borrowed money when the dollar was down on the speaking acquaintance with us, now has to pay it back when it has gotten so high that it takes two or three times the production produced on a farm, or considerably more labor to pay off a dollar of indebtedness than it did before; at least it takes more than the dollar did when the money was borrowed.

Mr. HUSHING. Or to purchase the things the workers can produce.

Mr. BUSBY. I want to touch one point. It is my view that, in order for any degree of prosperity to return, it will be necessary for labor to be employed in productive places, and for commodities to be given a standing in the scheme of valuing our money, and that when all of these things are done, if they are done under this bill, which we believe they can be, then, automatically, when we cause prosperity, confidence will come back, and that it will not come by reason of cutting down or trying to reach the shrinking values that we are confronted with to-day.

Mr. HUSHING. That is true, but I do not believe it will cure the entire situation, with this new and modern machinery still coming into industry, because there is something else that must be done when these workers are displaced; you can not just discard them. The only solution we can find for that is to reduce hours, and our statistical department has figured out that if the hours for all workers are reduced to 35 a week, there would be no unemployment to-day.

Mr. BUSBY. There has got to be more jobs, or less hours for those at present employed on those jobs.

Mr. HUSHING. That is the only way we can see, to reduce the hours.

Mr. BUSBY. That involves another phase of legislation.

Mr. HUSHING. Yes.

Mr. STRONG. Of course, we have got to bring our position where people can make profits out of business, before they can pay these men for a less number of hours, and continue to do business.

Mr. HUSHING. That is true. In past times, however, there has been no difficulty about that.

Mr. BEEDY. In figuring the hours, you figure that a curtailment of the hours would take up the slack in the labor market. Have you given any thought to what the effect will be on the price level?

Mr. HUSHING. No; we have not; at least, I have not. We have a department that handles all that sort of thing.

Mr. BEEDY. I wish your society, when it figures on this reduction of ours, would also give us a little light on what that reduction in hours would do to the price level.

Mr. HUSHING. I shall be glad to take it up with the head of that bureau.

Mr. BEEDY. That particular thing, itself, might tend to increase prices, might it not?

Mr. HUSHING. I should think so.

Mr. BEEDY. At first blush, one might think so.

Mr. HUSHING. When you have underconsumption, naturally, the price level will fall. When the demand is increased, it usually comes up, just the same with the price of labor.

Mr. STRONG. It will tend to counterbalance the effect of improved machinery.

Mr. HUSHING. That is true.

Mr. STRONG. That is, however, the only balance you can figure out that will be effective?

Mr. HUSHING. That is all I can think of.

Mr. PRALL. For the purpose of getting it in the record, I would like for Mr. Hushing to tell us, officially, from memory, if he can, the approximate number of unemployed men in the country as of to-day.

Mr. HUSHING. Eight million three hundred thousand, not including the white collar workers, except a few school teachers who belong to our organization, and of which we keep a record, and a few employed in mercantile establishments who are also affiliated with our organization.

Mr. PRALL. Can you approximate the number of white collar workers, as you have termed them?

Mr. HUSHING. We have no definite figure on them.

Mr. PRALL. Have you any idea?

Mr. HUSHING. No; but it must be, on a percentage basis, as large as the people of whom we have records.

Mr. BEEDY. Do you mind telling us how you compute that 8,300,000; is that through a system of questionnaires sent out to industry?

Mr. HUSHING. Yes; and our bureau is in touch with certain organizations, and we have 32,000 of them throughout the country. We have 32,000 local organizations.

Mr. PRALL. And they report to you?

Mr. HUSHING. They report, and we make up our monthly reports therefrom.

Mr. BEEDY. So you finally arrive at the point, without overlapping, as of a fixed date; and say that, from a certain number of locals, representing so many industries, there were 8,300,000 men out of employment?

Mr. HUSHING. Yes.

Mr. BEEDY. Men and women?

Mr. HUSHING. Yes.

Mr. BEEDY. On what date did you arrive at that figure?

Mr. HUSHING. That is in the past month's report, just recently issued.

Mr. PRALL. Would you say that those of whom you have no record would amount to approximately—

Mr. HUSHING. Well, it would only be a guess.

Mr. PRALL. Approximately, how many? Have you any idea?

Mr. HUSHING. No, I have not; but we must not lose sight of the fact that there are large numbers working part time, in addition to these 8,300,000 I mentioned. For example, the great majority of our building-tradesmen, especially in the large cities, share time on a 50-50 basis.

Mr. PRALL. But you do not include those part-time workers in these 8,300,000 unemployed?

Mr. HUSHING. Oh, no; absolutely not. Our building trades in the larger cities work two shifts on the same job, in order to share the work among themselves. Of course, both of those groups are part-time employees, and we do not figure them. In fact, most everyone that follows a trade for a livelihood is glad to have half time, and considers himself mighty lucky to have it.

Mr. PRALL. Have you any way of estimating the amount in loss of wages, in dollars?

Mr. HUSHING. Mr. Green has stated before the congressional committees that it amounts to \$11,000,000,000.

Mr. PRALL. \$11,000,000,000?

Mr. HUSHING. Yes; and that is a lot of purchasing power.

Mr. PRALL. I should say so.

Mr. HUSHING. That is all—

Mr. BEEDY. Is it not true, also, that on many railroad systems, or some at least, where they have not taken a wage cut, men are dividing time with others who would, in the absence of such an arrangement, lose their positions?

Mr. HUSHING. Understand, Mr. Beedy, I do not speak for all the railroad organizations, that is, the four brotherhoods, as they are not affiliated with the American Federation of Labor; however, I do speak for the other 17 railroad organizations who are affiliated.

Mr. BEEDY. I said, is not that true of some railroads?

Mr. HUSHING. I believe it was practiced long before this 10 per cent reduction on the railroads was agreed to. Most of the railroad workers, as I see it, were in a little different position, as were the railroads, on account of the service that the railroads must render, in times like these, when they are obliged to run their trains for purposes that are obvious, and they must run them at a loss. Now, the brotherhoods evidently took those matters into consideration and agreed to this reduction, temporarily.

Mr. STRONG. Well, I have had occasion before—I do not know that it is pertinent to this hearing, but I think there ought to be a point of record of the willingness of labor in these days. I think they have contributed a good deal to the stability of the whole situation, through a willingness to cooperate.

Mr. GOLDSBOROUGH. We thank you, Mr. Hushing.

Mr. HUSHING. I thank you. We try to be as sympathetic and as reasonable as possible at all times.

Mr. STRONG. I would like to add this: If it had not been for the Federation of Labor's cooperation during the times we have had, I think we would have had some very serious disturbances in this country.

Mr. GOLDSBOROUGH. I agree with you, Mr. Strong.

Mr. STRONG. I think they have been for the better, and have been very fine.

Mr. HUSHING. We endeavored to keep the pledge we made to the President in regard to no difficulty about wage matters, and we did keep it. I am sorry to say that some of those on the other side of the fence did not.

Mr. GOLDSBOROUGH. You want to be heard again for just a moment, I understand.

STATEMENT OF ALVIN T. SIMONDS—Continued

Mr. SIMONDS. Mr. Chairman, I was very kindly heard yesterday, but I stayed over until to-day, because I was so much interested in what you are endeavoring to do, because I have worked on this matter actively, along with Professor Fischer, for the past 12 years, in fact, since the fall of 1919.

My great difficulty has been that, while you men are all actively interested in stabilization at the present time, I can not get any help at all at the most important time. The most important time is when business is too good to make it bad, intentionally make it bad.

Starting in the winter of 1919-20, our men were only willing to work four days a week, regardless of pay; buying silk shirts at \$22 a shirt, and then I believed something was wrong, and I predicted, on paper, to our own men, that they had better look after their savings because in the fall of 1920, they might be looking for jobs. They were. Every time there has been superactivity and things are going fine, you feel there is stabilization enough, and you feel that the only way you can avoid depression is to kill superprosperity. I find no help on that score.

Mr. GOLDSBOROUGH. Suppose we can avoid superprosperity, if we had stabilization, there is one thing it would do; it would restrain undue expansion.

Mr. SIMONDS. I agree, but you find, Mr. Chairman, if you have had the experience that I have had, that while you will get plenty of help to bring about anything to help depression, which I am fully with you on, you will find no help to recognize and stop superprosperity.

Mr. GOLDSBOROUGH. You mean false prosperity?

Mr. SIMONDS. False prosperity. What is purely illustrative of the problem is this: That in building railroads, we build them as level as possible, over hills and valleys. There is no way of getting over that valley, except to take the dirt off of the hill on both sides and put it into the valley; whereas, in the cycle of business, you can not take it off of the hill that is beyond you, but you must take all of the dirt off of the hill before you come to the depression. As far as I know, myself, and Paul Walters and Andrew Mellon, in a very subtle way, and the Federal Reserve Board, were the only ones who tried to stop this depression in 1928 and 1929, and I am on record to that effect. The Federal Reserve Board issued a warning, you will remember, in the spring of 1929, to which there was a terrible howl. They did not take any action; they just passed it on to the public.

Mr. STRONG. That was the trouble, they did not take any action.

Mr. SIMONDS. Yes; they talked about it, instead of taking action, and now, I agree with you sir, that they are also talking and not taking sufficient action, some action, but not sufficient action.

The world goes mad in periods of prosperity. I was in Florida at the height of the boom, and I tried to talk to the real estate fellows about the prices they were asking for real estate, and I was all by myself, and they said, "You go home and see your doctor. There is something the matter with your liver." And I said, "There will be something the matter with your liver before you get through with this thing." I said, "You should be interested in what this property will produce, not the price that is being asked," but they only laughed at me. I said, "What will it produce? Will it produce oranges or lemons or anything of the sort?" I said, "If you stay long enough in Florida you will be interested not in what you can sell it for, but what it will produce."

Now, I have spent a lot of time and a lot of money and a lot of effort on this stabilization, going back for 12 years, and I am very much interested, as Professor Fischer will tell you; and you gentlemen are doing a good thing, but you will not meet with any encouragement from the banking group, for they are too conservative. This gold proposition is such a habit and such a bad habit, that a tremendous amount of educational work must be done before you can bring about that third clause in your bill. I hope you will do it at this time, because you will not get anybody in this room, when business gets good, two years from now—you will not have a corporal's guard to help you push down business and keep it from going over the top.

So I hope, in spite of the fact of the testimony given before, that this is not the time to upset things, I say to you it is the only time you will be able to do it, or in the next five years, this is the only time you will be able to do it. If you can not get interest in this thing now, you will not get any 10 years from now. I thank you very much.

Mr. GOLDSBOROUGH. I thank you very much.

Now, gentlemen, on to-morrow and Thursday, Mr. Stegall's subcommittee is going to use this room. Friday is Good Friday. So the subcommittee will not meet again until next Monday at 10.30,

when Governor Harrison, of the Federal Reserve Bank of New York, will be heard, and Professor Fisher, of Yale University, will be heard, and also Governor Meyer of the Federal Reserve Board, if he will attend. I do not know whether he will care to attend and testify or not, but he will be invited.

Mr. STRONG. Mr. Chairman, I would like to have Governor Meyer here. I think we ought to know what the Federal Reserve Board has done in the last two years regarding the buying and selling of securities, and the raising and lowering of the rediscount rate. I think that ought to go in the record.

Mr. GOLDSBOROUGH. Mr. Strong, I wrote a letter to Governor Meyer about these meetings, and I also talked with him. He wrote me that someone would be here, and a gentleman did come and introduce himself to me the other day and said he was from the Federal Reserve Board. That is he over there by the door. Now, he indicated, of course, that the gentleman he would send down, would have no authority whatever to speak for the board on matters of policy.

Mr. STRONG. Whether they favor or do not favor the bill, I think they ought to come down here.

Mr. GOLDSBOROUGH. He did not indicate at all, in my talk with him over the telephone, that the board would care to come. I do not know that we could do anything more than tell him we would like to have him.

Mr. STRONG. I think, if the chairman writes him a letter to come, he will come.

Mr. GOLDSBOROUGH. I am going to suggest this: With the consent and with the approval of the subcommittee, I will request Mr. Meyer, Governor Meyer, to come here next Monday.

Mr. BEEDY. If you are going to have Doctor Fischer and Mr. Harrison, clearly you can not get to Mr. Meyer, but we can get to him Tuesday.

Mr. GOLDSBOROUGH. I think Tuesday is all right. If the subcommittee thinks proper, I will ask him to come Tuesday, and we will have all of the rest at 10.30.

(Thereupon the committee adjourned to meet at 10.30 o'clock a. m. on Monday, March 28, 1932.)

STABILIZATION OF COMMODITY PRICES

MONDAY, MARCH 28, 1932

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON BANKING AND CURRENCY,
Washington, D. C.

The subcommittee met pursuant to adjournment, at 10.30 o'clock a. m., in the committee room, Capitol Building, Hon. T. Allan Goldsborough presiding.

Present: Messrs. Goldsborough (chairman), Busby, Prall, Strong, and Beedy.

Mr. GOLDSBOROUGH. Gentlemen, members of the committee, Governor Harrison, of the Federal Reserve Bank of New York, was to have testified first this morning. He telephoned me on Saturday and said that he had a brother who was desperately ill and whom he could not leave, but that he wanted to come as soon as possible. He has great interest in the discussion.

Governor Meyer, of the Federal Reserve Board, called me up Saturday and said that he, in answer to an invitation which had been extended to him, desired to appear before the committee, but was not quite ready and suggested that he be heard next week. The subcommittee will act on that, but I presume what they will do will be to try to fix a date that will be suitable to both Governor Meyer and Governor Harrison and then hear them.

The purpose of the committee, however, is to bring some legislation before the full committee at the earliest possible date for action by the full committee.

This morning we have with us Prof. Irving Fisher and we will be very happy to hear Professor Fisher in his own way. When he completes his statement, we will probably want to ask him some questions.

Professor Fisher, would you please give your name to the reporter and state your connections and your interest in economic legislation?

STATEMENT OF PROF. IRVING FISHER, YALE UNIVERSITY, NEW HAVEN, CONN.

Professor FISHER. Mr. Chairman and gentlemen of the committee, my name is Irving Fisher, professor of economics at Yale. I have been a special student of money problems, particularly since 1911, when I published my first book on *The Purchasing Power of Money*.

Since then I have published a number of other books more or less relating to the subject.

Mr. GOLDSBOROUGH. Will you give a list of them and when they were published?

Professor FISHER. Those that are particular related to this bill are: *Stabilizing the Dollar*, first published in 1920, I think. I am not sure. This edition I have before me is 1925.

The Money Illusion, published in 1928.

Why The Dollar Is Shrinking, 1914.

The Making of Index Numbers, 1923.

I appeared before the committee twice on similar bills, once in 1922 and once in 1926.

Mr. GOLDSBOROUGH. I think you also appeared in 1923 and 1924.

Professor FISHER. Yes. There were two sets of bills, those introduced by Mr. Goldsborough and by Mr. Strong. I am very much in favor of this legislation or any legislation which will accomplish the purpose which, in a nutshell I think, is to enable the people now in debt to pay their debts and to pay those debts on the basis on which they contracted them, or more nearly so than at the present price level; that is, when the payments are translated in terms of cotton, wheat, or other commodities.

In fact, I think any legislation that will accomplish this purpose is by far the most constructive legislation with respect to the depression. It is by far the best form of farm relief and is not special legislation. It is by far the best form of antiunemployment legislation and is not special labor legislation. It is by far the best basis for balancing the Budget, for it would lead to the recovery which would restore the goose that lays the golden eggs. You can not tax a vacuum.

The other measures that have been tried, although good, are inadequate. The subsidy for public works to make employment, the moratorium for intergovernmental debts, the National Credit Corporation, the Reconstruction Finance Corporation, the Glass-Steagall bill, which I think is the most constructive so far, and the antihoarding campaign, are all inadequate and need—as the capstone, or foundation, or most important supplement—the passage of this bill or something that will accomplish the same purpose.

The bill embraces two main points. It raises the price level and stabilizes it after it is reached. Both of these, it seems to me, are necessary if we are to restore prosperity and maintain prosperity. I thoroughly believe that stabilization legislation is destined ultimately to come, that now is a golden opportunity which, if it is lost, will not come again for many years.

THE STABILIZATION MOVEMENT

This movement toward stabilization is not a new movement. Academically it goes back a long way. When I published my first book on stabilizing the dollar, I spoke in the preface of the various people who had preceded in this study. The earliest definite proposals similar to those in this bill were those of John Rooke, 1824, in a book called *Inquiry Into The Principles of National Wealth*, published in Edinborough, 1824, in which he said:

The regulation of the new system is that in whatever proportion the general and annual price of farm labor throughout the kingdom has a tendency to rise or fall, that rise or fall shall be counteracted by a reverse rise or fall in the current price of the gold and silver coin.

That is to be found on page 221.

Then Simon Newcomb, the distinguished astronomer or astronomer-economist, because he also wrote on economics, one of the leading men of science produced in this country, a former resident of this city, proposed very much the same thing.

Prof. Alfred Marshall of Cambridge University, who during his lifetime was the dean of economics in the world, had an article called "Remedies for Stabilization of General Prices," in *The Contemporary Review* for March, 1887. He gives two possible plans, one of which is similar to that in this bill.

Then, as I said in the preface, you will find a number of other people, including Dana J. Tinnes, of North Dakota; Mr. Shibley, here.

In 1913 one of the first drafts of the Federal reserve bill contained a proposal similar to the first section in this bill. That was put in by Senator Owen. You know the Federal Reserve Act was the Glass-Owen bill, but the stabilization provision was taken out by the conferees representing the House, during their conference.

Congressman Husted in 1919 introduced a bill for stabilization; Congressman Dallinger shortly after; Congressman Goldsborough in 1922; Congressman Strong in 1926. There were extensive hearings on both of these last two bills.

The idea of stable money has been promoted, but without recommendation for any method, by the Stable Money Association. This was organized merely to promote the idea of stabilization, being specially careful not to recommend any particular method, because there are so many methods to choose from and to disagree about.

The present president of the Stable Money Association is Frederick Delano, formerly of the Federal Reserve Board. Paul Warburg was one of the honorary vice presidents, formerly of the Federal Reserve Board. A number of men of great prominence were connected with it in one way or another. Among the founders we find the names of Bernard M. Baruch, R. Fulton Cutting, Pierre S. du Pont, George Eastman, Otto H. Kahn, Thomas Nelson Perkins, John J. Raskob, Alvin K. Simons (who has appeared before this committee), Alfred P. Sloan, jr., Silas H. Strawn, and Owen D. Young.

Among the honorary vice presidents are Nicholas Murray Butler, John W. Davis, Charles G. Dawes, William Green, Frank O. Lowden, Elihu Root, Sir Josiah Stamp, Paul Warburg.

These are only a few of many distinguished people who have been on record as favoring the idea of stabilization. Whether or not all of them or any of them would favor this particular bill, I do not, of course, know.

For every one person who was interested in this matter at the last stabilization hearing in 1926, I would be of the opinion there are now over 1,000 people interested. In fact, you have two great groups interested, the farmers and labor. Practically all economists, so far as I know, are in favor of stabilizing the dollar, although they are not yet altogether agreed as to what are the best methods.

Ex-Senator Owen quoted from the distinguished Swedish economist, Gustav Cassel, when he testified before this committee. I would like to quote from him also. In his book on Money and Foreign Exchange After 1914, published in 1922, Cassel (p. 254) says:

The only quality demanded of a monetary system which is of any importance for promoting the trade and general welfare of the world, is stability.

Reginald McKenna, who was formerly Chancellor of the British Exchequer, who is now president, or, as they say in England, chairman, of the Joint City and Midland Bank, the largest bank in the world

(unless it be exceeded by the Chase in New York or the National City), at the annual meeting, January, 1922, said:

The truth is of course that both (inflation and deflation) are bad. What is needed is stability, the point from which both alike proceed in opposite directions. When we have stability of prices we have a basis upon which trade can be carried on with confidence.

I quote from him again, or at any rate from his journal, The Midland Bank, Limited, Monthly Review, in an article called "The Problem of Gold Values Regulating Demand or Supply, 1927," where we find:

History has shown that apart perhaps from wars and religious intolerance no single factor has been more productive of misery and misfortune than the high degree of variability in the general price level. This may sound like an extravagant statement, but so far from being of the nature of a demagogic outburst it is clearly demonstrable from the course of events in various countries ever since money became an important element in the life of civilized communities. A stable price level is a thing to be desired, second only to international and domestic peace.

There are other bankers who favor this. You had one appear before you the other day, and recently Dr. Royal Meeker, formerly labor commissioner, now my associate in New Haven, received this letter from a banker in Texas whose name I will not give, as I am not authorized; not that he would object, I am sure:

When the deflation scheme was put on 11 years ago and I began to explain to the boys the fallacy and the fearfulness of the thing, there were few men round here who understood what I meant. They are bright, well-informed, and thinking men, but they had never thought on that subject. Not many men who did not pass the nineties had thought much about money and its relation to business; not many knew that there is such a thing as a "unit of measure" and that it can be and is monkeyed with, and that it has more to do with "success" of the average man than energy, enterprise, and economy. * * *

It is discouraging and sickening to read all that stuff spouted by the inerudite about the fear of an "inflation." They simply do not know anything about the real situation. They do not even know where, when, nor how their own bread is buttered. Their policy has killed agriculture, and now the inability of agriculture to consume as well as to produce is killing all the industry and investments. The mountains of smaller unit debts stacked up during and right after the war (yes, there are billions still unpaid) are eating up all the purchasing and consuming power. That is the potent point. And there is no way of earth to "revive" business until a way is provided for the paying of these debts. When men can pay their debts then they can go ahead consuming; then business will move. And these smaller unit debts never can be paid except in the same kind of money. France, Spain, Italy, and Belgium had wisdom enough to know that and acted accordingly. Now practically all the farm mortgages in France are paid off and the people can go on with this business; while our nine billions of farm mortgages never can be paid if the present policy is persisted in.

I would like to quote from Lord D'Abernon on German Currency: Its Collapse and Recovery, 1920-1926. Lord D'Abernon is or was a banker before he was a peer. He was Minister of Great Britain to Germany in 1921 and for several years. I met him there in 1922.

There is a kind of ironical justice in the fact that the classes in Germany who in the end suffered the most heavy losses from inflation were those who were the

most favorable to it in the early stages. They imagined that loans contracted on a given date and repayable six months later in paper would be repaid by them on very advantageous terms, providing large note issues continued to be made. They not unnaturally held that a currency dispensation which facilitated such a pleasant business could not be wholly vile or radically unsound. As long as currency depreciation remains within moderate limits their calculation was sound, but the final result was that, when the ultimate crash came, all the profits which had been acquired through this astute calculation vanished in the catastrophe, and the excessive issues which they had favored led to the confiscation of so large a portion of their holdings that their temporary gains were more than swept away.

He was then speaking of the evils of inflation, but he was also against the evils of deflation. He was in favor of stabilization.

John Maynard Keynes, perhaps the leading economist of Great Britain to-day, a man whose advice, if followed, would have saved us a great deal of foolishness in regard to war debts and a great deal of foolishness in England in regard to resuming gold redemption without devaluation, and a great deal of foolishness in the last few years—his recent book on his efforts at “persuasion,” shows on how many occasions his advice was rejected and ought to have been accepted. He said, in his article, *Gold in 1923*—that was the title of the article in *The New Republic*, February 27, 1924:

Currency reform has two objects: To remedy the credit cycle and to mitigate unemployment and all the evils of uncertainty, and to link the monetary standard to what matters, namely, the value of staple articles of consumption, instead of to an object of oriental splendor, it is true, and one to which Egyptian and Chaldaean bank directors attributed magical properties, but not otherwise useful in itself and precarious in its future prospects.

I would like also to quote from Prof. E. W. Kemmerer, a distinguished American economist who is sometimes called “the money doctor,” because his advice has been so often sought and taken by other countries, especially in South America, for reforming their currencies. He was at one time president of the Stable Money Association, and at a meeting of the Stable Money Association, December, 1927, he said:

* * * The world sooner or later must either learn how to stabilize the gold standard or devise some other monetary standard to take its place.

There is probably no defect in the world's economic organization to-day more serious than the fact that we use as our unit of value not a thing with a fixed value but a fixed weight of gold with a widely varying value. In a little less than a half century here in the United States we have seen our yardstick of value, namely, the value of a gold dollar, exhibit the following gyrations: From 1879 to 1896 it rose 27 per cent; from 1896 to 1920 it fell 70 per cent; from 1920 to September, 1927, it rose 56 per cent. If, figuratively speaking, we say that the yardstick of value was 36 inches long in 1879, when the United States returned to the gold standard, then it was 46 inches long in 1896, 13.5 inches long in 1920, and is 21 inches long to-day.

Of course, it has a varied a great deal since then.

Mr. STRONG. I would like to state right there that Professor Kemmerer delivered a very splendid address before about 50 Members of the House, some of whom are here present, the past week, in which after telling us of the serious condition of the country and the world, his final advice was to do nothing about it.

Professor FISHER. Professor Kemmerer has enlisted the countries of most of the world to get on to the gold standard as the first step toward stabilization. He, I believe, judging from what I have heard him say, is afraid that his advice to these people will not be under-

stood by them if he should now say that he does not think the gold standard is as good as he thought it was then.

Mr. STRONG. I think he has also continued his policy with the Stable Money League of being for a policy and not a plan. He evidently never wants to reach a plan.

Professor FISHER. I quote next from Paul Warburg, when he was chairman of the committee on banking and currency of the Merchants' Association of New York, May 24, 1927:

The association shares the view universally held that the interest of the country is served best by the greatest possible stability of price levels, and believes that in fashioning their discount and open market investment policy, the Federal Reserve Board and the Federal reserve banks should ever be mindful of this aim.

* * * It would be dangerous, however, to permit the fallacious impression to assert itself in the minds of the people that the Federal reserve system (no matter how much its officers might bend their efforts in the direction of obtaining price stability) could be held responsible for failure in attaining this ideal which, as already stated, could only be reached by the cooperation under a common plan of forces entirely outside of the Federal reserve system's control, not only in the United States, but all the world over.

John R. Commons, who as you know is professor of economics, Madison, Wis., in an article in the North American Review, "Farm prices and the value of gold," January and February, 1928, says:

Congress has given to them as a system authority for concerted action which enables them, as has been explained, to control the value of gold and the general level of world prices, but Congress has laid down no policy except the vague "accommodation of business and commerce," thus putting on the Federal reserve authorities the unfair responsibility of using their uninstructed and private judgment as to what is needed by, and desirable for, the country from time to time. This omission has already caused a division within the system, as to whether the rate of rediscount should be uniformly lowered in order to help Europe buy American farm exports, or kept at a higher rate to aid the bankers in making profits. Had Congress retained the first draft of the Federal reserve bill, which would have instructed the system to maintain stability of the general price level, the wholesome effect of a definitely known policy might have been enjoyed. Even the extreme fluctuation of 1919 and 1920 might have been avoided by stopping inflation sooner and making the deflation less severe, just as afterward a price inflation was stopped in 1923 and a price deflation was controlled in 1925. * * *

Now I want to quote from a German economist, W. A. Schulze-Gaevernitz. He wrote to me, coming over to this country September 27 last, from the steamer. I am leaving out most of the personal matter. He says:

It is wonderful, though very painful, how your theory is verified by the facts. I really believe that the world depression was to be avoided if according to your advices the value of the dollar would have been stabilized. But even now it might not be too late. The chief thing in order to give a turn to the cycle seems to be to cut down the value of the dollar and by that make the prices rise again. America with its enormous hoards of gold can do so without leaving the gold standard. I am sure that you and your adherents have worked out the technical side of the matter.

Incidentally, I may say that he was a member of the Reichstag at one time and was the first German to be on any committee of the League of Nations before Germany joined the league.

I would like to quote from Sir Josiah Stamp, formerly a professor of economics, now chairman of one of the largest railways in England, what we call president, and is a director of the Bank of England. He has been to this country frequently and is coming over here again in April and will speak before the American Political Science Asso-

ciation in New York. He wrote an introduction or foreword to my book, *The Money Illusion*, the English edition. In this foreword he says:

Money as a physical medium of exchange made a diversified civilization possible. * * * And yet it is money, in its mechanical even more than its spiritual effects, which may well, having brought us to the present level, actually destroy society * * *.

Everything depends upon whether our combined and international wisdom can master the next stage of monetary science. Certainly the old ideas and practices will no longer serve.

I have long said that a new development in monetary knowledge is the most important single problem of our age—more important than unemployment, industrial peace, or capitalism, because fundamental to them all. * * *

The number of thinking men who appreciate, ad hoc, the fact of monetary fluctuation is now not small, but the proportion who carry that appreciation into the other fields of thought as a persistent element in them all is singularly few. It means the same kind of effort of mind as the realization of terrestrial or astronomical motion. Even when realized it is deemed a little pedantic to insist upon it.

The revolutionary proposal embodied in the Dawes plan to make the annual reparation burden fluctuate with the value of gold, passes with little or no comment whereas "interference" with the monetary burden by altering the aggregate, the period of years, or the rate of interest for reparations or international loans excites political feeling at once. * * *

Whether our monetary standard is to be of pure and visible gold or an unseen one managed by a golden handle, or whether gold is to have no more effect upon the price level than the mercury in the thermometer has upon the temperature, the next decade will more clearly show.

He was the man who, more than anyone else, got into the Dawes plan that provision, to which he refers in this quotation, to make the annual reparation burden fluctuate with the value of gold. Unfortunately it was left out of the Young plan. The consequence is, with the change in the price level, there has been an enormous increase in the reparation burden.

I would like to quote now from Gov. Benjamin Strong, then governor of the Federal Reserve Bank of New York, in *Collier's Weekly*, 1923:

Therefore, is not the fundamental condition of industrial and national tranquility that of a reasonable stability of prices, as from 1909 till toward the close of 1915?

I believe with Mr. Henry Ford that what the great body of our workmen most desire is security of employment and an adequate wage that represents a fairly even and stable purchasing power.

Then I quote from Adolph C. Miller, member of the Federal Reserve Board, at a joint conference of the chairmen and governors of the Federal reserve banks, in Washington, October 26, 1921:

We should seek just as earnestly to avoid deflation as we should to avoid inflation. By inflation I mean an expansion of credit that eventuates in a rise of general prices. By deflation I mean a restraint of credit that eventuates in a fall of prices. Good economic and credit policy will endeavor to steer a middle course between these two dangerous shoals.

SOME IMPORTANT STEPS

One of the most important steps in this movement towards stabilization was the adoption by 35 nations unanimously at Genoa at the economic conference there in 1922 of certain resolutions from which I will quote. This in on page 129 of my book, *The Money Illusion*:

At several international conferences following the World War the question of stabilizing the buying power of money was discussed. Finally, at the economic

conference at Genoa in 1922, an epoch was marked by the unanimous adoption, by the representatives of more than 30 nations, of resolutions favoring such stabilization, and indicating some of the methods to be employed. These included cooperative action among the great central banks of the world concerning the use to be made of gold reserves and as to the discount policy to be pursued. These economic experts, at the Genoa conference, recommended:

"The essential requisite for the economic reconstruction of Europe is the achievement, by each country, of stability in the value of its currency."

They then proceeded to outline the specific steps which should immediately be taken, adding:

"The purpose of the convention would be to centralize and coordinate the demand for gold, and so to avoid those wide fluctuations in the purchasing power of gold, which might otherwise result from the simultaneous and competitive efforts of a number of countries to secure metallic reserves."

Then recently, only last year, there was an official report by the Lord Macmillan committee on finance and industry, to Parliament, some paragraphs from which I would like to quote:

275. Thus our objective should be, so far as it lies within the power of this country to influence the international price level, first of all to raise prices a long way above the present level and then to maintain them at the level thus reached with as much stability as can be managed.

276. We recommend that this objective be accepted as the guiding aim of the monetary policy of this country. The acceptance of such an objective will represent in itself a great and notable change. For before the war scarcely anyone considered that the price level could or ought to be the care and pre-occupation, far less a main objective of policy, on the part of the Bank of England or any other Central Bank.

278. At the same time we see no great reason to doubt the feasibility of attaining the objective of a higher price level in due course, provided that the Central Banks of the leading creditor countries will work together with this end in view. No one would doubt the ability of a closed monetary system to bring about a rise of prices; in fact it is only too easy. Thus the chief ground of hesitation is the difficulty of securing adequate cooperation among central banks, rather than any obstacle inherent in the nature of the problems. The subsequent maintenance of stability may prove more difficult but experience alone will supply a confident answer.

There are other quotations that might be made as, for instance, from the League of Nations committee on the purchasing power of gold and the League of Nations committee on the present depression.

The only very definite stabilization that has been actually practiced is that that was initiated by Governor Strong of the Federal Reserve Bank of New York and it worked extremely well until he became sick and died. He was opposed to Congressman Strong's bill, but I understand from Professor Commons and from Congressman Strong that he altered his opinion before he died. Perhaps Congressman Strong will add to that statement.

MR. STRONG. I want to say right here that the bill that I introduced in Congress providing a study of the Federal reserve system and containing practically the same language which my present bill contains, was prepared at the direction of Doctor Strong and had his approval, before I introduced it. I have his correspondence. I think you may have seen it. It is on that subject.

PROFESSOR FISHER. Yes. That is a copy of a letter that you sent to me at one time [indicating letter].

One reason why Governor Strong's policy somewhat largely has lapsed was, I think, that the small workable committee which he initiated for the open-market operations was absorbed into a larger "conference."

Mr. GOLDSBOROUGH. Will you explain what he did do, and when he began to do it, and go through that, because the committee, I am sure, thinks that that would be extremely interesting and important.

Professor FISHER. There are others who could testify more definitely in regard to that. Roughly and briefly, it was, I think, in 1921 or 1922 that he felt confronted with the situation which the war and the deflation of 1920 had brought about, that America was possessed of an enormous surplus of gold, and that if that surplus were not in some way substantially "sterilized" or prevented from having the effect of inflation, that inflation would ensue. He felt that he was "confronted with a condition, not a theory," and in order to prevent the terrific evil of inflation, after having had the terrific evil of deflation, he undertook to prevent the gold from having this effect; and in order that the various banks should not be working at cross purposes, he joined with the governors of the Federal reserve banks of Boston, Philadelphia, and Chicago, making an original committee of four, afterwards five, including Cleveland, to buy and sell Government bonds in the open market, and to utilize that power which the Federal reserve had to prevent inflation and also to prevent deflation.

This operation was in conjunction also with changes in the rate of discount of the various Federal reserve banks, and the one was used somewhat in preparation for the other.

There was a lag in this operation, he found—I remember his telling me—largely because if the banks were in debt to the Federal reserve banks, the first effect of putting new purchasing power in their hands by buying up the member banks' Government securities was for them to use this additional money, not as the basis for loans to the public, but as a means of paying off debts to the Federal reserve bank, and until they thus got unhooked from the Federal reserve banks, the effect upon the price level was not very marked. But after that it would have its effect, and so, in this way by skill, foresight, and persistence as well as the cooperation of the other people—because he had a forceful personality that enabled him to get almost the unwilling cooperation of others—he succeeded or they succeeded. It may have been partly good luck, as has sometimes been claimed; but, at any rate, they did succeed in maintaining a fairly stable price level for some nine years.

Does that answer your question?

Mr. GOLDSBOROUGH. Yes.

Professor FISHER. Another reason for the lapsing of this movement, as it apparently has lapsed to some extent, a considerable extent, was that these purchases naturally influenced the bond market, and the bankers who did not understand the supreme importance of stabilization at the cost of any upset in the bond market or anything else, but who did see changes in the price of bonds, causing them sometimes to lose money—because when bonds were persistently purchased prices went up, and with the ceasing of purchasing the bonds came down and the banks registered a loss on their books, which they did not like—felt that some other way should be found. Recently the effort, as I understand it, has been to substitute short-term acceptances for bonds in the buying and selling, and there has been a great growth in the purchase of bank acceptances. There has been very little, if any, in the way of sales, but their term is short so that they

expire before long, so that the expiration or liquidation it is equivalent to a sale. But this sort of open-market operation has not had the same effect as buying and selling bonds in the open market, because these acceptances were purchased over the counter; the initiative came from the bankers, who presented the acceptances rather than from the Federal reserve banks, so that they could not so aggressively perform this operation with acceptances as they could with bonds.

I have given two probable reasons why this stabilization of prices has largely lapsed, but I believe myself that the chief reason is that they have never had any mandate to stabilize, and they have never wanted to confess a distinct responsibility to stabilize. This is natural; it is human nature not to have wished upon you a job that you may not be able to do satisfactorily. I can realize well how anyone in their place would feel a reluctance, if they could avoid it, to take over a new responsibility so onerous as this. But the point is they have the power already and they feel to a certain extent the responsibility, though they do not apparently want to be known to have that power or to be known to have that responsibility, for fear that the power may not be adequate for the responsibility.

Now, Sweden is reported to be initiating a stabilization plan, and I have verified that by talking with Mr. Ivar Krueger, whose tragic death by his own hand you have read of in the papers. He was a guest of the Stable Money Association about two months ago, and I sat next to him and asked him if it was true that the Riksbank of Sweden was intending to stabilize the price level in Sweden. He said that it was, I got the information originally from an article called "The suspension of the gold standard," in an issue of *Skandinaviska Kreditaktiebolaget*, where it was said:

It may be objected that the prevailing depreciation is due to other factors, such as injudicious expansion, accumulated stocks of goods, and so forth. Such objections, however, do not invalidate the contention that it is urgent to make every possible effort to perfect the monetary system. Such endeavors should aim at maintaining the value of money, as far as possible, constant.

This aim, of course, can be attained even with a paper currency. The proposals on these lines submitted by several well-known political economists, e. g., Wicksell and Keynes, the essential feature of which is that the value of money should be regulated according to a price index, are now being tested in practice by the Swedish Riksbank. The latter has made arrangements for the compilation of a price index, covering both wholesale and retail prices, and specially adapted for serving the purpose indicated. It is noteworthy that the Riksbank has thus set up a definite goal for its monetary policy in the immediate future. And as the Swedish national bank has previously succeeded in pursuing a predetermined course of monetary policy with a free paper currency, there is reason to expect that its similar endeavors to the same end will meet with success. If similar declarations of policy were made also by other countries with a paper standard, first and foremost by Great Britain, this would greatly conduce to clear up the present monetary situation.

Sweden is, as you know, off the gold standard, and, therefore, as the McMillan report says, it is a closed system and not subject to international influence such as, for instance, the Federal reserve. And, as the McMillan report said, it is possible for a closed system to stabilize of itself, without being at the mercy of foreign systems.

There is a reference in the quotation that I have just read to the previous success of the Riksbank in a predetermined course, and that refers, so I assume, to the time when other countries had a depreciated currency and even gold, though at a premium in paper was somewhat depreciated in purchasing power. During the war, Sweden, by refus-

ing to import gold, and by limiting their paper currency, kept their paper unit, the krone, at an actual premium in terms of gold instead of gold being at a premium in paper as in other countries. There is one other possible instance, but that is the only well-authenticated instance where you have paper money in a country more valuable than the gold which is supposed to be the base. If they could do that, as they did, they ought to be able now to control fully and to stabilize. There is not the slightest doubt that they can.

Mr. STRONG. Doctor Cassel, of Sweden, who is supposed to be an authority on gold, was over here during the hearings on this same subject two or three years ago, and he testified here. Did you meet him at that time?

Professor FISHER. Yes. I did not meet him here, but I had him as my guest in New Haven.

Mr. STRONG. His statement was that the first duty of a nation setting up a monetary standard was the stabilization of its unit of value.

Professor FISHER. Yes. I think every economist would agree to that. I know of no one who would not.

I have a letter here which I received last February from Major Bellerby, of England, who is a professor in one of the universities in England—Manchester, I think—and who has been deeply interested in this subject from the standpoint of labor. He says:

I think you may take it that this country has fairly definitely in mind two ends: The first is to secure the expansion of industry through the expansion of currency and credit, and through the recovery of prices; the second is to institute a system of stabilization of the price level when prices have reached a position at which they yield an adequate margin of profit and when unemployment has fallen well below a million. These two aims were accepted by the McMillan committee as ideal. It is fairly safe to say that they are now the accepted objectives of the government.

Then, some of you may have heard, over the radio last fall, a speech by the honorable Pethick-Lawrence, formerly member of Parliament on this subject, in which he says:

As a proof of the confidence of the ordinary Englishman in the inherent strength of the national credit—

England has, as you know, gone off the gold standard.

I may tell you that not at any time since the crisis first arose, not even during the general election when some of the politicians were trying to make our flesh creep, has there been any run on the banks.

Going off of the gold standard did not do harm.

All this time people have been putting their money into the ordinary banks and into the post office savings bank just as they had been doing for years past.

The people who do notice a complete change in the situation are the traders and manufacturers who are dealing with countries that have remained on the gold standard. When the pound stood at \$4.86, goods which cost an Englishman a pound to make could not compete in the international market with goods made in America for \$4. But now that the pound has fallen to \$3.30 the English manufacturer has a decided advantage over his American rival so long as he can continue to make the same goods for about a pound, and this he is still able to do to-day because his costs of production have risen little, if at all.

At the same time the Englishman—

This is so valuable that I would like to quote quite a bit of it.

At the same time the Englishman who is manufacturing for the home market finds that his foreign competitors are less able to undersell him because their

prices turned into English pounds are higher than they would be if the pound had remained at its old gold ratio.

Thus a double fillip has been given to British production and it is no doubt for this reason that there has been the rise in the price of industrial common stocks which I mentioned just now. For this reason also the numbers of our unemployed which had been mounting up and up week by week before we went off the gold standard in September, have since then been coming slowly but steadily down again.

Of course there is the other side to the picture. The cost of raw materials imported from abroad has gone up. Uncertainty as to the future level of the exchange has complicated international trade. The prestige of the city of London has suffered. But on balance British manufacture and commerce have gained substantially up to the present by our going off the gold standard.

But if you ask me whether there is any chance of the English pound behaving like the German mark or the Austrian krone a few years back, and coming to be worth only a few cents or even less than a single cent, I can tell you at once that the suggestion is utterly fantastic. It is true that there has been a rise of some 7 per cent in wholesale prices in England since we went off the gold standard.

After that, it went up to 13 per cent; now it is 10 per cent.

But retail prices and the cost of living have only made a tiny advance and are still considerably below their figures for a year ago.

I do not think England is in any hurry to go back to the gold standard, and if she does go back it is highly improbable that it will be on the old ratio of \$4.86. Most Englishmen think that we are much better off to-day in spite of our fluctuating exchange than recently when we were tied to gold. It seems to many of us that not only this country but a large part of the civilized world was drifting to disaster because we were all bound up through the gold standard to a steadily falling level of wholesale prices, by which many manufacturers and merchants were being steadily ruined.

It should be the business of those who are at the head of the great central banks of the world to secure to us such a stable unit of value in every country. They possess wide powers for such a purpose. They issue the currency. They have the means to expand or contract credit. They consult together from time to time. But in my view that have wholly failed to do their duty in this respect; and our English economist, Maynard Keynes, whose writings many of you know so well, shares this opinion with me.

I do not think, therefore, that England will go back to the gold standard unless she has some assurance that if she does so she will have more voice than she had before in controlling its distribution which would enable her to escape the grave consequences from which she suffered during the last few years.

At the present time a large part of the world is off of the gold standard and many countries have deliberately chosen to link themselves to the English pound rather than to gold.

Sooner or later there must be international cooperation to secure a sound monetary system which will serve the needs of the world better than what we have had up till now. It may be, when that day comes, that the world will throw off completely its allegiance to gold. For gold has been an autocratic ruler which has not treated its subjects well and there is nothing inherently impossible in the idea of a monetary system in which gold plays no part.

But I think that a better solution will be to retain gold and instead of dethroning it make it into a constitutional sovereign which shall no longer possess arbitrary power but shall guide the destinies of nations according to the peoples' will.

Mr. STRONG. Might I observe right there that this change in the value of the English pound is a direct illustration and proof of your theory of changing the value of the American dollar into grains of gold, is it not?

Professor FISHER. It shows control, at any rate.

I would like to quote now from Sir Basil Blackett, who is also a director of the Bank of England. I have already referred to Sir Josiah Stamp, who is a director. Sir Basil Blackett, on October 22, last,

advises, as reported in the New York Times, against haste in resuming the gold standard. The article reads:

Some reasons why Great Britain should not hasten to return to the gold standard, either at the old or new parity, were given by Sir Basil Blackett, a director of the Bank of England, in a speech to the Rotary Club to-day:

"We are bound to ask whether there is an alternative international standard, such as bimetallism, symmetallism, or a nonmetallic standard, which would work better than gold."

Even if there is such an alternative, however, the question will still be asked whether conditions are ripe for its adoption.

"If by sacrificing the stability of exchange, Britain can be made the master of its own economic destiny, not to be dragged at the wheels of the chariot of the Federal Reserve System of the United States or the Bank of France, and give real stability to the internal price level, the alternative of a managed sterling currency is at least worth examining."

He suggested that it would be worth examining whether it might not be possible to adopt an imperial currency standard.

I have quoted so much on the movement for stabilization, because I thought it was worth while that you should know the high spots in this movement which now involves so many distinguished bankers and business men throughout the world.

NEED OF EDUCATION

Now as to this bill and the present hearings. You have heard already from many men who have anticipated what I would have said, especially ex-Senator Owen and Prof. W. I. King. Ex-Senator Owen omitted to mention that he had introduced into the original Glass bill, now the Federal reserve act, a stabilization clause which was afterwards stricken out. W. I. King, I hope you realize, is one of the leading statisticians and economists of the country. I only wish that those two speeches could have been heard over the radio by every business man and banker in the United States. If they could have been, there would be no doubt about the success of your efforts to get some constructive legislation adopted by Congress immediately. All we need is education. The thing that is needed the most is to have people read what has already been written on this subject.

I was much impressed at one of the meetings of the Stable Money Association about a year ago to hear the president of one of the largest life insurance companies confess that only within some six weeks before that speech had he known anything about this subject and appreciated its overwhelming importance; and he waited humbly to confess that he ought to have known about it and that henceforth he would be one of the strongest supporters of the stable money movement—which he has been.

I also call attention to another business man, a leading business man in his own city, in the West, who started out with the idea that the plan as originally proposed by me in my "stabilizing the dollar" was a wild one and that I was a very dangerous man; he undertook to show that these beliefs of his were right and in order to prepare himself he studied into the subject, and the more he studied the less his opposition grew, until he turned exactly the other way and finally wrote a book on the subject which was dedicated to me.

Now, these two "conversions" that I have mentioned are characteristic of what happens when a man really grapples with the subject;

but the trouble is that the average business man not only does not grappled with it, but he has not the faintest idea of what it is all about, because of what I call the money illusion. He takes it for granted that we already have a stable dollar because we have had the price of gold uniform since 1837 at \$20.67 an ounce, which merely means that the weight of a dollar is 23.22 grains of pure gold, some such uninformed people ask, "Isn't that stability? What more do you want? Why interfere? Any interference will give you instability."

That is the fallacious and common opinion of the average man, until he is waked up by studying the subject enough to realize that the only real stability is stability of purchasing power, that what you really want is a commodity dollar, that what you really want is a market-basket dollar, a stability in purchasing power of our commodities in general, not of one commodity only gold. In other words, what you want is a stable price level.

Now, with this fact, that there are few men among business men, among bankers and among Congressmen in both Houses who have any conception of what this is all about, it put upon you leaders here a great responsibility to get such a bill through. If you can convert your colleagues by education, by having them read on the subject, I think the thing can be done.

NINE PROPOSITIONS

Now, I just want, as a preliminary to what I shall say about the bill, to tell you what my main beliefs are on this general subject, and if they seem wrong to you, and I do not justify those beliefs before the hearing is over, I would be very much pleased to have you ask questions and to see if I can not do so then.

I can put in nine propositions my main beliefs on this subject:

First, that money has always hitherto been unstable, with very few exceptions, one being when the Federal reserve system, under the leadership of Governor Strong, was trying to stabilize it between 1921 and 1929;

Second, that both inflation and deflation are injurious, and, if extreme, as at present, are ruinous;

Third, that the evils from inflation and deflation may be summarized under three heads: Social injustice, social discontent, and social inefficiency. These evils bring poverty, bankruptcy, unemployment, suicide, bloodshed, political upheavals—they are behind all the legislation, practically, that is exciting any comment now in Congress—war, and revolution.

Fourth, that the realization of these evils is hidden. There is no realization of these evils by most people, because they are hidden by what I call the money illusion. We think in terms of money, and take it for granted that it is stable.

Fifth, that the present depression is for the most part due, I would say nine-tenths due, to deflation.

Sixth, that the price level, if we do not do anything about it, could still go down far below where it is now. There would be no absolute bottom to the abyss into which we could plunge—I do not say will plunge, but could plunge—until we got down 95 per cent lower than

we are now, which would ruin practically every business man and every farmer in the country.

Seventh, what has happened—as well as this further fall that is still possible—was all or mostly preventable.

Eighth, that even to-day it is partially curable.

Ninth, if it is not cured, our whole American individualistic and capitalistic system is in danger.

I heard one of the leading bankers—I wish I had permission to quote him, but I do not want to do anything I am not authorized to do—the president of one of the largest banks in one of our largest cities, and the chairman of one of the most important committees of the American Bankers' Association, say that we must raise the price level to let people pay their debts, and that if we do not he fears that the whole capitalistic system is going to collapse. He was willing to raise the price level by changing the weight of the dollar.

EXPLAINING THE BOOM BEFORE THE CRASH

I am writing a book on the depression. As I see it in my studies, the depression represents two social diseases, the debt disease and the dollar disease, and the latter has aggravated the former.

Mr. GOLDSBOROUGH. Mr. Busby has to speak downtown at half past twelve, and there is a call of the House now. So the committee will adjourn until 2 o'clock.

(Thereupon, at 12.05 o'clock p. m., a recess was taken until 2 p. m.)

AFTER RECESS

The subcommittee reconvened pursuant to the recess, at 2 o'clock p. m., Hon. T. Alan Goldsborough presiding.

Mr. GOLDSBOROUGH. The committee will please come to order. Professor Fisher, will you proceed, sir?

STATEMENT OF PROFESSOR IRVING FISHER—Resumed

Professor FISHER: I was getting to the present depression and I stated that I had just written a book on the subject. I have got some of it here and am going to have it all mimeographed so that in case any of you should care to have a copy before it is published, I shall be very glad to send it to you and would like your criticisms.

Mr. GOLDSBOROUGH: Thank you very much, Professor.

Professor FISHER: When I began this study, which was about nine months ago, I had never made a study of the so-called business cycle, except certain phases of it and I had no idea, no prepossessed idea as to what was now the matter. I always believed that a depression or so-called business cycle was a tangled skein of events not due to any one thing. I believe so now. I do not think any historical event is ever, with some possible few exceptions, due to one thing only.

But the more I studied it, much to my surprise, the more convinced I became that there was one overmastering item, or two—one dependent on the other—in this present situation, which together are so important that the other items dwindle into insignificance in comparison.

I want to make it distinctly understood that there are, in my opinion, other elements, other explanations, some of which if there were time

I would go into, but I believe that the two I have mentioned, over-indebtedness and deflation of the price level, will explain almost all that has happened in the last three years.

I did not realize that until I began the study but I feel very certain of it now.

Let us see what the state of debts was when the stock market crash came. There were enormous war debts and there were enormous farm debts due to the war and there were enormous industrial debts due largely to speculation in new inventions and in the prospective recovery of Europe from war.

Most of our investments abroad, especially in Germany, were on the theory that there was going to be unusually rapid progress in recovery, due to the fact that Europe was in a deep hole after the war and in getting back to normal would naturally go upward at a steeper pace than it would progress under normal conditions, and that it was a golden opportunity for Americans to invest.

In the same way, our inventions here led people to invest; for instance, in the airplane business. That was regarded by many as something quite equivalent to the railroad development in the seventies; and there were the radio and sound pictures, the chemical industries, the development of the automobile, the Patent Office was choked with inventions. Inventions had suddenly become the vogue. The use of scientific men in industry had become general and much in favor. When I was a boy, the college-bred man was rather looked down upon by business men as impractical and unutilizable.

I can remember perfectly well a very successful business man in Chicago saying he never would employ a college graduate.

Well, that has all changed. They not only employ college graduates to-day, but they compete for the academic professor. That came out largely through realizing what Germany was doing in those lines. We realized that German efficiency in the war was partly due to that fact. Then, the high cost of living (our unstable dollar!) during and after the war made it impossible for many college professors who were dependent upon their salaries, to live upon their salaries and they sought positions outside where they could get more, particularly in the chemical industries. Industry began to establish or to further develop great laboratories. To-day the greatest laboratories in this country are not the university laboratories, as they used to be, but laboratories of industrial concerns, like the American Telephone & Telegraph Co., which spends millions of dollars a year in investigations.

You used to hear over the radio about the House of Magic at Schenectady, General Electric. Now inventions have become almost a matter of mass production. They are assembling all the brains that they can hire. Edison in his younger days was not appreciated. Inventors were regarded as cranks. But when he died, he was the greatest hero in the whole world.

So, when Langley tried to invent the airplane here in Washington, the fact that it caught on a hook on the boat, and went over into the Potomac, was a subject of newspaper ridicule and he was so humiliated that it hastened his death. Anyone who thought of a flying machine in those days was regarded as a crank. Now we have Langley Field and we honor his memory, and all that. But there was none of that premium on inventions then that there is to-day.

Then suddenly came the period during and especially after the war when there were enormous developments in inventions—technological improvements, they were called. There was a tremendous investment in these, a tremendous speculation. That led to a great deal of debt, because when a man can see that he can make, not the ordinary interest on his money of 6 per cent or something of that sort, but that if he gets in on the ground floor on something new, a wonderful invention, he can make a hundred or a thousand per cent.

If he can go to the banker and put up some collateral or in any way get a loan at 6 per cent, thinking he is going to make a thousand per cent on his investment, he is very much tempted to do so. And it is perfectly all right, but when millions of people try to do that then they boost the price of stocks and then a little later when they get to counting on the rise in value itself instead of the prospective profits and dividends, they are on very dangerous ground. Gradually we accumulated that situation until it broke in 1929.

Mr. GOLDSBOROUGH. May I interrupt you there for a moment?

Professor FISHER. Certainly.

Mr. GOLDSBOROUGH. I want you to make a connected statement and I do not want any question of mine to interrupt your line of thought. But I wanted to ask you this: After the collapse of 1929, I saw and heard you on the screen when you said—you only spoke for maybe five or six minutes—that the difficulty was not so much that stocks were too high. Of course, you may have been simply making an optimistic statement, but if you can say anything now that would clarify your position then, I think it would be helpful; it would be interesting.

Professor FISHER. I shall be very glad to. I have written a book on *The Stock Market Crash*. I would say that the conditions during the few years immediately preceding the stock market crash, except for excessive debt, were not the exaggerated false prosperity that people now think; that that condition was more nearly normal than the present condition. There was, as I have just explained, a lunatic fringe in speculation; people who went into the market just to get out of it in a short time, not to stay with it and wait for the development of the airplane, or whatever. They made the most dangerous element and added greatly to the debts.

Now, I may be wrong. I know that I am in the minority, expressing my opinion in answer to your question. Nevertheless, it is my opinion that what we called the new era then, and which now is laughed at as absurd, was nearer normal than the present era. This last is a "new era," which is to my mind extremely abnormal. I do not mean to say that there was not any exaggeration in 1929.

In fact, I have just been trying to make it clear that there was and that it led to this over-indebtedness by the American public. But if you could set up a standard or normal and say that values were far above that normal in 1929, that excess above normal was, I think, far less than the present deficiency below normal. The normal of course, is somewhere between, but not midway between, 1929 and 1932. It is much nearer 1929. That is my opinion. That is the best answer I can make to your question. Moreover, as I shall show later, the crash and depression, could have been mostly prevented in spite of the debt disease of 1929 if we had, as we could, prevented the dollar disease from following.

The original danger of the situation was one which I had not sufficiently appreciated at that time, because we did not have the statistics on debts. We had just begun statistics on brokers' loans. If we had had brokers' loans going back a long way and had had full statistics of other debts, history might have been different.

You will find in books on the business cycle comparatively little data on debts and I think that is one reason why they have not got anywhere in all these explanations, these elaborate monographs that have been written on the explanation of business cycles.

They have had all kinds of explanations: Overproduction and undersaving; overinvestment and under consumption—all sorts of things, in all or most of which there probably is a grain of truth. But if I am right in my diagnosis of this depression, which I suspect applies also to many others—I have not studied the others so intensively—it is overindebtedness which is the important thing, and what we need is to keep track of debts in the future. If we watch that particular dial, we will not be so likely to get caught as we were then.

THE DEBT DISEASE OF 1929

You had these enormous war debts. First there were the reparation debts. They were fixed originally at astronomical figures which were quite impossible, due to the attitude of France, and to some extent of England. Even to-day, even though they have been enormously reduced, they amount to twenty-seven and a half billion dollars, payable in 58 years. But this is a misleading figure unless you discount it at some reasonable rate of interest, in which case you find it amounts to about \$9,000,000,000 in present value. Even this is an enormous figure.

Then come the other intergovernmental debts: The United States had lent up to 1919 about \$10,000,000,000; that is, the Government. The present value now discounted at $4\frac{1}{4}$ per cent is about \$7,000,000,000.

The United States Federal debt is now about \$18,000,000,000. The State and local public debts are now about \$15,000,000,000. Ten years ago they were \$7,000,000,000. You can see the great growth in the State and local debts.

The international private debts owing to the United States, for investments that we made abroad, increased from \$8,000,000,000 before the crash in 1922 to \$15,000,000,000 in 1931.

The farm debts increased from about \$3,000,000,000 in 1910 to about nine and a half billion dollars in 1928.

Corporation bonds have increased comparatively little, because during that period of speculation, instead of corporations going into debt, investment houses had taught the public that common stocks were much more valuable to buy and so the corporations financed themselves with common stocks instead of bonds. But that did not get rid of the debt. It made it even worse, because then the individual did the borrowing. Instead of a corporation borrowing on bonds and having a large part of its capital structure in the form of debt, the individual bought the common stock and then went into debt himself, on margin account or collateral loans, or whatever. He became a speculator.

Then, bank loans and discounts of member banks increased between 1922 and 1929, from eighteen billions to twenty-six billions; and for all banks from about twenty-seven and a half billions in 1922 to forty-two billions in 1929.

Brokers' loans increased from 1928, six and a third billions to nine and a half billions in 1929. We had no figures back of that to know really whether there had been too rapid an increase or not.

Installment buying and loans, you know, were very popular; we tried to finance the consumer. Professor Seligman of Columbia wrote two volumes on installment buying, at the instance of General Motors and they, and then other automobile concerns, and many others got acceptance corporations to help the small consumer buy his car, his radio, his washing machine, or whatever it was, on installments, which was really going into debt, and at a high rate of interest.

The figures on those are not well worked out, but they apparently increased from several years before the crash until the time of the crash, from five to eight billions.

The total loans in this country according to Carl Snyder of the Federal Reserve Bank of New York, leaving out international debts, intergovernmental debts, and governmental debts, but merely from people to people in the United States, according to him, amounted to from a hundred and twenty billion to a hundred and fifty billion dollars.

Doctor Edie reckons that a hundred and twenty billion dollars represents the very minimum of long-term debts in the United States, other than bank credit. Three to twelve months installments and everything inside of a year he calls "short term." As to long-term debts he reckons they amount to over a hundred and twenty billions and probably over a hundred and fifty billions.

Now, if we would add all the varieties of debts it is, I think, unquestionable that if we had the figures we would find that the indebtedness of the United States to-day is over \$200,000,000,000.

NINE CONSEQUENCES OF THE DEBT DISEASE

Suppose you just reason as to what the consequences of overindebtedness are and see if the consequences do not correspond with the facts, as they necessarily must if you assume other things equal and just follow what must happen. It seems to me they correspond extremely well.

In the first place, as soon as there is anything to awake people to the danger, somebody begins to sell in order to get out of things. He realizes that his margin is too small, he is in debt too far. It is all, of course, an individual matter. When I speak of overindebtedness, I mean overindebtedness of John Smith and millions of John Smiths.

As a matter of fact, two hundred billions of debt, if it were equally divided all through the United States, or in proportion to wealth, would not be perhaps an overindebtedness. But the overindebtedness consists in the fact that those who are in debt are in debt too far individually.

When that is discovered by a few people and they attempt to extricate themselves, they find themselves, as the men in Wall Street say, out on a limb. They try to extricate themselves by selling—liquidation. I am going to trace eight steps. The first is liquidation. As soon as they attempt to liquidate, they find that they are under the pressure of distress selling. Distress selling is a highly abnormal thing and itself portends a crash or a crisis or a depression or something out of the ordinary. Normal selling is induced by high prices. Ordinarily, in normal times, when a man is not in debt, is not forced by his creditors, or is not forced by his fears to sell, he will hold off until he thinks he can get near the top of the market. He will hold his real estate or his stocks or anything else and will only be tempted to sell by a high price. That is the normal situation. High price is the inducement to sell. But under distress selling, it is low price that induces him to sell.

In the stock market crash, as soon as prices began to go down, because some people began to sell, almost everybody else wanted to sell; not because the prices were high enough to suit them, but because they were so low that the debtors were fearful of their solvency; because the broker called them up and said, "Prices are now down. We are carrying you on a margin of 10 per cent, we want 30 per cent. If you do not let us have the margin, we will sell you out."

So here, because of the pressure of the creditor or because of their own fears, they sell. That is distress selling induced by a low price and not a high price.

When you get that distress selling, induced by low prices, falling prices, it makes matters worse, because the more the debtors sell, the more the prices go down and as they go down, the greater the pressure to sell. It is all because of overindebtedness, because people are trying to save their solvency and price is no object.

And it is not simply because of distress selling that we have such reductions in price. The really most important reason for this fall in the price level is the contraction of the currency that comes about. There is always a contraction of currency when people pay their debts to a commercial bank faster than new debts are created in the commercial bank. That is a point very few people realize, but it is the key to the whole situation.

If one of you pays me a debt which you owe me of a thousand dollars, that \$1,000 is still in circulation. You have parted with it, but I have gained it and the country as a whole has just the same money as if there were not this transaction. There is no loss of a thousand dollars. But if, instead of owing me, you owe a commercial bank and you pay the commercial bank a thousand dollars by a check against your deposit account in that bank or elsewhere, that \$1,000 has entirely disappeared. It no longer exists. Its only existence consisted in a book entry. It is book credit. You have it on the stub of your check book. You say that your bank balance is "money in the bank." The bank keeps its books parallel to yours and they credit you with that. That does not mean that the bank has got

that in a safe-deposit box in physical money, gold or Federal reserve notes or greenbacks or silver certificates, or anything of the sort. It merely means that the bank agrees to recognize your checks up to that amount.

Mr. GOLDBOROUGH: If you will excuse me, it really means that the bank acknowledges an indebtedness of itself to you.

Professor FISHER. That is it. The bank owes you and the banks owe you what they call deposits, because you owe them what they call loans. It is just a swapping of loans. Your loan is not and could not be circulated. You could not pass it on to somebody else in place of money. You could not make out a debt or note on a piece of paper and say that it shall be legal tender, so people should accept it. But the bank can give you a deposit credit and it will circulate and can be turned over from one person to another by check.

Most people find that a very mysterious thought, but when these two debts, one against the other, telescope and both disappear, you have wiped out that much circulating medium.

So there is a contraction of currency and that has gone on at a rate in the last few weeks of more than 25 per cent per annum. When you have a contraction of currency through this process, you will necessarily have a deflation of the price level, because the price level depends so much upon the quantity of this circulating medium in existence.

In normal times, while you are paying your debt to the bank, somebody else is going into debt to the bank and normally, the two will about offset each other. In fact, in a progressive state, as we have in this country generally, more people will go into debt at a bank than will get out of debt, as the population grows. So that it is normal for deposits to banks to grow 4 or 5 or 6 per cent per annum. But when you have many people all trying to get out of debt at the same time or being forced by their creditors to get out of debt, then the wiping out of deposit currency goes on much faster than its re-creation.

So that there is a net contraction of the currency. That results in falling prices.

I would like to call your attention to the fact that this is not only theory, but that the relation between the deposit currency and the price level has been demonstrated by a number of studies and most of all by those of Carl Snyder, the statistician and economist in the Federal Reserve Bank of New York:

I have here a chart which is not quite up to date. I have seen him in a public lecture in Chicago bring it a little bit further down. To my mind it is one of the most satisfying things that has been done in statistics. The reason the relationship has often not been seen is that you have got to take into account in making this comparison the growth of the country. You have to take that into account and then plotting the commodity prices on one curve and the currency in relation to its trend on another curve—not the absolute currency, but the currency in relation to trend—you get curves that agree in

a rough way, and would agree even more if you had more accurate statistics.

Mr. GOLDSBOROUGH. Now, the primary purpose, as I understand it, is to demonstrate the soundness of the quantity theory of money upon which this proposed legislation that we are considering now and other like legislation is based?

Professor FISHER. Yes; in a measure, I think, Mr. Chairman, that we do not need to go quite as far as that. In my book *The Purchasing Power of the Dollar*, I stressed the relation of quantity to price very much, but also admitted the existence of other factors, and I was rather surprised that I have been classified ever since so unreservedly as a quantity theorist. I think this classification is on the whole correct; but I admit that there are other things that have to be taken into consideration, and I think I have taken them into consideration; but as to those who do not like to admit that they are quantity theorists, or who want to deny it, it is quite possible to get them to admit, and I think this would be true of all economists, that a contraction of the currency will at least tend to reduce prices.

Mr. GOLDSBOROUGH. Professor Fisher, do you mind saying why you think it is that people object to the quantity theory of money?

Professor FISHER. Yes; I think there are two reasons. One reason which used to be quite powerful was a rationalization of the opposition to Bryan in 1896. I myself was opposed to Bryan in that campaign, and I went out on the stump against him, because I did not think it was fair to go back as far as 1873 to take his 16 to 1, but that never blinded me to the truth in the quantity theory, yet it did blind a great many people. They said that Bryan had founded his theory on the quantity theory, and that Bryan was wrong and therefore the quantity theory must be wrong, which does not follow at all. The fact that Bryan may have used the multiplication table does not make the multiplication table itself wrong. That prejudice lasted for some 20 years, until people had forgotten it, and recently, especially after the experience of the World War, we found very few responsible students of the subject, especially economists, who were not inclined to follow the quantity theory.

Mr. GOLDSBOROUGH. There was one man in Chicago, Professor Laughlin, who was the only one that I knew of.

Professor FISHER. I think you will find almost all of those who stand out now against the quantity theory are people who go back to Laughlin, largely as students of his. I know that Laughlin resented it very much when people claimed that that was behind it in his case. But I am satisfied it was true in a great many cases, that it was the opposition to Bryan.

The second reason is that so many people do not understand what the quantity theory is. They take it too literally. They think it means that if you double the amount of money in circulation, you will necessarily and exactly double prices. As I work them out in my book, *The Purchasing Power of Money*, there are six factors

involved—five other than “price level”—that impinge upon the price level. There is the quantity of money in circulation, there is its turnover or velocity, there is the quantity of deposits subject to check and its turnover, and there is the volume of trade.

Mr. GOLDSBOROUGH. All that is the quantity theory?

Professor FISHER. I would rather say that the quantity theory is that if you assume the velocities are constant and the volume of trade is constant, and that money and deposits keep in proportion to each other—then the quantity theory is true. It is purely a conditional proposition.

Mr. GOLDSBOROUGH. But if a dollar circulates three times today where it only circulated once yesterday, certainly that will cause a rise in prices, and that is a demonstration of the quantity theory of money?

Professor FISHER. Yes; if you wish to enlarge the meaning, but the people misunderstand it, and they insist on pointing it out. People write to me and say, virtually, “You fool, don’t you see that you had quantity of many so-and-so to-day and so-and-so a year ago, and prices did not go up in that ratio?”

Of course, you have to take account of other factors, but, nevertheless, I think that practically every economist will agree that there is a tendency to raise prices when you have an inflation of money, and a tendency to decrease prices when you have a deflation of money. That is all the theory you need in order to get behind the bill. You do not need to commit yourselves to a “quantity theory.” I am not averse to being called a quantity theorist as long as people read my book and know what I mean; but I do not think your bill is linked up with the quantity theory even as I define it. All you need is to say that it is universally admitted that there is a tendency for prices to rise with an increased quantity of money, whether that tendency is proportional or not, and that there is a tendency for prices to fall with a decreased quantity of money, whether proportional or not. You do not need to assume the proportionality at all; I myself believe the proportionality is true under theoretical conditions; but all you need is that an increase tends to raise, and a decrease to lower, the price level.

Now, besides this chart that I give you, and I suggest that it be photographed and put in the record—

Mr. GOLDSBOROUGH. That will be done.

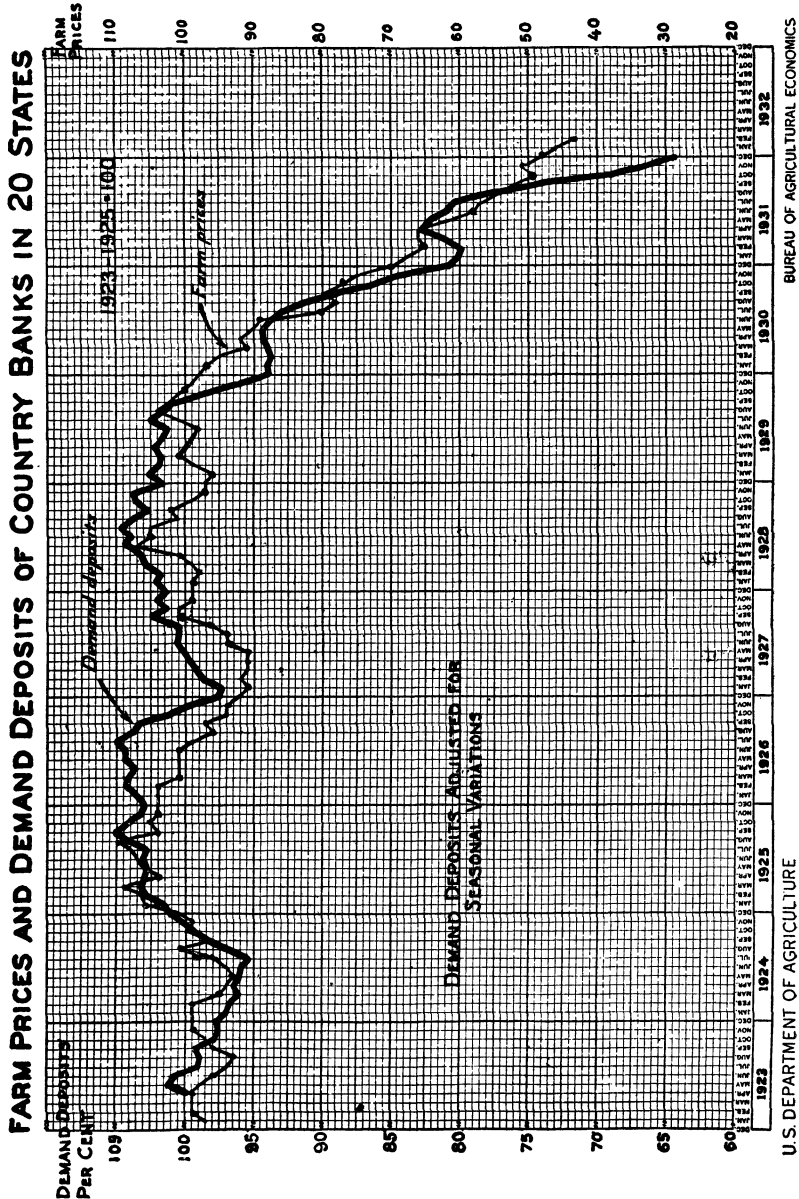
Professor FISHER. I think it is well worth while.

Professor FISHER. I have another chart here which has been handed me by Mr. Bean of the Bureau of Agricultural Economics. In that he has worked out a similar relationship between farm prices and demand deposits.

Mr. GOLDSBOROUGH. I think that is very necessary.

Mr. BUSBY. Yes. It is a picture of the case.

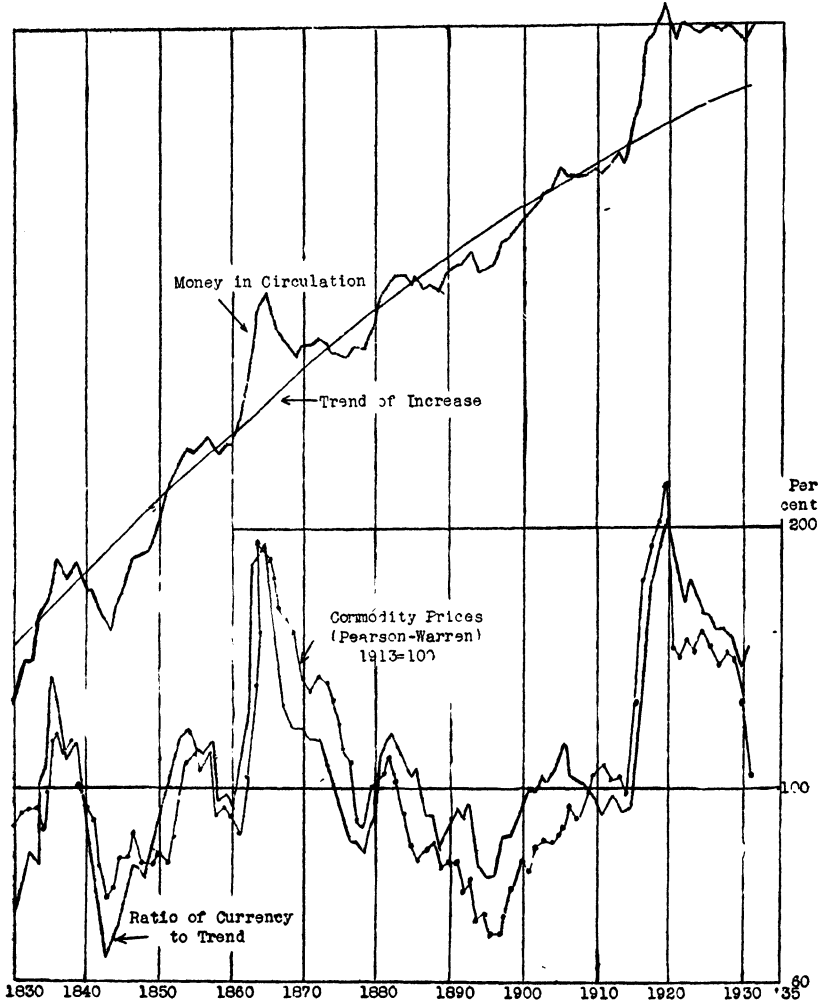
(The chart referred to is reproduced below.)



(The chart referred to is reproduced below.)

THE RELATIONS OF MONEY IN CIRCULATION AND COMMODITY PRICES

Below is shown, in the upper line, the amount of money stated as in circulation in the United States from 1830, adjusted from 1870 to money in circulation outside of all banks alone. Through this is drawn a trend line and below are shown the deviations from this trend line as compared with a new index of commodity prices back to 1830, prepared by Professors Pearson and Warren of Cornell University. The most marked divergence was in 1931.



Professor FISHER. I would like, if this second chart goes in, to have go into the record with it this statement, that I think the relationship could have been made better, truer, and more fully in agreement with the other chart in some of the details if he had used a uniform charting for both elements and had put it on the "ratio scale", as this first one has been done. He has two arithmetical scales, and they differ, which fact throws some of the comparisons out of kilter.

When prices are falling, the dollar is rising. It is the same thing to say that the general level of prices has been cut in two as to say that the purchasing power of the dollar has been doubled, and vice versa. So, we can shift from the terminology of prices into the terminology of purchasing power and, talking in terms of the change in dollar, we will be less likely to be confused than when we talk in terms of prices. People forget the money element, notwithstanding that money is used so universally in everything that they think they can leave it out. They talk about the price of wheat, and they think that they are talking about wheat only, but the price of wheat is so many dollars and cents, and the dollars are just as important in the ratio as the wheat is, and the dollar is applied not only to wheat but to everything.

Of course, I do not need to talk about what an index number is, and all that. I have written a book on the Making of Index Numbers, which has gone into that fully, and I think it is demonstrated there that an index number is a valuable, and, under proper conditions, an accurate instrument of measure. This is now universally recognized, far more so than several years ago. In fact, it is used now too uncritically. Very often the wrong kind of an index number is used, just because people have now got faith in index numbers that they did not use to have.

Mr. PRALL. What, in your opinion, Doctor, is the best index number?

Professor FISHER. I would say that the index number of the United States Bureau of Labor, their index number of wholesale prices is probably the best. I would say that the index numbers of wholesale prices are more accurately worked out than index numbers of retail prices or of stocks and bonds or anything else. The technique of working out index numbers of wholesale prices has developed through two generations, until now it is a very accurately measured thing. I think that, if I were to criticize the United States Bureau of Labor Statistics index at all, I would say that it has too many rather than too few commodities. It had been criticized for giving too much weight to farm products and food, but when they tried to meet that criticism, they should have met it partly by taking some things out, rather than simply putting in 200 more commodities, because now they have so many commodities, some of which represent prices that move too sluggishly to be of much value.

I have my own Index Number, published weekly. It was the first to be published weekly. It has 120 commodities wholesale. Of course, I do not collect the figures myself, but get them from the trade journals, Dun's Review, and the Journal of Commerce, and I know one very good critic who thinks mine is the best index; yet I think mine has too few commodities; but I can not get it out promptly if I try to get very many more than that.

But I would say, undoubtedly, on the whole, the best index in existence today is that of the United States Bureau of Labor Statistics.

I have traced three steps, liquidation, contraction of the currency, and falling prices. Liquidation, when the liquidation is in banks, as it almost always is, implies contraction of the currency, and contraction of the currency implies falling prices.

The fourth step is an implication of reduction in net worth and an increase of bankruptcies, because in the capital account of any business concern, when there is a falling of the price level, i. e., an increase in the purchasing power of the dollar, due to contraction of currency, it affects the valuation of every item in a man's assets. It does not correspondingly decrease his liabilities, because they are fixed by contract in dollars. Consequently, as the assets shrink in sympathy with the shrinkage in the price level, while the liabilities do not, the difference between assets and liabilities, that is net worth, will shrink faster. That means that people who are already on the ragged edge who have not much net worth to start with become bankrupt. So there is a fourth consequence. The overindebtedness, when it leads to liquidation, is a contraction of net worth and an increase in bankruptcies.

If any of these points are not clear, I wish you would interrupt me here, rather than wait to ask questions at the end, because I want to make these nine steps absolutely clear.

Now, I want to call your attention to this, that this shrinkage is due to the fall of the price level. I started out by saying that overindebtedness started the whole thing; but suppose some counteracting cause, such as the Federal reserve policy, had compensated for this tendency to fall and had prevented the fall of prices coming as a consequence of overindebtedness and liquidation. Then this fourth consequence would not have happened, and that applies to all of the rest of these nine steps, as you will see. They are consequences not directly of the overindebtedness, but consequences of the fall of prices which the overindebtedness was permitted to cause.

Now, the fifth step is a corresponding fall in profits. There are two great sets of accounts in business, the capital account and the income account. The capital account relates to a point of time, such as January 1 or July 1, and the income account relates to a period of time, such as a year or a month. Now, the same principle applies to both. When the price level falls, profits will fall still faster, as profits are the difference between receipts and expenses. The receipts represent the value of the goods sold, and if prices fall the receipts will fall, even if the quantity of goods sold remains the same. The mere fact that the price of the goods is reduced means that the number of dollar's worth of receipts tends to contract with the contraction of the price level, but the expenses will not contract so fast, because expenses are largely fixed by contract, such as interest on debt, such as rent, on a lease, for a period of years, such as salaries fixed for several years, and such even as wages, which are fixed by contract, or custom, or fear of labor unions. Therefore the business man's profits will be decreased.

So there is a contraction of net worth, an increase of bankruptcies, there is a contraction of profits and an increase of losses absolutely coming out of falling prices, if you assume the falling of prices to come as a consequence of liquidation of debts.

Now, the sixth consequence is shutdown in industry, for in a capitalistic civilization it is the profit taker who decides whether to shut down or open up, and capitalistic civilization really means a profit civilization—that is all it means. It means that the leadership and the decision is in the hands of the profit taker, and when the profit taker finds he does not have profits, and that the more he runs his business the more he loses, he will shut down. That means unemployment, it means a reduction in production, it means a reduction in trade and a reduction in employment.

This is not theory, either, altogether; it has been demonstrated by careful studies. I am sorry that I can not lay my hands on a study made by the International Labor Office at Geneva, in which some 40 nations were studied in reference to this, and it was found practically universal that during falling prices there was more unemployment, and that during rising prices there was less unemployment. It is good theory; it is good fact.

Here is what I found myself, one of the studies that I made some years ago. It is not up to date; it ends in 1926, but here is a chart that shows—and this relates to bankruptcies, not unemployment.

Here is another study in which I have shown that the volume of trade fluctuates with changes in the price level, and here I have a chart showing the employment in relation to changes in the price level. There is a good deal that might be said in further explanation about that price level change, if there were time, but it is all fully explained in the article, if anybody wants to examine it. I do not ask to have it in the record, unless you want that especially but there can absolutely be no question, and I do not think there is an authority in statistics or economics in the world who will deny, that there is a very strong relationship between falling prices and unemployment, and it comes right out of the theories, as I have said.

Here is a quotation from the International Labor Office. This will perhaps sum up the whole thing.

Fluctuations in the purchasing power of gold are indisputably a cause of unemployment.

That is from a report on unemployment and monetary fluctuations, published in the May and June issues of the *International Labor Review*, 1929.

So I think you can take that for granted. There is no question there whatever.

Mr. PRALL. If these producers and manufacturers, during the good years, the profitable years, were to lay a surplus aside, and if they were to use that during the poor years, then the situation would not be as frequent, would it?

Professor FISHER. No; it would help that specific trouble of unemployment, and would mitigate the evils of the depression, but it would not go far to keep a stable price level and general prosperity.

Now, the seventh consequence is pessimism and distress, psychological consequences, because when you have business men being bankrupted, and profits turning into losses, and the working men unemployed, it does not require any demonstration that the human moods will turn from sunshine to gloom; not only emotional pessimism, but intellectual distress as they see concerns going to the wall and they wonder what is going to happen next to them or to somebody else.

The eighth consequence, when people have this distress and pessimism, is hoarding. If people are afraid of their banks, or afraid to invest their money in an enterprise because they see that everything is going to be bad, they think the only safe thing is putting the money under the mattress. What amounts to the same thing, the velocity of circulation of bank deposits is decreased. Hoarding is merely reducing the velocity of circulation, holding money a longer time than usual.

I calculated that, on the average, money, either so-called money in the banks or actual physical money, ordinarily turns over about once in two weeks.

Mr. BUSBY. Do you refer to the present time?

Professor FISHER. No; I mean normally, something like twenty-five times a year.

Mr. BUSBY. I noticed a statement in the Honest Money pamphlet, published by the farm organizations, that the velocity of bank credit was, in turnover, probably about two and a half times per month now as against about five and three-quarters times in 1929.

Professor FISHER. Yes. The turnover differs enormously in different cities.

Mr. BUSBY. Of course, New York City carried the ordinary outlying city to a higher average than if New York City should have been left out of consideration.

Professor FISHER. Yes. I found when I made a study of this that in a big city like New York the turnover would be sometimes over one hundred times a year, whereas the turnover in a small city like New Haven would be fifteen times a year.

Mr. BUSBY. I believe Doctor King touched on 140 cities and then on the one city of New York, and he related the rapid turn-over there and the big amount of business that was done for the entire country on the New York Stock Exchange.

Professor FISHER. Yes. In Santa Barbara, a small town at that time, I think in 1911, I had a banker tell me that his turn-over was less than once a year. There are enormous differences, and so Mr. Aupetit, who was secretary of the Bank of France, made a study of the bank deposits in Europe, and he found enormous differences between the larger and smaller communities. Doubtless this is because in the bigger cities the people are closer together and things can go from person to person much faster, while in the country people will hold their money for months before they go to town to spend it.

So far as a depression is concerned, it slows up the velocity of the circulation of money. You have two sets of figures to show that, the hoarding figures, which are really inferential figures, that are probably more or less dependable, and the other the figures of Carl Snyder, of the Federal Reserve Bank of New York, on the turn-over in bank deposits in the United States. Those are probably what Mr. King was referring to.

As a consequence of this hoarding comes bank failures, because banks are organized to rely upon people leaving their money there. They can not keep 100 per cent of their deposits in money. If they did, they would not make any money. They have to lend it out. So they only keep a small fraction, maybe 10 per cent, or maybe 5 per cent in actual cash. The till money is apt to be small in amount, and when people are demanding it, they have to pull in and get money from other

banks, or get people to pay their loans, and so it goes on and every dollar hoarded means, in the end, embarrassment of about \$10 to the banks' deposits.

So, this eighth factor, of hoarding, reenforces the second, of contraction. It is in fact the same thing from another point of view.

Then, the ninth point is change in the rate of interest. The rate of interest during a depression is nominally low, but that is again one of those tricks due to the money illusion. You will always get tricked if you think in terms of money. You can not think in terms of money without getting fooled, and many a person thinks the rate of interest is low when it is really high, because the fall in prices adds to the burden of interest. Take a farmer who thinks in terms of wheat. If he pays 5 per cent, and prices are falling 4 per cent per annum, he is really paying 9 per cent; sometimes during the depression the real rate of interest is over 50 per cent, but people do not know it.

Now, I have given you nine consequences of overindebtedness and the effort to get out of debt, starting with liquidation: (1) liquidation, (2) contraction, (3) deflation, (4) bankruptcies, (5) losses, (6) unemployment, (7) pessimism, (8) hoarding, (9) high "real" interest.

MONEY DEBTS AND REAL DEBTS

But if you think in terms of commodities instead of in terms of money, if you think in terms of real things instead of simply the money symbols, you will find that the liquidation does not liquidate. When liquidation causes a fall of prices, or rather is allowed to cause it, it is really causing a swelling of the dollar, and if your debt is \$1,000, and the consequence of millions of people like you paying their debts, trying to pay them, is to enlarge the dollar, then at the end of a year, if you have paid off \$300, and owe \$700, each dollar of that \$700 is not the original dollar; it has become a bigger dollar now. It is \$900, or \$1,000, or \$1,100 in terms of the original dollars.

It may even be that the very effort to pay debts will actually enlarge the debts, because it enlarges the dollar.

As long as you allow the dollar to be tampered with in this way, and you do not compensate and keep it stable, the very effort of paying debts, by precipitating a contraction of the currency, a falling of prices and an enlargement of the dollar, may enlarge your debt itself, and that is what has happened!

Mr. BUSBY. Enlarges your debt in relation to commodity prices?

Professor FISHER. Yes; in terms of wheat, cotton, or any other commodity. It is not an accident that during a depression people find their debts hard to pay. It is a consequence of the very effort to pay them. The more the millions try to pay, the more they find that they owe in terms of wheat and cotton, and the more they try to get out of debt, the more they put themselves in debt.

It is like an attempt to escape from a burning theater. Everybody presses toward the door on the theory that he is more likely to get out by pressing in that direction, but the fact that everybody else in the theater is doing the same thing jams them all in all the tighter. If they could be marshaled out one at a time in an orderly way, they could get out faster. You can not blame the individual who is trying to get out of a burning theater to save himself, or his wife and children; you can not pin the fault on the individual, but the crowd itself

as a mass is defeating its own aim. So in this effort to get out of debt, though, of course, is not voluntary—it is forced by the creditors. If the creditors did not force people to pay their debts during falling prices, they would not lose so much money. If they would give moratoriums, the price level would not fall, the dollar would not enlarge so much, and the possibility of payment would be much greater.

There is a conflict here between the individual and the mass, just as in the competition in international armaments. If every other nation is arming—at least, this is my view—we have to get into the game and compete; one nation can not lag behind, or it will be overwhelmed some day; and yet it is perfectly true that the very efforts to defend themselves against each other that make the danger of war all the greater. So you either have to compete with the rest of the world in armaments, or combine with the rest of the world in disarmament.

Gentlemen, there has been no liquidation since 1929. We are more in debt now than we were then. That is the mystery of the depression. People think that they are getting out of debt, and they wonder why this depression should go on because there has apparently been some liquidation. However, there has not been any, because we have allowed the dollar to swell, and it is all because of this thinking in terms of a dollar, and assuming that a dollar is a dollar, that it is the same thing from one time to another; it is that same old money illusion, and that is so important that I would like to dwell on it a little bit with respect to inflation, just as I have dealt with it in respect to deflation. I have written a book under the title, *Money Illusion*, in which I tried to present this whole subject of stabilization from that angle.

In 1921, I think it was, I visited Germany to see whether they had the money illusion; at least that was one of my main objects, because that was a case when the mark was falling very fast and when everybody in the United States knew it; even school boys knew that the mark was falling, but the Germans did not know it, because they were too close to it.

Mr. GOLDSBOROUGH. They thought the prices were rising.

Professor FISHER. They simply thought in terms of commodities. Prices were rising, the prices of wheat, sugar, and everything else, and they sought the cause in the wheat, or the sugar, or in everything else.

Professor Roman and I interrogated some 25 people in Germany; I mean the people that we met in the stores, the average citizens, all intelligent people, and there is a higher level of intelligence in that country perhaps than in any other, we only found 2 people out of that 25—of course, we did not count the professors of economics; they understood perfectly well—who had any inkling that the mark had fallen. One of those was a German-American who had looked at it from the outside, as we had. We can not see ourselves as others see us. The other was an accountant, who was accustomed to looking at such things, with a high degree of intelligence. But the other 23 did not have any such idea.

I remember spending an hour talking with two intelligent women who kept a shop in a little suburb outside of Berlin. Professor Roman and I talked with them. We found that, in terms of dollars, the prices

were very low. I bought a trunk for \$1.50. I felt almost ashamed that I was so robbing the woman of her goods, but if I had asked her why prices were so low, she would have looked at me aghast, not knowing what I meant. In terms of marks prices had been going up very fast, to about 50 times as much as before the war (and after that they went up to a trillion times). I said to her, "why are your prices so high?" She thought I was going to call her a profiteer, and said, "It is not my fault. For instance, that shirt I just sold you will cost me as much to replace as I am selling it to you for." I thought that was rather foolish. I asked her why she sold it to me when she was going to pay the money right out again. "But I made a profit on that shirt," she said, "because I bought it for less."

She had not made a profit; she had made a loss, if she had reckoned in dollars, or in wheat, or cotton, or anything that was real in this world; but, reckoning it in terms of marks, she simply saw that she had bought that shirt for 50 marks, or whatever it was, and sold it for 60, but the 50 marks that she paid for it were bigger marks, worth more six months before, than the 60 marks that she got from me. She was keeping her accounts on a false standard, just like everybody else who thinks of money, assuming that it is constant, as we have a right to assume, as we assume every other unit to be is constant.

Here is another instance showing the conflict between the view from the outside and the inside of a country. I know of an American woman who owed a mortgage in Germany, and after the war, she went over there and went to the banker and said that she wanted to pay off "that \$7,000 mortgage." He said, "My dear lady, that is not a \$7,000 mortgage; it is a 28,000 mark mortgage" (which, of course, before the war was the same thing as \$7,000). He said, "All you have to do is to pay those 28,000 marks, and that is about \$250." She said, "I would not think of cheating like that; I have to pay that \$7,000." He could not see it; he did not see why she had to pay any more than she contracted to pay, and legally that is true; she only had to pay 28,000 marks. She insisted on paying \$7,000, and he thought that she was very quixotic yet even she was making the same mistake in a lesser degree, because she was not thinking straight. Instead of marks, she was thinking in terms of dollars, but if she had thought in terms of market-basket dollars, or commodity dollars, wheat, corn, or cotton, she would have found that she would have to pay some \$12,000 to satisfy her conscience. So you have there three standards.

This money illusion is the root of the whole thing, and that makes a mystery of the depression, and it makes it difficult to put through any legislation on it, because people do not understand what the real problem is. I suppose that if you talked to the men high up in the Government about the United States debt here, they would all insist that it had been reduced, that it was at the maximum in 1919, when it was \$25,000,000,000, that it got down to a minimum about a year ago and has gone up a little bit now, where it is at \$18,000,000,000. They say, "We have reduced our debt from twenty-five billions to eighteen billions; that is a reduction of 28 per cent." But that is an illusion. That debt is not going to be paid except out of the farmers' cotton, or wheat or hogs, or out of the manufacturers' cotton cloth, or out of sugar, and so forth. All the taxes, all the sales that constitute the wherewithal with which

to meet that debt, come out of commodities. In terms of commodity dollars, translating our present dollar by means of an index number of commodity prices back to the 1919 dollar, we find that our debt to-day, instead of being \$18,000,000,000, is, in terms of 1932 dollars, over \$35,000,000,000, or more than \$10,000,000,000 more than when we started.

England owed us \$4,600,000,000 when the settlement was made in 1925. She has paid us \$1,000,000,000 in interest and \$175,000,000 off of the principal, so the debt in terms of dollars has been reduced by that \$175,000,000 and is now \$4,425,000,000, as I remember it. So that probably almost all Englishmen and Americans think that the English have really liquidated some of that debt; but they have not. England has apparently paid off 4 per cent of her debt, but really now, in 1932, owes us more than 50 per cent more.

The only kind of debt that has been really partly liquidated that I have been able to find in any of these categories of debt is brokers' loans, and even brokers' loans are largely shifted. There are a lot of debts that people had through brokers that they now have through banks but brokers' loans as such have been largely liquidated, and on the basis that they have been liquidated in money by 90 per cent, translated into market-basket dollars they have been liquidated by perhaps 80 per cent. That is the only place where there has been any reduction whatever. But brokers' loans were never very much, not over ten billions out of some two hundred billions in the country, and all the other categories have been increased.

France reduced her debt to us by 4 per cent, but really increased it 50 per cent. United States private loans abroad are now 9 per cent more in dollars than they were, but in actual market-basket dollars 64 per cent more. State and local public debts have increased, in dollars, 20 per cent, and people are alarmed about that, but on the basis of market-basket dollars they have increased 80 per cent. Our Federal Government, as I have already mentioned, has reduced its debt between 1919 and 1932 by 36 per cent, but really the indebtedness has increased, in terms of 1919 dollars. Comparing 1929, the increase is 57 per cent.

Combining our Federal, State and local debts, they have increased 12 per cent in current dollars, but in stable dollars 68 per cent. Bankers' loans to business men other than brokers have been decreased or liquidated by 18 per cent since the crash, but really in terms of commodities they have increased 23 per cent. Corporate loans have been decreased—we have not very good statistics on them—from 10 to 20 per cent, but have really increased from 30 to 40 per cent. Farm loans have nominally decreased, as nearly as I can figure it in current dollars, 20 per cent, but really, in terms of stable dollars, 75 per cent, and in terms of farmers' prices much more than that. Of course much of the decrease is through foreclosures.

Now, it is hard to give a general total, and I shan't try to, but we may say this, that the debts before this thing started, say 1928 or 1929, in this country were much more than \$200,000,000,000 and that much less than \$50,000,000,000 has been paid in liquidation, leaving much more than \$150,000,000,000 payable, which is equivalent to much more than \$230,000,000,000. So that, even at the very worst—

and these are rough figures—there has been an increase of \$30,000,000,000, and probably a good deal more than that, in terms of the dollars of 1928 and 1929, probably an increase of from 15 to 25 per cent.

So the effort of this country to liquidate has not liquidated, but just the opposite. It has put us deeper in debt.

THE DOLLAR DISEASE PREVENTABLE

But that was only because we allowed the price level to drop. It was not inherent in the process of liquidation. That process of liquidation was allowed to go uncompensated. When people paid off their debts at banks, they destroyed the currency, and there was no effort to restore that currency, to make it up. If only somebody had come forward and filled that gap by going in debt to the banks, it would have met the difference. Of course, nobody is big enough to do that; Henry Ford could not have done it, nor John D. Rockefeller.

Mr. GOLDSBOROUGH. But society itself, symbolized by the Federal reserve system, could have done it.

Professor FISHER. That is exactly what I was going to say.

Mr. GOLDSBOROUGH. I beg your pardon; but, having it at the tip of my tongue, it had to come out.

Professor FISHER. People say, and naturally, "We have to let this thing work itself out." But it is not working itself out; it is working itself in. These bankers who think it is are simply deluded by the money illusion. They say there has been some liquidation, and that we should let it go on. The further it goes on, the less it goes on. It is liquidation that does not liquidate, but that increases it if you are going to let it go on uncompensated.

Why should we not have a dollar that is a dollar? Why should we penalize all the honest men to-day because a few people overspeculated in 1929? People say that "it served them right," but if they, the stock market speculators, were to be punished we certainly have overpunished them by adding to their troubles the increase in the dollar, and what is worse we punished everybody else as well who was in debt. Why let a ten billion dollar debt infect a two hundred billion dollar debt with the dollar disease?

Take Ivar Krueger, whom I mentioned as having committed suicide the other day. He was the best informed business man I ever met. I think he was probably the best informed business man in this whole world. He knew business conditions all over the world, and yet he was caught just because he was so active that he thought he could depend on his knowledge of affairs, but he left out one thing; he assumed that money was going to be stable. If he had been justified in that assumption, he would not be a suicide to-day. There are people who say, of course, that he was rich and they do not care about the misfortunes of the rich, but a bankruptcy carried with it a great deal of misfortune to the poor. The people who are being punished now mostly are the innocent bystanders, not the guilty parties, not the people who overspeculated.

Contrast what has happened with what happened in Florida during the boom. There you had a great many people going through the same performance, and more. The Florida boom was by far more

false than the speculation of 1929, in my opinion. I think there is a lot of justification for the stock speculation of 1929. I think our present view is greatly distorted. There was a "lunatic fringe" there and quite a big one, but nothing like what there was in the Florida boom. People got so excited there boosting real estate, buying it to-day to sell to-morrow, not seeing where it would ever earn anything and not caring as long as more suckers would come along to buy. But finally somebody was called for the mortgages and the thing began to crash like a house of cards. Yet that did not disturb the country much, but only a few people. They were not southern people, but northern people who had gone down there and speculated in Florida real estate.

Why did it not upset the whole country? Because it did not change the dollar. The dollar was kept stable by the efforts of the Federal reserve at that time, that is, during the period of stabilization. People did get a great retribution who were so foolish as to get into that speculation, but they did not involve you and me and the rest of the country, because their actions were not allowed to change our dollar. There was this compensatory action going on.

You may say it is natural for prices to fall. Well, it is natural on an excursion steamer for the people to rush from one side of the boat to the other to see the sights, and sometimes the boat capsizes. It is natural, but does that mean that we ought to let it happen? No. Where there is danger of that, they have sailors rolling a heavy roller the opposite way, so that, if the crowd gets on one side, they compensate by rolling that weight to the other side to right the boat, to prevent its capsizing. They are doing hard work; they are going just the opposite of the crowd. What we want is a roller run by the sailors of the Federal reserve, to keep our boat from upsetting.

Now, let me take another illustration, for this thing is so important I hope you do not mind, I am not merely talking to you men who are far above the average in understanding the question, but these hearings will go to your colleagues who have not studied it, and to a great many people, and I do want to make it just as clear as I can.

Mr. GOLDSBOROUGH. Proceed in your own way.

Professor FISHER. I talked with an oil man not long ago about this thing, and this was all Greek to him. He said, "I do not know what you are talking about," because he was thinking in terms of dollars, and could not get out of that habit.

"Why," I said, "let us forget the dollar and talk about barrels of oil. Suppose you had contracted to deliver 1,000 barrels of oil, and that you had your oil stored in a warehouse in rubber barrels, which—we will suppose for the sake of this grotesque example that I am going to give you just to give you a clear physical picture—are automatically filled by stopcocks, and automatically shut off when the level gets to the top of the barrel; so they are kept full.

"Now, out of your contract to deliver 1,000 barrels of oil, you pay off, 100 barrels; we will take them out of the outer row of barrels. You go back next day and find that it is 'natural' for rubber to expand. You have taken away some of the support of the 900 barrels left. They have expanded and, with the automatic filling, they were all kept full of oil. You now have 900 barrels there, but you have practically the same amount of oil as you had in your 1,000 or more. You have paid 100 units of your debt, and have only 900 units

left. Would you stop there and say that, therefore, your remaining debt is nine-tenths of what it was? Would you consent to have a barrel made of rubber like that, that you could not depend on?" He said, "Most certainly not." I said, "Yet it is natural for it to expand when you try to pay in rubber barrels if you do not compensate or make the barrel strong enough to resist that tendency. Why should you object to nature taking its course?"

I said, "You have a rubber dollar, and it is natural that it should expand during a depression, when people pay off their debts. Naturally you ought to have something to prevent it," and he said, "I see your point, and it is a good one."

Now, this may be a lame illustration. But I have tried over and over again to get people to see that, by trying one illustration after another, they have these two obsessions, first, the money illusion, and when they get over that, they have the obsession that it is "natural," that you should let nature take her course, that this depression will cure itself if you wait.

Now, we do not say that with respect to any other unit; we do not say it is natural for a clock pendulum to swing more slowly in summer than in winter, because it is hot and that lengthens the pendulum and because it is "natural," let it happen. On the contrary, we use what we call a compensating pendulum so as to make that pendulum continue to keep good time, because we want to keep a unit of time dependable.

We want a stable unit of everything, and we have a stable unit of everything except the dollar. All units are arbitrary and artificial and interfere with nature, if you like. We have tried to make them all constant except the dollar, and that just makes fools out of us with respect to everything. What is the use of being so careful about the units that go across the counter in one direction and so careless of those going in the other direction? Every time you buy so many yards of cloth you pay so many dollars of money, and to measure those dollars is just as important as to measure that cloth. You would not think of allowing the yardstick to be of rubber; your dollar should not be, either. We have no fixed unit of value or purchasing power. Until recently we couldn't even measure purchasing power. Now that we can—by index numbers—there is no longer any excuse for keeping our crude dollar any longer.

We arbitrarily fixed the dollar in weight, and fixed the price of gold, which is the same thing; and it has stayed so since 1837, \$20.67 an ounce, instead of fixing it in purchasing power, which we could not then have done but can now. Every other unit had to be rough until people had developed scientific methods of measurement. Our unit of weight had to wait until we developed scales, or something to give us a definite unit. So we had rough units, such as a "stone" or a horse being so many "hands" high. We have tried to improve on all of those units, but we have not yet improved upon the dollar. It is really getting worse, rather than better.

WHAT CAN BE DONE?

Now, what do we need, then? We need two things what somebody has called "reflation," which is a better word than inflation, because it carries more meaning in it. It means that it is justified

inflation, justified by the previous deflation. As I said, I opposed Bryan in 1896 because he was going back too far and because of a very slow fall of prices. He wanted to go back to 1873. But it is a different thing when you talk about the change since 1929, with most debts hanging over from then till now. In 1896 there were practically no debts outstanding from 1873. It was absurd to go back to 1873 and would be still more absurd now. You might as well go back to Norman the Conqueror in 1066. But now, when you are talking about a recent deflation, with most of the debts hanging over, we certainly ought to go back enough to be sure that the average debtor and creditor are honestly dealt with.

Now, whether that is done by this bill or something else does not matter. I was asked by a man who is high up in the Government, when he became convinced that these were our needs, how we were going to accomplish the reflation. I said that I was not committed to any one way, that I was keeping my mind open, because I knew that Congress had its ideas and I was willing to fall in with anything workable. He said, "That is the whole question; how are you going to do it?" I said, "There are a great many ways." He said, "Won't you give me some of them?" I said, "I will write them out for you," and I wrote out 22 different suggestions. I have them here, so that they may go in the record. I do not have his permission to mention his name, although I do not doubt that he would give it. But I have here the manuscript detailing those 22 methods. I do not think it is worth while for me to read them all, for I have already taken so much time, but they are there. They include a great many things that have been done since. They include a good many things which some of you perhaps would not approve of, and a good many that I do not want myself if we can get along without them. I have preferences between them, and I have starred the ones I would advocate and double starred those that I would especially advocate, but I would be willing to have any or all of them, if necessary, because the important thing is to get that reflation.

(The memorandum referred to is reproduced below.)

We need first to raise the price level enough to let debtors pay their creditors on as just a basis to both as practicable; and secondly thereafter to stabilize the price level.

The raising of the price level must be done either (a) by increasing the circulating medium, or (b) by increasing its activity or velocity, which means, in particular, reducing hoarding.

The circulating medium may be increased in many ways:

1. The United States may issue new United States notes in purchase of United States bonds (or in purchase of silver or anything else, or paying its employees).

*2. The Federal reserve may buy United States bonds or other securities permitted, paying for them by Federal reserve notes or book credits.

**3. National banks could be given the bank note privilege as to the 1½ billion dollars worth of United States bonds issued in 1931.

**4. Federal reserve may rediscount more freely, either by reducing the rediscount rate or by getting authority to increase the range of securities eligible for rediscount.

5. Federal reserve may release more "free gold" by getting authority to issue Federal reserve notes on deposit of Government bonds with the Federal reserve agent.

*6. Federal reserve reserve ratio requirements may be reduced as now authorized.

7. Other bank reserve ratio requirements may be reduced by special legislation.

8. Federal reserve requirements may be suspended entirely, leaving unaffected the reserve requirements of other banks. (This would not necessarily nor

even probably, destroy gold parity, for gold to-day has little value except as reserves for the American Federal reserve system and the French demand. If gold should conceivably flow abroad, it could not flow in large quantities for lack of demand there and would tend to flow back for its chief use here. Moreover, if the gold parity should be disturbed, there would be no harm done, much as there is a prejudice against it.)

9. The reserve requirements of other banks may be suspended.

10. Following Colonel Rorty's plan, a subsidy could be given to borrowers at banks, thus increasing the borrowings.

11. As an alternative to Rorty's plan, and to avoid the cry that might be raised of subsidizing the rich producers, a plan has been suggested by H. B. Brougham for subsidizing the deposits made by retailers—25 cents on the dollar for every dollar deposited—the subsidy to be supplied by the Government. This would enable the consumer to get the advantage of low prices while encouraging the increase of deposits to raise price level.

**12. A penalty might be imposed upon banks not in debt to the Federal reserve banks at least once a year. This, or some other device, might be able to break up the tradition that it is a reflection upon a bank to be in debt to the Federal reserve bank.

13. Penalize members banks outside the Federal reserve system by perhaps making a service charge for carrying their checks. The object would be to induce all banks to join the Federal reserve system, and so strengthen and make more safe the banking system of the country.

14. The gold content of the dollar could be reduced. In other words, the price of gold could be raised. In order to prevent a raid upon the Treasury by buying gold of the Government in anticipation of said increase of price and reselling to the Government at the higher price, a suitable spread needs to be inserted between the buying and selling price.

*15. Put an embargo on gold as during the war. This would enable us to issue the irredeemable money to a large extent without destroying gold parity, so that we would, in form, retain the gold standard. If desired, limitations or prohibitions could be put upon the melting or industrial uses of gold, as also was done during the war. This measure, however, while it might help America, would tend to hurt rather than help other countries, and indirectly react somewhat unfavorably upon America herself.

*16. As Professor Persons has suggested, encourage the strong financial corporations instead of paying cash to pay as much as possible with discountable notes, thus increasing the volume of commercial credit.

**17. As Professor Persons suggests, avoid imposing a tax on bank checks. The one thing we do not want to do is to interfere with the circulation of currency.

The velocity or activity of circulation can be increased in the following ways:

**1. A propaganda, through the President or otherwise, could be undertaken, urging people to release their hoarded money, putting it into safe banks or the postal-savings banks. The President already has the requisite power to utilize these savings to buy bonds.

*2. The Government could, as it did during the war, issue baby bonds, in denominations of \$50, or even less, and those could be advertised at the same time that the postal-savings and antihoarding propaganda were undertaken. These bonds need not be new bonds, but merely the breaking up of existing thousand-dollar bonds.

*3. There might be as an emergency measure—a guarantee of all bank deposits of approved banks, said guarantee to be given by the Government or the Federal reserve banks (out of their large surplus), or mutually among the banks themselves, whose deposits are thus guaranteed, or any combination of these three.

4. Direct psychological encouragement, so far as actual facts permit, with scrupulous avoidance of exaggeration or anything that might make possible countersuggestion, especially in view of the unfortunate failure of previous assurances.

5. While anything that will encourage confidence in parting with hoarded money for other goods is desirable, it is well to remember that the same result can be obtained by lessening the over-confidence in money itself. Any fear that the money hoarded is unsound would actually help in these days.

Personally, I am quite willing to see adopted any of the foregoing measures for raising the price level. Those that I would specifically recommend are marked with an asterisk, and those that I would even more especially recommend are marked with a double asterisk. These statements of preference, in most cases, are largely because of their quick availability rather than because they have merits superior to the rest.

The above have been catalogued as possible ways of raising the price level. Most of these ways can also be used for stabilizing the price level after it is raised. Particularly, the Federal reserve could do as it used to do when dominated by Governor Strong's open market committee—buy and sell Government bonds so as to resist deflation and inflationary tendencies at any time. The change in the weight of the gold dollar can be put on a systematic basis, in accordance with the Goldsborough bills.

Doctor Edie has suggested that if we wish to avoid the "highbrow" discussion of the index number in measuring the price level, we can secure approximately the same result by feeding currency into circulation to correspond to the volume of trade—the normal volume of trade, calculated on a 10-year basis, with an increase of about 4 per cent per annum.

The inter-governmental debts should, I believe, be canceled, or as nearly canceled as public sentiment will permit. If not, we should surely reduce our tariffs to permit the debtors to pay in goods.

Our banking system should have a thorough overhauling. Bank failures abroad are almost unknown. Bank affiliates should be controlled or abolished. Bank inspection at present seems to do more harm than good, as it is made in the interests of the individual bank as against the interests of other banks, thus encouraging banks to cut each others throats instead of to cooperate. Inspectors are apt to be especially strict in depressions when they ought to be especially lax, and would be if their advice were given not to an individual bank as against other banks, but to the banking system as a whole.

This can all be summed up by saying that in America we lack the psychology of central banking. Even bankers on the boards of directors of the Federal reserve banks often fail to take a central bank's point of view, which is usually the opposite of the individual bank's point of view.

Some banking agencies should be created, permitting or affording better facilities for financing small companies. At present there is a big hiatus between the very small companies, which can be financed by individuals, and the very large companies in which the unit of financing is a million dollars or more. For this intermediate group, it is very difficult to get the requisite financing.

Likewise, there should be provision for loans, the duration of which is intermediate between long-term bonds and short-term commercial bank loans.

Such measures would reduce the misleading appearance of liquidity, which commercial banks now have where short-term loans are made with the understanding that they can be renewed so as to become long-term loans. These oral agreements are very treacherous and make trouble in times of depression. Any liquidity which appears to exist should be actual.

The New York Stock Exchange should profit by the example of the London Stock Exchange in affording more time for settlements. In London there are fortnightly settlements instead of daily settlements.

Financing by preferred stock rather than bonds would help make for elasticity. We need a system which will bend and not break in a depression.

There should be, as soon as possible after the present hectic legislation is out of the way, an international conference called on the stabilization of price levels, the conference to consist of genuine experts who have studied the problem and not of banking technicians who have not studied the problem.

One objective is to get the Bank of International Settlements to take the lead in banking policy throughout the world, especially policies directed toward stabilization.

The experience in this depression of the countries which have gone off the gold standard and secured a rise in the price level has been encouraging. This applies to England, Japan, Sweden, and a dozen other nations. Sweden, it is announced, is, through its state bank, going to try to maintain a stable price level—the first nation avowedly to do so.

I believe it would be of great importance if the President, in some public statement, would declare in favor of a stable price level; that is, a stable purchasing power of the dollar as a preliminary objective. Another way of stating the same thing is to say that both inflation and deflation are evils and should be avoided.

I believe that Governor Strong's policies would have been more frankly explained to the public had there not been a well-justified fear that the United States could not stabilize the price level without the cooperation of other countries. The price level is a money problem, and as money flows freely under any common gold standard, it is an international problem. It can only be within national control if a country has a standard of its own, such as a managed paper standard, or a gold standard with the weight of the monetary unit changing from time to time.

Mr. GOLDSBOROUGH. What is your conception of the value of this bill in relation to what you think ought to be done, and the best way?

Professor FISHER. I am in favor of it. I think it needs the addition of some sections, a little clarification. I am coming to that in a moment.

Mr. GOLDSBOROUGH. Proceed in your own way.

Professor FISHER. I have talked too much already.

Mr. GOLDSBOROUGH. No, you have not. Proceed in your own way.

Professor FISHER. The point is to translate from money into commodities, and to get a commodity dollar. I do not care whether you retain the gold standard or not, as long as you get a commodity dollar. I think there is a certain value in the gold standard. I would rather retain the gold standard than to lose it, if it can be prevented from misbehaving; but if you have to choose between keeping the gold standard in the sense of the dollar remaining 23.22 grains of gold, of course it is ridiculous to choose the former when the latter is really what you want. The only important object of the gold standard is to prevent undue inflation; in other words, to keep a certain amount of stabilization.

A "NORMAL" PRICE LEVEL

Mr. PRALL. I would like to ask you a question there. What is your definition of the normal price level?

Professor FISHER. I would say a price level is normal always relatively to where you are. The price level that is normal for to-day is different from the price level that was normal for 1920 or 1896 or 1865. The price level of 1920 was abnormally high because just before the price level had been falling; so that at that time we ought to have reduced it to find a normal. We did reduce it and reduced it too much. In 1896 the price level was abnormally low as at present. The actual price level to-day is highly abnormal because of the hang-over of debts, and to make it normal you want to raise it to that point where it will most advantageously serve the interests of debtors and creditors, as I see it.

That is an abstract answer, rather than one that is concrete, but I think it can be made into a concrete answer if you would have a certain amount of study put on it, and I would recommend that before you recommend that section 1 as it now stands, which takes 1926 as normal, that you ask W. I. King or two, three or five men to act as a committee to make, at any rate, some kind of a rough estimate based on these statistics of debt and other things, and to bring in a report as to whether they think 1926 is reasonable from that standpoint.

Mr. GOLDSBOROUGH. Professor King has already said that he did think so.

Professor FISHER. Well, I know, but that was a thumb-nail opinion. My present tentative opinion would be that it is not. But I am perfectly willing, as he would be, to change my opinion if the facts developed should justify it.

Mr. GOLDSBOROUGH. 1926 is not high enough. My conception of long-term debts is that they go back at least to the high prices of the war period, and some of them go way back of that.

Professor FISHER. Some of them do.

Mr. GOLDSBOROUGH. And 1926, in my judgment, does not begin to put the average mortgagor on a parity with his creditors.

Professor FISHER. That is your impression.

Mr. GOLDSBOROUGH. No; it is not my impression. I know what I am talking about when it comes to mortgages. I do not mean that I am an expert in so far as long-term bonds are concerned, but I am just talking about the average man who gave a mortgage either on his town property or on his farm property years and years ago. I will tell you that 1926 will not begin to compensate him.

Professor FISHER. I am inclined to agree with you so far as mortgages are concerned. I thought you meant with regard to everything. With regard to mortgages, I think undoubtedly that is correct, but that is simply one element in the whole situation.

Mr. GOLDSBOROUGH. It is the mortgages that are the curse of this country right now.

Professor FISHER. It is one of them.

Mr. GOLDSBOROUGH. It is the curse right now. Mortgages and real estate taxation are the two curses of the country right now.

Professor FISHER. I do not regard this bill as aiming merely to give farm relief. It is legislation intended to do justice to everybody, so far as that is possible.

Mr. GOLDSBOROUGH. Will you let me make this suggestion? People got up to a certain standard of living around 1928 and 1929, to a certain standard of expenses, to a certain standard of contributions to worthy causes, to a certain standard of clothes that they would like to wear and food that they would like to eat. Those people have not had time to readjust themselves at all, and they are just about on the point now where they feel they have to do it. On the other hand, labor has not reconciled itself to any readjustment as yet, and why not go back to the time before there was any necessity of lowering the standard of living, or lowering wages? It has been so recent, Professor Fisher, as late as the middle of 1929, before people even began to consider any change in their mode of living. Now, it seems to me, as Mr. Busby indicated the other day, that there are other considerations beside the mere arbitrary dollar as between the debtor and the creditor, and, as far as I am concerned, considering the price level of 1926, I do not believe any creditor would feel it or even know it.

Professor FISHER. The creditors who have come in since then, who lend money, are considerable.

Mr. GOLDSBOROUGH. I do not think so.

Mr. BUSBY. Are not a lot of the debts that bear late dates really renewals of obligations that represent a much more distant period, which were contracted a considerable time back from the date borne now on the paper?

Mr. GOLDSBOROUGH. There has not been under new money loaned in the last two years.

Professor FISHER. That has a lot to do with it. That could be straightened up. That is a very good point. A great many debts seem to be of recent origin which are in reality renewals of debts that go back a long way. On the other hand, you have exactly the opposite situation where you have to liquidate a debt, like a bond which has been sold. Take Liberty bonds; they represent a debt of the United

States, representing all of us. It is quite unjust to Uncle Sam that he should now, after all of his liquidation, really owe 40 or 50 per cent more than he did at the time. That is an injustice that ought to be rectified. But from the standpoint of the bondholder, you do not go back more than a few days or weeks, because the present holders of those bonds are not the people who bought them in those days. The bonds have been sold and resold and resold, and any "cheating" to past holders has already gone over the dam; you can not reach it. All you can do now so far as the Liberty bond holders or creditors are concerned is to have repaid to the last holders; all their predecessors are out of the picture and beyond the reach of any law.

Mr. BUSBY. When you come to consider balancing the detriment that has come to the thousands—and I might say millions—who have gone through the process of liquidation, whether it has been real or apparent, and who have been separated in many cases from the last vestige of their property and in others from part of it, a restoration to a little higher level than would be reached from an exact measuring or balancing of debtor and creditor obligations seems to me to be demanded.

Professor FISHER. Provided that they have not gone bankrupt. Maybe they are out of it, just as Ivar Krueger is out of it.

Mr. GOLDSBOROUGH. I want to make this statement in the record. In my judgment, if we went back to the 1926 level, within from 90 days to six months everybody would be going along just like they did before the collapse. In my judgment, also, if we went back only to half the 1926 level, it would take society 20 years to readjust itself to that point, and it is not necessary, in my judgment, to do that.

Professor FISHER. I am not sufficiently familiar yet with this debt situation to be sure that you are right or wrong about it. I want to make it clear that I am not saying you are wrong. I am merely saying that my present impression is that you are; but if after a careful study I should come around to your point of view, I would be perfectly willing to see you go to 1926.

Mr. GOLDSBOROUGH. There is one thing I can not understand, and that is why it is ever necessary for society to go through the throes of a new birth when it can be avoided, and it seems to me that the proposition to raise the price level to half of what it was prior to this collapse—

Professor FISHER. Half way back?

Mr. GOLDSBOROUGH. Half way back—means that every single element, social element, has to readjust itself to that new level, and I do not think it is necessary. As far as an economic plan is concerned, I think it is brutal, and the reason I think so is this, that while I understand perfectly well that it would make very little difference what your price level was, after it became stabilized, and society became adjusted to it, why is it necessary to go through this period of readjustment? Why not stabilize at the end which will cause the least disorganization.

Professor FISHER. I think, Mr. Chairman, that that is putting in another way my answer to Mr. Prall's question as to what is a normal price level. But I am not able to answer it except in general terms, and it may be that after study I would think that 1926 is not going far enough, but my present impression is that it is going too far.

Mr. BUSBY. What I started to observe is that inasmuch as in the period from 1921 to 1929 the price level had been reasonably constant, and a proper condition of living seemed to be enjoyed or participated in by all classes of society, and, so far as we know, debts having been contracted then—but that is a matter perhaps of importance second to the proposition of a proper standard of living—it seems to me that the average of that period should be taken to return to, or as the pole star to which we should direct our compass in getting back to a proper level; and this also seems to require some compensation, in that labor and the producer have undoubtedly suffered in going through the period from 1929 down to the present time, and there ought to be some recognition of that lack of compensation that he has suffered during that time in returning to a point where we should not be a little under the proper level, but even if we were a little above it we would not be making any mistake on the whole. I do not know what you think of that, but it strikes me—

Professor FISHER. I think, if I understand you, that I agree in principle, as they say. I think we should take account of all the factors that relate to the present. They are practically all debt factors. The theoretically exact method, as I see it, would be to restore the level to such a point that the average dollar of debt affected by this law would be reduced to its average value when contracted or assumed by the parties now affected, including both debtors and creditors.

Mr. BUSBY. Just one other observation. I believe that the creditor class, who are now standing in fear of not being able to realize on the promises of people who are dependent on commodities to meet those promises, would be much better satisfied if they could return even to the 1926 prices. If we concede that they got a slightly depreciated dollar in return for the debt, they would be entirely agreeable to getting that kind of a dollar rather than to face the uncertainty with which they are confronted at the present time.

Professor FISHER. Yes; I agree with that absolutely. I would rather have 1926 than 1932. But get a committee to report a recommendation to you. You might reject it, but I think it would be of value to you.

Mr. GOLDSBOROUGH. Speaking as one member of the subcommittee, I do not think it would be of benefit to us. Without economists we would probably have not been able to reach anything like the point we have on this subject, but you have to take the human picture as we have it. We had a relatively stable price level from 1921 to 1929, and everybody wants to go back to it—it does not make any difference what class it is—and if we can get them back to it, let us do it as quickly as possible and start the machinery of the country going.

Professor FISHER. It may be that 1926 is right, or even is too low, but I just want to call your attention to this, Mr. Chairman, that we are very apt, all of us, to be more or less blinded by the needs of the moment. You will remember that in 1920, as ex-Senator Owen indicated when he spoke, there was a clamor throughout the country that we had then too high a cost of living. I can remember it just as vividly as if it were yesterday. We only wanted to see that rectified. It should have been rectified, but the way they rectified it was to get us out of the frying pan into the fire. We got rid of the inflation, but we had a terrific deflation, and one of the most severe

crises, in 1921, next to this one we have just gone through, and it all came out of this tremendous emotional desire to correct it without going into it scientifically; and finally the Federal Reserve Board, which had resisted it up to that moment, under the leadership of Governor Harding put on the brakes and put them on too hard.

Mr. GOLDSBOROUGH. Professor Fisher—

Professor FISHER. I do not want to make the same mistake now.

Mr. GOLDSBOROUGH. I do not either; but I want to say this, and I want to insist upon it as far as my judgment is concerned, that there is no emotional appeal in this section 31 of my bill. It is conservative, in my judgment, in the extreme. If there were simply a direction there to raise prices, it might be subject to that criticism, but the simple suggestion that we go back to the point where we had stabilization for nine years, and all the people of all classes are hoping now that we can stabilize at that point, I do not think is comparable to the situation in 1920.

RETAINING THE GOLD STANDARD

Professor FISHER. I believe, if we do the right thing, that we can probably retain the gold standard and, without changing the price of gold or the weight of the gold dollar for many years to come, perhaps never, can still stabilize. but I would stabilize anyway, no matter what happens.

Mr. BUSBY. In stabilizing without changing the gold dollar, I presume that you refer to the exercise of powers already vested in the Federal reserve, and to be vested by this legislation?

Professor FISHER. Yes; and we have, you know, an immense amount of gold. Now it has been released by the Glass-Steagall bill, but it was tied up before that. We have now released three-quarters of a billion that way, and now that other countries have gone off the gold standard and are not needing it—and only one country of any importance beside ours has a gold standard, and that country has already more gold than it needs—it seems to me that we ought to be able to stabilize and still retain the present price of gold, because gold—and here is another illusion—does not have very much effect of its own on the purchasing power of the dollar. The gold standard is almost a myth, and more mythical to-day than it ever was. There was a time when gold meant something independently of any other money, and we built up all our credit on that basis. I believe Edison says that now it only has its usefulness for picture frames and filling teeth. But those uses, and jewelry, were enough in the old days to give it something to stand on. Then people took paper receipts for gold deposited, like our present gold certificates, and gradually turned to promissory notes. They built up more and more on these promises on top of the gold base, until the great big bubble in now fixing the purchasing power of the dollar, and the little base at the bottom has almost no effect. Yet people have an illusion when they say that the value of the dollar goes up and down but that the value of the gold does not. It is credit that does it. This gold is just a little capsule attached to a big balloon. It has practically no effect. When people say that gold is our ultimate means of redemption, it is, but it would be more logical to say that we redeem the gold in deposit credit, and let it go at that.

The gold gets its value because it is convertible into credit, and the credit does not get its value, to any extent, from the gold. Of course, we know that the earth attracts the sun and that the sun attracts the earth, but the earth attracts the sun so little that it is the big thing, the sun, that does the real controlling. The big thing to-day is not gold, and if we and France should demonetize gold to-day, without any hope of coming back to it, and England should make a declaration such as her leaders suggest, that henceforth they are going to have a managed paper currency, and not a gold base, and if the Swedish Riksbank should do it, and then Japan, how much do you think gold would be worth, having nowhere to go but into peoples' mouths, for dentistry, gilding picture frames, and jewelry? What do you suppose it would be worth then? It has not any important independent value that could stand up of itself. It derives its value from the fact that it is used by the nations as the safest basis, the legal redemption basis for other dollars.

Mr. STRONG. Just the same as the silver people are trying to have the silver used more generally in circulation as money in order to advance the price of silver.

Professor FISHER. Yes.

Mr. BUSBY. I want to ask you another question. I do not want to divert you, but while you are on that subject, do you have any suggestions to make to us as to what the countries would use to settle international credits or debts in the event that gold was not recognized as money, but only as a commodity, like all other commodities? I am just curious to know that.

Professor FISHER. You could use anything that you limited in quantity. You could use the autograph of George Washington. You could use any other metals sufficiently small in quantity.

Mr. BUSBY. I understand that you are in favor of retaining it, but I was just curious to know what the different countries would then do.

Professor FISHER. I am in favor of retaining gold. But we might do something like what Mr. James H. Rand, jr., president of the Remington-Rand Co., has recently suggested. He has suggested, to get rid of international debts, that we create an international bank of issue, or use the present world bank and give it the power to lend to all the countries that owe money to other countries the full amount of new paper money based on the credit of the nations that agree to the contract or treaty, and let those debtors then pay off all their debts, so that we get rid of all international debts, and have that international paper money, limited to this amount, then made legal tender at the present rate of \$20.67 an ounce of gold, and let that circulate internationally instead of gold.

Mr. STRONG. However, you would limit the amount of that?

Professor FISHER. Absolutely. The idea of paper money we have always regarded as unsound, the idea of fiat money. I have always opposed fiat money. I am not going on record now in favor of it; but I have always objected to any economist signing his name to the proposition that economically it is unsound, for its unsoundness is political. You can not trust the governments with the printing press, and it is better to anchor to gold, than to have no anchor. That is the reason that Kemmerer is for the gold standard. He is afraid, from his contacts with countries in South America, that could not manage the currencies well, and the gold supplies a certain

automatic check. But theoretically it is quite possible to have a managed currency. Keynes suggested it, and the Riksbank in Sweden is apparently going to adopt it.

In the Ukraine there was money issued by various governments that went through various revolutions during the war. At one time it was under a German general, and he issued some paper money, and then he was overturned; but that paper money continued to circulate, and because it was limited in quantity, it was the most valuable money in the country. It is chiefly a question of quantity and the only danger, the only fallacy, the only unsoundness in paper money is because the political policy may not be sound.

Mr. STRONG. And the fact that every one who had a scheme to offer would want fiat money to do it with.

Professor FISHER. It is a very dangerous thing, but I think that ideally, if you had it internationally, or under an international commission—

Mr. STRONG. Some of the leaders of our farm organizations and of some other organizations are advocating that we pay the soldiers' bonus in fiat money. Well, I can see how that would not hurt so much, if that was all that there was a demand to issue fiat money for, but when you commence to build roads and public buildings and pay Government debts and pensions, that would be using printing press money as they did in Germany, world without end.

Professor FISHER. You would have a tremendous pressure in Congress. Everybody would say, "It won't cost you anything; just run your printing press"—unless you established the idea that the price level must be maintained.

Mr. STRONG. That would destroy the price level.

Professor FISHER. Yes; but I am in favor of retaining the gold standard and using it as it really is. Its only use to-day is for international settlements.

Mr. BUSBY. In that connection, do you not feel that by using gold as it is used to-day, by quantity, for international settlements, each country would so arrange its measure as a domestic proposition, using this gold in the varying dollar quantities, if necessary, when you found you were not doing the right thing to affect price by your credit arrangement, so as to relate that gold to commodity prices and have your central point like a magnetic pole to which you could attract prices back if they went too high, or up if they went too low?

Professor FISHER. Yes.

Mr. BUSBY. And in that way stabilize your commodity prices, and also automatically stabilize your money?

Professor FISHER. Yes, but what I tried to emphasize, Mr. Busby, is that to-day we are in an unusual position in reference to gold. Gold has little independent force to-day, because so many countries have given it up. It is a drug on the market. It is overshadowed by credit to-day and it is concentrated in two countries, so that to-day we get very little regulatory value out of gold itself. If one little country, like Switzerland, should take gold as fixed by the other countries of the world and adjust its currency by regulating the size of the dollar, or the franc, its action would not affect the value of gold appreciably. To regulate their price level they would have to change the weight of their gold franc. Switzerland is too small. But if this great country tried, I think we could regulate our price level without changing the

weight of the dollar. For years ahead, unless there should be some further cataclysm, there would probably not be any difficulty both in maintaining the price level and the weight of the dollar as it is, both at the same time.

Mr. BUSBY. I did not mean to divert you.

SUGGESTIONS FOR THIS BILL

Professor FISHER. Now, to take up the three sections of this bill, and to comment on each of the three sections:

I would really like very much, and I think it would help you in your committee work, if you would be able to put, in terms of figures of some sort, and based on the authority of some expert, impartial student or students, your justification for taking 1926 as the basis, or some substitution for 1926 rather than taking it for granted.

Mr. STRONG. You have yourself said that 1926, being an average in between 1921 and 1929, when we did stabilize, would be a satisfactory point.

Professor FISHER. I would, up to 1929. I would have said that up to 1929, but now we have fallen so far down since 1929 that you will have to take account of the new contracts in the last three years. They ought to be given some weight. If it is true that there are few of them by comparison—

Mr. STRONG. I was going to accept your judgment, rather than hire somebody else or seek the advice of somebody else.

Professor FISHER. I think a little intensive work on the part of two or three students could give you some real criticism of that section which would be useful to you in either defending it or substituting something for it when you come to present your case to Congress, but if you go now and they ask you why you took 1926, and you say it is because you call that 100, they would think it is not much of a reason.

Mr. STRONG. I would say because that was a very satisfactory period in our financial history.

Mr. GOLDSBOROUGH. It seems to me that that would be the least difficult thing to defend in the bill.

Professor FISHER. At any rate, I make that suggestion.

Mr. STRONG. Mr. Burtness has suggested to me that we might also say that, as far as we can judge, 1926 is about the base upon which most of our indebtedness has been contracted.

Professor FISHER. That should be a matter of study.

Mr. BEEDY. Has that been established?

Professor FISHER. I do not think so. I do not think anyone has made a study of these debts in relation to the present.

Mr. BEEDY. What would be the effect if we would go from 1921 to 1932? Why should we not, as a matter of fact, include the period between 1921 and 1932, and strike an average?

Professor FISHER. We should, but we should weigh each year's price level in proportion to the debts of that year contracted then by debtors and held then by creditors and still outstanding to-day for said debtors and creditors. That is exactly what I would like to do, take an average of from 1932 back as far as you would like, to the earliest debt now existing, but give the earlier year, say 1920, very little weight compared with 1929, which would have the biggest weight, or 1930.

Mr. BUSBY. Just prior to 1921 we had an awfully inflated condition. It would be fairer to go back to 1913, at a time when we had a gradual price rise, and hit this swelled period when there were a great many debts created that have since been renewed. You will not have more than 1 per cent of variation from 1926 prices if you will include the period during the war as well as the period down to the present time; you would get on 1926 practically solid in your average.

Professor FISHER. It may be.

Mr. STRONG. It would be a pretty hard study to determine the amount of the debts contracted in any one year and still existing. I have mine still existing.

Professor FISHER. In the second section, Mr. Chairman, you speak of the board as issuing debentures. I think you should have said the banks.

Probably there are many little technical points like that that ought to be looked into carefully before you present the bill to Congress.

Mr. GOLDSBOROUGH. Section 2 reads "and/or"—"the Federal Reserve Board and/or the Federal reserve bank."

Professor FISHER. Shall issue debentures of its own.

Mr. GOLDSBOROUGH. Yes.

Professor FISHER. The board is authorized.

Mr. GOLDSBOROUGH. Yes.

Professor FISHER. I do not know how to put it. It is a lawyer's proposition, but it looked to me as though it was defective in the language there.

In section 3, I strongly suggest that you add an authorization to make two separate gold prices possible, one for selling gold and the other for buying gold. Suppose, for instance, 10 years from now, or 10 months from now, or whenever it is, the Federal reserve system should make use of this section 3 and should announce that tomorrow, or next week—or if it should leak out, if they did not announce it, that—the price of gold, instead of being \$20.67 an ounce, was going to be \$21 an ounce. Evidently people would now buy of the Government at \$20.67 an ounce, and sell back to the Government tomorrow or next week, making 33 cents an ounce out of the Government and embarrassing the Government in the meantime. You see, the Government price of gold is now the same for buying and selling. For years and years, modern governments have had a buying and selling price which is uniform. A margin never occurs. It is different with a business man. A retailer buys at one price and sells at a higher price, and that margin is a normal thing with him, but Uncle Sam would be defenseless if we should say that he would buy and sell now at one price for both buying and selling and tomorrow to buy and sell at another price. People would immediately buy of him to-day and sell to him tomorrow, if prices were going up, or if he announced a fall in price, they would sell to him to-day and buy back tomorrow. In each case they would be taking it out of him. That was provided for in the original Goldsborough bill with a margin of 1 per cent, I think it was, and it was stipulated that the shift of this pair of prices should never be more than 1 per cent also. In that case no speculator could make any money; there would be no object in doing the speculating at the expense of the Government;

but, in order that the Government Treasury shall be protected, the Federal reserve system, when they make these changes, I think will have to have a spread between the buying and selling prices, and they ought to be given plenty of leeway here. I would let them raise or lower the price both of selling and buying to maintain the price level.

Mr. GOLDSBOROUGH. They could arrange that, of course, to meet particular conditions.

Professor FISHER. It ought to be so specified that they would know it.

Mr. GOLDSBOROUGH. I think your suggestion is a necessary one, but, you will understand, as we have announced here before, we purposely stripped this bill down as far as possible so as to confine the discussion to the principles involved, and then with the idea of re-writing the bill from a technical standpoint afterwards.

Professor FISHER. I think there ought to be a fourth section in the bill, to include a suggestion which came from the Federal reserve. The Federal Reserve Board, through a committee, worked out a new plan for reserves, to base reserves on velocity of circulation, and, instead of having merely three classes of reserves, 7 per cent, 10 per cent, and 13 per cent in the different cities, which was a guess at the various activities in those cities, to have it scientifically adjusted to the activities in every bank, in every city, so that the banks that had high velocity would have high reserve and so that the banks that had a low velocity would have a low reserve, and so that also, when the velocity accelerated, the reserve would automatically go up, and when, on the other hand, there is a depression and the velocity goes down, the reserve would automatically go down.

I think it is one of the cleverest and simplest things I have ever seen, and it was proposed in the Glass bill.

Mr. STRONG. Maybe we can put some stabilization in it.

Professor FISHER. I wish you could. I was authorized to offer to you, out of that bill, this clause, which I will call section 4 now in your bill:

Section 19 of the Federal reserve act of the United States Code, title 12, sections 461 to 466, inclusive, and section 374 as amended, is further amended and reenacted to read as follows:

*“Reserves of member banks.—*Section 19 (a) each member bank shall establish and maintain reserves equal to 5 per centum of the amount of its net deposits, plus 50 per centum of the amount of its average daily receipts, debits to deposit accounts, but in no case shall the aggregate reserves required to be maintained by any member bank exceed 15 per centum of its gross deposits.”

That was very carefully worked out by the experts in the Federal reserve, and its effect is to make the reserves go up when business is going too fast, and to go down when business is going slowly, which, of itself, would have a great stabilizing effect.

Mr. STRONG. That would put a governor on it.

Professor FISHER. Yes.

STABILIZATION IN ALL POSSIBLE CONTINGENCIES

I have tried my hand, Mr. Chairman, in writing a memorandum here as to what I would do if I had my way. It is crude, because I am not a bill drafter, but it represents how I would probably proceed if it were all in my hands, and I have put it into three divisions. I call it, "Suggestions for a bill for restoring to normal, and thereafter stabilizing, the price level by methods fitted to operate successfully under substantially all circumstances." What I set myself was the problem to surmount every difficulty that you could foresee—if gold should become scarce, or should go abroad; if the member banks should fail to cooperate—whatever is necessary to overcome all those situations, and I put it under three heads:

"Division A, comprising legislation of immediate urgency," which is substantially what you have in the Goldsborough bill, a little less in fact.

"Division B, adding provisions needed to enable the Federal reserve system to stabilize independently, if need be, of member or other banks." Several people have said to me, "You can not in America stabilize, because you have so many banks, independent banks, and you can not make them behave. They are going to manufacture credit or stop manufacturing credit, and what can a Federal reserve system do about it?"

I think they could still do a great deal about it, if they had the requisite powers.

"Division C, adding features designed to bring about fuller cooperation of banks and a unified national banking system."

That is to correct this lack of cooperation on the part of the banks, by compelling them to come into the Federal reserve system. I know that that will go against the grain of some a great deal, and I know it will be a consummation of perfection to get all of this done, but it seemed to me that it might be worth while recording here what one man has attempted to do to solve the stabilizing problem so as to meet all possible contingencies. The only thing, I may say, that would clearly break it down is a great war, where the Government itself would inflate, because it could not win the war otherwise. The Government would then itself be the law breaker and destroy the whole thing; but, except for that I do not see why those three methods do not really solve the stabilization problem in America under practically all circumstances.

If you want this, I will be very glad to offer it.

Mr. GOLDSBOROUGH. I think it is the concensus of opinion of the committee that that should go into the record.

(The memorandum of suggestions referred to is reproduced below.)

SUGGESTIONS FOR A BILL FOR RESTORING TO NORMAL, AND THEREAFTER STABILIZING, THE PRICE LEVEL BY METHODS FITTED TO OPERATE SUCCESSFULLY UNDER SUBSTANTIALLY ALL CIRCUMSTANCES

Under three divisions, namely:

Division A, comprising legislation of immediate urgency.

Division B, adding provisions needed to enable the Federal reserve system to stabilize independently, if need be, of member or other banks.

Division C, adding features designed to bring about fuller cooperation of banks and a unified national banking system.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled—

DIVISION A. OF IMMEDIATE IMPORTANCE

GENERAL PROVISIONS

SECTION 1. The act approved December 23, 1913, known as the Federal reserve act, as amended, is hereby further amended as follows: Add to section 14 the following paragraphs:

(g) The term "Federal reserve system," as used in this act, shall mean the Federal Reserve Board, the Federal reserve banks, and all committees, commissions, agents, and others under their direction, supervision, or control.

(h) The Federal reserve system shall, as conditions make them suitable, use in its monetary and credit policy all the powers now or hereafter possessed by it, in order to effect the following purposes:

(1) To raise the general level of commodity prices in accordance with (k) below;

(2) Thereafter to prevent that price level from fluctuating, so far as possible.

(i) Such monetary and credit policy shall include:

(1) Open market operations—that is, buying and selling eligible bills and securities.

(2) Buying and selling gold or gold certificates in exchange for Federal reserve notes or other funds (the price of gold being unless hereafter changed as hereinafter provided \$20.67 per ounce of pure gold, i. e., \$1 per 23.22 grains of pure gold).

(3) Adjustment of rediscount rates.

(4) Adjustment of gold reserve ratios of Federal Reserve Banks as hereinafter prescribed.

(5) Advice to member banks and nonmember banks, with the object of securing their cooperation in stabilization policy, including, especially adjustment of discount rates to customers, open market operations and rediscounts with Federal reserve banks.

(6) Relations, consultation, cooperation, and lawful transactions with non-American banks, including the Bank for International Settlements at Basle known as the World Bank.

(7) Statistical studies.

(8) Publicity.

(9) All other activities permitted under this act and suitable for the purpose of controlling or influencing the general level of prices through monetary and credit policy.

(j) Whenever any important decision as to monetary or credit policy is made tending to affect the price level, such decision or action, with reasons therefor, shall, with reasonable promptitude, be reported by the Governor of the Federal Reserve Board to the press through its usual Washington correspondents in the usual way, and in such detail as may be deemed by him to be most effective for advising the public of the same.

PRICE INDEXES

SEC. 2. (a) An interdepartmental committee on price indexes, with not less than _____ nor more than _____ members, such as the present informal organization commonly so designated, shall be constituted by the Federal reserve system and shall consist of statisticians representing those departments and bureaus of the Federal Government which compile and publish price statistics.

(b) It shall be the duty of the interdepartmental committee on index numbers, in cooperation with the Bureau of Standards, after careful study of the problems of measuring price changes and the best methods of constructing an index number for measuring the general level of prices, to decide upon the best methods for computing the official price index number or index numbers of the United States. The types of price series to be used, the methods of weighting the prices, and the formula for constructing the index or indexes and other technical details shall be determined by the said interdepartmental committee on price indexes.

(c) At the direction of said interdepartmental committee, the quotations of prices which are to be used in constructing the official price index number shall be collected by the Census Bureau, the Bureau of Farm Economics, the Bureau of Mines, the Bureau of Foreign and Domestic Commerce, the Bureau of Labor Statistics, and the several other Bureaus or agencies of the Government which

are best equipped and best fitted by function and by experience to collect them quickly and accurately in all important commercial centers.

For example, the Bureau of Farm Economics would doubtless continue to collect prices at the farms; the Bureau of Mines to collect prices of metals, or coal and other minerals; the Bureau of Foreign and Domestic Commerce to collect prices of manufactured and partly manufactured commodities; the Bureau of Labor Statistics to collect retail prices of goods constituting the workers' cost of living.

(d) It shall be the duty of said interdepartmental committee to compute the official price index number or index numbers from the data on prices and quantities furnished by the collecting Bureaus and agencies above mentioned, according to the methods and formulas approved by it.

(e) Said interdepartmental committee is hereby authorized and directed, as promptly as possible, at short intervals to publish, and transmit to the Federal reserve system its said index number or index numbers for the purpose of measuring and providing a standard for regulating the general level of prices.

Said committee is authorized to improve the index number or numbers from time to time as evidence, data or methods for possible improvement become available.

(f) The Federal reserve system shall employ the said official index number or index numbers as a guide or criterion by which to accomplish the restoration of the general level of commodity prices to a more normal level and the stabilization of that level as hereinafter authorized and directed.

Alternative to section 2: Employ the existing index number of wholesale prices of the Bureau of Labor Statistics or that of the Federal Reserve Board; or entrust the problem of constructing of the most scientific index numbers to the Bureau of Standards under a new division to be created.

VOLUME OF TRADE INDEXES

Sec. 3. Since the stabilization of the price level is substantially equivalent to adapting the volume of credit to the growth of business, the Federal reserve system is authorized to employ as a supplementary guide or criterion, for normalizing and stabilizing the price level, what it shall deem the best available statistics of the volume of trade and all data related thereto.

It would be possible, as proposed by Doctor Edie, to employ a trade index exclusively and ignore price indexes. In that case the aim would be to accommodate business by supplying it with a ration of credit (measured by demand deposits of member banks or by loans and investments) increasing each year according to the average rate of the last decade.

RESTORATION OF PRICE LEVEL

Sec. 4. Immediately following the amendment, stated in section 1 above, to the Federal reserve act, the following further amendment shall be added:

"(k) The Federal reserve system is hereby authorized and directed to take all suitable and available steps to raise the present deflated level of prices, as speedily as possible to a level not above that existing before the present deflation. A level such as will as nearly as practicable equal the average level at which outstanding debts were contracted or assumed by their present owners and such as will most nearly restore business, industry, commerce and agriculture to a fair and reasonable normal.

"(l) Such a level is to be determined according to the best judgment of the Federal reserve system with the aid of expert statistical and other suitable assistance.

MAINTAINING THAT LEVEL

"(m) When said predeflation price level is reached, taking into consideration all aspects of the situation, including specifically the figures reached by the index (or indexes) employed for that purpose, the fact shall be made public in the manner provided in section 1 (j) supra, and thereafter said level shall be maintained as nearly as this is possible through monetary and credit policy.

"(n) In maintaining said level so far as possible, the Federal reserve system is authorized to extend its open-market operations by buying and selling commercial paper as well as all other types of drafts, bills of exchange, acceptances, municipal warrants, government bonds, and other securities hitherto authorized. All open market operations may be conducted without the mediation of member or other banks.

SOME TECHNICAL DETAILS

“(o) If the free gold of the system is deemed, at any time, to be too near exhaustion, the system is authorized for a period of 15 days at a time, to utilize its holdings of Government bonds as backing for Federal reserve notes. Such authorization may be renewed as often as required.

This would perpetuate the like provision in the Glass-Steagall bill now limited to one year.

DIVISION B. ADDING PROVISIONS NEEDED TO ENABLE THE FEDERAL RESERVE SYSTEM TO STABILIZE INDEPENDENTLY, IF NEED BE, OF MEMBER OR OTHER BANKS

“(p) If the securities held by the Federal reserve system, and available for sale, seem, at any time, to be too near exhaustion, the system is authorized to issue and sell, in the open market (and at any later time, rebuy), new interest-bearing debentures in such volume and of such date of maturity and rate of interest as may be deemed by it most suitable.

“(q) All net profit or loss from buying and selling said debentures or paying interest thereon shall accrue to the United States Government and shall annually be paid into, or reimbursed from, the Treasury of the United States.

“(r) If the gold reserve ratio is deemed to be too near to the prescribed minimum, the system is authorized and directed to lower the legal minimum reserve requirement for Federal reserve banks in accordance with, and under the conditions and restrictions already prescribed in Section II, subsection c of the Federal reserve act;

If, on the other hand, the legal minimum gold reserve ratio is deemed to be too high, the system is authorized and directed to raise the legal minimum ratio for Federal reserve banks.

MAINTAINING THE LEGAL GOLD RESERVE RATIO

SEC. 5. If the gold reserve is deemed by the Federal reserve system to be too near to the prescribed minimum, the system is authorized, if the other methods already authorized appear inadequate, to raise the official price of gold.

If, on the other hand, the gold reserve ratio is deemed to be too high, the system is authorized, if the other methods already authorized appear inadequate, to lower the official price of gold.

SOME TECHNICAL DETAILS

SEC. 6. Should, at any time, the price of gold thus be changed, either up or down, the Federal reserve system is authorized to introduce temporarily a differential between its selling and buying prices sufficient to prevent speculators (for instance, on rumor of a proposed change in price) from taking advantage of the Federal reserve system or the United States Government either by buying gold from them at one price and later selling it back to them at a higher price, or by selling gold to them at one price and later buying it back of them at a lower price.

After the price of gold has been sufficiently changed to safeguard the reserve ratio so that price may, presumably, again be left unchanged for a considerable period, the differential may be removed so that the Government's buying price and selling price may again coincide.

SEC. 7. All profits and losses from buying and selling gold shall accrue to United States Treasury.

It will be observed that there is no mandate put upon the Federal reserve system ever to change the price of gold. Such a change is merely authorized if and when found necessary to prevent inflation or deflation. As long as the retention of the present basis of \$20.67 an ounce continues to be compatible with the maintenance of a stable price level, that basis will remain.

But if and when the retention of a constant price of gold and the maintenance of a fairly constant level of prices are found to be incompatible, a change can and should be made. The Federal reserve authorities can be trusted not to make it any sooner than need be. But it is only fair to them that, when given the responsibility to stabilize the price level and to keep the legal gold reserve ratio they should not be eventually hamstrung in their attempts by the fixity of the price of gold. Inasmuch as the only proper purpose of maintaining a uniform price of gold is to prevent inflation, no one can properly object to changing the gold price if that purpose can better be served thereby.

Any change, made with such a purpose, is not an abandonment of the gold standard but simply a revaluation of gold to correspond to any great change in its purchasing power. The present price of \$20.67 an ounce might conceivably be maintained indefinitely without producing material inflation or deflation, and it is altogether probable that no change would be required in many years.

It is further to be noted that any change which might become necessary after it is once made in a thoroughgoing manner so that the reserve ratio is again moderate—neither absurdly high nor low—this new price will probably stand unchanged for many years.

Under these circumstances there seems no occasion for alarm, on the part of those who regard the figures \$20.67 as sacred, over the remote prospect of its being some day changed, especially as any change is authorized only in furtherance of maintaining the gold standard and its chief purpose—stability.

Should, at any time, the price of gold be raised this operates automatically to raise and thereby improve the reserve ratio in two ways, namely:

(1) It stimulates the sale by gold owners of their gold to the Federal reserve system and discourages the purchase of gold from it.

(2) It increases the dollar value of the gold in the vaults of the Federal reserve banks.

If, for instance, the price of gold is increased by 1 per cent, a hundred million ounces of gold in the vaults now worth \$20.67 an ounce or 20.67 million dollars is thereupon worth, instead, 1 per cent more rising, namely, to \$20.8767 per ounce or to 208.767 million dollars, an increase of 20.67 million dollars which can be entered on the books of the Federal reserve banks as a profit.

Contrariwise, if at any time the price of gold should be reduced, this operates automatically to reduce the reserve ratio in two ways, namely:

(1) It discourages the sale by gold owners of their gold to the Federal reserve system and encourages the purchase of gold from it.

(2) It decreases the dollar value of vault gold.

This, of course, registers a loss on the books of the Federal reserve banks.

There is practically no limit under this act, to the power of the Federal reserve system, either to counteract deflation or to counteract inflation. Its buying power is practically unlimited and, when exercised, it will raise the prices of securities and other goods, not only of those it buys but of the great mass of others. This is true not only because of the sympathetic movement of securities but because the buying power does not cease with its exercise by the system. Those who receive this buying power pass it on by buying other securities and goods of all sorts, raising their price in turn and so on indefinitely. This new buying power is not at the expense of some other buying power as in the case of an individual spending money already in circulation before he gets it. The Federal reserve notes or other credit is newly created, a net addition to the circulating medium. Until withdrawn this new circulating medium adds permanently to the annual buying power of the country.

To see how resistless is the power of the Federal reserve system to sustain the price level, suppose that, as was threatened recently, there should be a nationwide run on banks and continued hoarding, causing an increasing vacuum in our circulating medium; this vacuum, however great, could be filled as fast as created, by pouring out Federal reserve notes in purchasing of securities, to say nothing of any added deposit balances. Yet the gold reserve need never be too low if the price of gold were raised sufficiently. Furthermore, if action were prompt enough there would be no hoarding as hoarding is the result of deflation.

For the same reasons the outflow of gold to foreign countries can not prevent the Federal reserve system from safeguarding the price level against deflation so long as it has the power to raise the price of gold.

The only limit to be encountered would be reached when the Federal reserve system had exhausted the entire legally available security market so as to have gathered within its own walls all Government bonds, and other securities on its eligible list.

To take an example of the reverse sort, suppose there should be a threat of inflation, due, say, to speculative activity resulting in increasing loans and swelling the volume of deposits subject to check. The Federal reserve could then, if need be, sell newly created debentures without limit, receiving back their own Federal reserve notes (or deposit balances on their books to the credit of member banks or the United States Government). This shrinkage of outstanding Federal reserve credit would cause member banks in turn to curtail the credit extended by them to their customers. Otherwise their reserve ratios would be reduced

below the legal requirement. This shrinkage would have no limit since there is no limit to the possible issue of debentures.

The importation of gold from abroad can not upset the control of the Federal reserve over inflation so long as the latter can decrease the price of gold.

Of course, every change in the price of gold changes the rates of foreign exchange. But the slight additional inconvenience caused by this to foreign commerce will be as easily and regularly allowed for as any other, and the inconvenience is small as compared with the advantages obtained in the fact that domestic commerce has a stable level of prices; for foreign commerce is of very small volume, say one-tenth the volume of domestic commerce.

Moreover, at present, several of our chief foreign customers are now off the gold standard, so that there is scarcely any inconvenience added to that we already have at present. Ultimately, it is altogether likely that all important commercial nations will adopt uniform stabilization laws and policies.

There is only one obstacle to prevent the Federal reserve system, by this act, from fully safeguarding the price level against both inflation and deflation. It can not stop the danger of Government inflation. The Government can, in its sovereign power, break any or all rules laid down in this act, break away from the gold standard, and inflate the currency to suit itself.

In times of great distress, such as war, this usually happens. There is no way by law to prevent inflation by the Government; for the Government is the law-maker. But as long as the rules laid down in this act are observed the Federal reserve system has full control of the circulating medium, including deposit currency, and can stop either inflation or deflation to any conceivable extent.

The reason why there should be a special safeguard against speculation injurious to the Government is because the Government unlike an ordinary buyer and seller, stands ready to buy and sell at the same price instead of making a profit in the selling price over the buying price.

Thereafter the gold standard will continue with a fixed price of gold—that is, a fixed weight of the gold dollar—exactly as at present until any further adjustment is needed to avoid deflation or inflation. Thus, while all the virtues of the gold standard are retained, its periodical evils are avoided. Instead of those periodical evils of inflation and deflation there will be occasional readjustments in the price of gold. But these changes in the gold price basis will be made solely in order to avoid changes in the commodity price base. In this respect they will differ from such revaluations as those of France and Italy in recent years. They regained the gold standard after war-time inflation, through devaluing the gold franc and lira.

SEC. 8. At all times the United States Treasury, mints, Government assay offices, and any other agencies authorized to buy or sell gold shall employ the same identical prices as those employed by the Federal reserve system.

The above provisions make possible the perpetuation of the gold standard under all possible circumstances. They also permit the retention of the present price of gold, \$20.67 per ounce, and the corresponding weight of the dollar except when, if ever, a change of price should be necessary to supplement the other efforts of the Federal reserve system in order to prevent deflation or inflation of the price level. The chief justification of the gold standard has been that it afforded, to some extent, a safeguard against inflation such as has so often occurred when a country has gone off the gold standard and has adopted irredeemable paper money.

But this safeguard against inflation has only been partial. For instance, we experienced a great gold inflation between 1896 and 1920.

Moreover, the gold standard has afforded no safeguard whatever against deflation. England has just preferred going off the gold standard rather than suffer further deflation.

Under the present plan there will never be any need of America following the English example by abandoning the gold standard. She will have a gold standard safeguarded against deflation and inflation alike, a gold standard almost fully assimilated to a virtual goods standard, in short, a genuine standard of purchasing power, fair to debtors and creditors alike. It may never be necessary to change the price of gold; but when, if ever, a change should become necessary, it would always be a benefit and never an injury.

If the price of gold is ever raised it will only be because otherwise we should suffer deflation. That is, the price of gold would be raised only when gold became so scarce that its price clearly ought to be raised.

Contrariwise, if the price of gold is ever lowered it will only be because otherwise we would suffer inflation. In other words, the price of gold would be lowered

only when gold becomes so superabundant that its price clearly ought to be lowered.

SEC. 9. If at any time the price of gold is changed as herein provided—

(a) The coinage of gold by the Bureau of the Mint shall cease except as provided under (4) below, although its equivalent, the unlimited purchase of gold at the official price, shall continue.

(b) The redemption, by the United States Treasury, of United States notes, Treasury notes, and all other paper money, now redeemable in gold except gold certificates, shall be accomplished by selling gold bullion therefor, at the official price.

(c) The United States Treasury shall continue to redeem gold certificates, being warehouse receipts, in gold bullion or gold coin at the option of the holder, at the present rate of \$20.67 an ounce of pure gold, or 23.22 grains per dollar.

(d) The mint is authorized and directed to coin at the present rate of 23.22 grains of pure gold per dollar such of the gold bullion belonging to the Government as may be required to satisfy any demand for gold coin by holders of gold certificates.

(e) Any (full weight) gold coin in circulation shall be redeemable by the United States Treasury at its face value in gold bullion and shall continue to be full legal tender.

(f) Gold bullion shall be full legal tender at the official price at which the Federal reserve system sells it, provided this bullion is in the form of standard gold bars nine-tenths fine, officially stamped as to such fineness and as to weight by the United States Government under rules and regulations prescribed by the Secretary of the Treasury.

The holders of gold certificates or gold coin can thus have no cause for complaint. For they can, at any time, become holders of gold coin; and the holders of gold coin can, if their coined dollars of 23.22 grains each are bigger than the new current gold bullion dollar, melt them into bullion and get more dollars than they originally had; while, on the other hand, if their coined dollars of 23.22 grains are smaller than the new current bullion dollars these coins can be used, like token coins, at their face value, or redeemed in the new and bigger bullion dollars.

Practically, however, the number of the old-style gold coins or gold certificates will be negligible, because of section 1.

Sec. 10. In preparation for the contingency that the price of gold may sometime be changed, the Federal reserve system is authorized to accumulate systematically gold certificates in exchange for Federal reserve notes, and the Treasury is authorized, as occasion offers, to retire and destroy systematically such certificates when not further needed, to the end that, long before the possible contingency arrives of a change in the price of gold, the gold certificates in circulation shall be almost wholly replaced by Federal reserve notes.

SEC. 11. Federal reserve notes shall be full legal tender.

SEC. 12. If, in the opinion of the Federal Reserve Board, there is danger of deflation, Federal reserve notes returned to Federal reserve banks may be reissued and put back in circulation either via member banks or otherwise.

SEC. 13. Six months after the passage of this act all bonds, notes or other contractual obligations then outstanding containing the well-known "gold clause"—"payable in gold coin of the present standard of weight and fineness," or other words to that effect, shall be subject to a tax of—per cent unless both parties shall have within said six months agreed to substitute in said contract the stabilized dollar in place of the gold dollar of the present weight and fineness.

DIVISION C: COMPRISING FEATURES DESIGNED TO BRING ABOUT FULLER COOPERATION OF BANKS AND A UNIFIED NATIONAL BANKING SYSTEM

SEC. 14. The act approved December 23, 1913, known as the Federal reserve act, as amended, is hereby further amended as follows: Add to section 14 the following paragraphs:

"(a) If there is danger of deflation, the system is authorized, on due notice in addition to or in conjunction with other measures already authorized in such a contingency, to lower the minimum reserve requirements of member banks, the reduction to be by a uniform percentage.

"If, on the other hand, there is danger of inflation, the system is authorized, on due notice, in addition to, or in conjunction with, other measures already authorized in such a contingency, to raise the minimum reserve requirements of member banks, the increase to be by a uniform percentage."

Section 10 would operate, especially the last paragraph, to control member bank credit very promptly and effectively.

SEC. 15. The act of March 3, 1865, imposing a tax on state bank notes is hereby amended by adding:

"The Federal reserve system is authorized and directed to make a service charge of — per cent on all checks cleared for nonmember banks."

An alternative is to tax State banks' deposits, just as their notes were taxed in 1865 and for the same reason: To help bring about a unified national medium of exchange.

SEC. 16. Any member bank not borrowing of its Federal reserve bank at least once in every calendar year shall be taxed 10 per cent on its capital.

The object is to destroy the tradition that to borrow of the Federal reserve is a sign of weakness. This tradition operates to deter a bank from borrowing just when borrowing is most necessary. Borrowing should be a routine matter, not one exciting comment.

SOME TECHNICAL DETAILS

SEC. 17. Powers and discretions on the part of the Federal reserve system or any constituent thereof herein named or implied, if not otherwise provided for herein, shall be exercised by the most appropriate existing authority within the system in the usual way of such authority as to formalities and majority or other vote.

SEC. 18. Provisions herein for acts to be performed or services rendered by other Federal bureaus or agencies are compulsory; and when subject to request by the Federal reserve system or constituent thereof become compulsory on receipt of written notice from the secretary or other proper official of the Federal reserve system or constituent thereof.

SEC. 19. Salaries and other expenses required by this act shall be prescribed by the executive head of the respective bureaus or committees or agencies, none to be more than \$—— per year. There shall be included in the several budgets submitted to the —— (Treasury), and shall be paid by said —— to the respective bureaus.

Mr. STRONG. I want to suggest that if in the next war we draft all the resources of the country, not only the young men, the war would not so vitally affect our economic conditions.

Professor FISHER. No.

Mr. STRONG. The trouble is that we draft the men and we hire the money and pay any rate almost that is asked, and buy everything that is needed at enormous prices; then, of course, we come out of it in a terribly wrenched and crooked economic condition, but if we drafted all of the resources of the Nation, money, railroads, factories, men, labor and farm products and all that, we would not come out of the war in such a terrible economic condition, and therefore it would unsettle conditions.

Professor FISHER. Now, shall I comment a little on this? I won't offer to read it all; it is too long, but there are two or three points that I would like to mention. It was written largely before your bill was presented, and it would be somewhat differently put if I had had your bill at the time, although I have redrafted it somewhat since your bill was written.

Mr. STRONG. This draft that I have here is the new draft.

Mr. GOLDSBOROUGH. That is the new draft. That is the draft you gave me several copies of.

Professor FISHER. Yes; I would like to comment upon two or three points in it, if I may.

Mr. PRALL. Before you do that, may I ask you this question, Professor Fisher?

Assuming that a certain number of commodities were agreed upon to produce the index number, by any agreement could the producers of those commodities bring about any fictitious value or number?

Professor FISHER. Yes; so far as one or a few commodities are concerned, but scarcely at all as to the whole group. There is such a thing as pegging prices, and it is done to-day on a larger scale than it used to be. Ethelbert Stewart told me that there are very few pegged prices in his list.

Mr. J. M. CUTTS. Very few.

Professor FISHER. Do you know how many?

Mr. J. M. CUTTS. No; they vary from time to time, but it is a very small percentage.

Mr. PRALL. Would it make an appreciable difference if they could and did peg prices or make fictitious prices or values? Would that bring about a fictitious index number?

Professor FISHER. I have no doubt that if you started out to falsify the index number you could do it to a small extent, but if you used market prices where there is real competition and real, genuine quotations, I do not think you could do any substantial amount of monkeying with an index number. It is a very hard thing to do. Suppose that you have 100 commodities, and you exaggerated the price of 1 of those 100 commodities by 100 per cent, which is ten times what is imaginable; the difference that would be made in the whole would be only 1 per cent.

Mr. J. M. CUTTS. Provided all commodities were weighted equal.

Professor FISHER. Yes; I meant to take an average commodity.

Mr. PRALL. But assuming that business continues slowly but surely to fall into the hands of a few people, would it not be possible in a few years for them to manipulate their prices and to produce a false or fictitious value? Would not that, as a matter of fact, change the value of that stabilized dollar?

Professor FISHER. I do not think there is any real danger of that. I can not now, perhaps, give you a perfectly satisfactory answer, but I think you will find it in the appendix to Stabilizing the Dollar. I went over that question carefully, to see if there was a substantial danger of that sort occurring anywhere, and could not find it.

Mr. PRALL. It might be a prize worth winning, if handled by the big interests.

Mr. GOLDSBOROUGH. You are not through, are you, Professor?

Professor FISHER. No.

Mr. PRALL. I want to ask one more question, and then I will be through. What effect would the enactment of this bill into law have on the employment situation, in your opinion?

Professor FISHER. I think it would be, as I said at the outset, the most constructive measure than I can conceive of. I think it will do far more good than anything else that has been done or can be done.

Mr. PRALL. I do not think we have tried to do anything yet.

Professor FISHER. No. I am going to mention, a little later, what has happened in England.

Mr. BUSBY. Do you mean with regard to labor?

Professor FISHER. Yes.

VOLUME OF TRADE AS A CRITERION

As you probably know, Doctor Edie, and Professor Rogers, of Yale, and a man in the Federal reserve, have suggested that instead

of using the index number of the price level at all, we use the index number of the volume of trade. So I put this down:

Since the stabilization of the price level is substantially equivalent to adapting the volume of credit to the growth of business, the Federal reserve system is authorized to employ as a supplementary guide or criterion, for normalizing and stabilizing the price level, what it shall deem the best available statistics of the volume of trade and all data related thereto.

And this is a note on that:

It would be possible as proposed by Doctor Edie to employ a trade index exclusively, and ignore price indexes. In that case the aim would be to accommodate business by supplying it with a ration of credit (measured by demand deposits of member banks or by loans and investments) increasing each year according to the average rate of the last decade.

Now, I am sorry that I can not represent the psychology of other people very well. I can only represent well my own psychology; but, so far as I can understand Doctor Edie and my colleague, Professor Rogers—for both of whom I have the deepest respect and who I hope will testify here, and this other man in the Federal reserve system—as nearly as I can understand their psychology, it is that to most men in Congress, and to most business men and bankers, an index number is still a highbrow and academic plaything, that they are afraid of it and they do not see any need of stabilizing the price level.

Mr. PRALL. Why are they afraid of it?

Professor FISHER. Afraid of ghosts.

Mr. PRALL. Have they not any particular reasons?

Professor FISHER. I do not think so. It is ignorance. They do no know index numbers well enough. The more you get acquainted, with them, the more you understand their usefulness. I am not expressing my opinion, but Edie & Rogers fear that some people will object to your bill, Mr. Chairman, on the ground that you are trying to fix prices, that you ought to let them be fixed by supply and demand, as they say, that there should be no interference with natural fixing, and that therefore this whole idea of artificially inflating or deflating or preventing the general rise of prices or fall of prices by any "artificial" means is wrong. So you can not get those people to favor this bill, according to my friends, but you can get substantially the same result by ignoring the price level and saying to the supposed objectors: "You surely want to have a big volume of business, have a big supply of credit, and a small volume of business, have a small volume of credit; so let us agree that the ratio of credit ought to be so many billion dollars in 1932, in 1933 4 per cent more, in 1934 4 per cent more, and get a normal rate of growth corresponding to the average of 10 years, and then revise it from time to time, and say nothing about prices at all, but simply see that your volume of credit is adapted to your volume of business."

Mr. STRONG. But the trouble is that the rapidity of turnover might throw that out of balance.

Professor FISHER. No, sir; they are absolutely right in that you will get a rough stabilization of the price level that way, and the work of Carl Snyder proves it. He has done some very important work. It proves to my satisfaction that if you could do that you would also roughly stabilize. I prefer myself to go right after stabilization and say that it is the price level we want, and if you get tangled up with

this objection on the part of the people who do not know the difference between the scale of prices as affected by the general volume of trade and the influence of supply and demand on the individual business, and that snag impedes this legislation, then I say you should dodge that and do it the other way.

Mr. STRONG. I have always felt that the great objection to that was when business was turning over rapidly. Suppose that you have a certain volume of money, representing a certain amount of business; when that money is turning over rapidly it will accommodate or take care of more business than when it is turning over slowly. If a fellow has \$5,000 in a stock of goods, and he turns it over 10 times in a year, he will do more business with that \$5,000 than if he turns his stock of goods over only 5 times.

Professor FISHER. I think the most important discovery that Carl Snyder made, which no one had dreamed of before that I know of, was that the velocity of money and the velocity of business go hand in hand for short periods. The result is, to go back to the quantity theory of money, to make the quantity theory of money truer than I had supposed. People had said, "You can not regulate by the quantity of money, because you have this velocity that is constantly oscillating," but the velocity oscillates with business, so that the quantity oscillates with the price level.

Mr. STRONG. If you adopt that kind of a measure of value, that kind of a yard stick, will you not throw the whole thing into the consideration merely of business, and will not agriculture be forgotten in the picture?

Professor FISHER. Agriculture is included in business. I meant the volume of trade to include agriculture.

I am not in favor of this Edie plan as distinct from the other; I am in favor of having trade figures taken into account as a guide, but these people for whom I am speaking would say, "Let us use this exclusively."

I wanted to give their point of view, so far as I can give it.

Mr. STRONG. I do not want to acknowledge that my colleagues are so dense that they can not understand an index number.

Mr. GOLDSBOROUGH. You would be surprised to know what intense interest is being felt in this thing by all Members of Congress, and how much they know about it.

Professor FISHER. This was many years ago; it must have been 10 years ago: I was speaking with the vice president of an important bank in one of the larger cities of the country; I do not dare mention what city it was, because you might pin it right down to the man. He was formerly a professor of economics, and he knows all about this, and he said, after I had lectured in that city on this subject, "I was talking with my chief, the president of my bank; we play golf together, and I was trying to tell him a little bit about it, and I mentioned the words 'index number.' He said, 'What is an index number?' He had never heard of an index number".

As I say, I think there has been a great change, but only a month ago I spoke to some business men and I was told that this group was one of the foremost groups of business men in this country, and that they all were well informed, and when I was through one of my friends said, "I am sorry; you talked over the heads of these

people. You assumed that they knew what an index number is, and a price level, and a few other things."

Of course, I did assume it. They seemed to be men at the very top yet that was his opinion, and I tested it a little bit by some inquiries, and I am afraid he was right.

Mr. PRALL. That may be true of a great many Members of the House, and it may be a good idea, Professor, if you would be good enough to send each Member a copy of your book entitled "The Money Illusion."

Professor FISHER. I would be delighted to, if they would read it.

Mr. PRALL. I think that that might be educational.

Professor FISHER. Are you serious?

Mr. PRALL. I am, sir.

Mr. BUSBY. I think that that would entail too much burden on the doctor, though.

Professor FISHER. I would be very glad to endure that burden.

Mr. BUSBY. You might confine it to the committee.

Professor FISHER. I might write to the Members of Congress and say that at the suggestion of Mr. Prall—

Mr. PRALL. Of the committee.

Professor FISHER. Or of the committee, I was writing to inquire whether they would be willing to read this book if I should send it to them.

Mr. STRONG. That would be a good thing.

Mr. PRALL. The men who received it would be interested enough to read it.

Professor FISHER. Shall I do that?

Mr. GOLDSBOROUGH. It is asking a good deal of you. That would involve a great deal of money.

Professor FISHER. Yes; it might cost \$500.

Mr. BUSBY. I do not feel that we ought to ask him to do that.

Professor FISHER. I have spent many times that in this work.

Mr. BUSBY. I have a great consideration for my fellow man.

Professor FISHER. Now, I have two other comments in this manuscript.

WILL GOLD CONTRACTS SOME DAY BE A SNAG?

One technical snag, Mr. Chairman, that has often been thrown up against any attempt to stabilize by changing the price of gold is that you disturb the contracts that have the gold clause in them. Now, in my book, *Stabilizing the Dollar*, I undertook to answer that on the theory that Congress had the right to abrogate contracts, but that the States do not; but, on talking with a Washington lawyer recently, I found he was of the opinion that I was not correct. According to this lawyer, Congress can tell what a dollar is, and can change the dollar; they can make the dollar consist of one grain of silver, if they wanted to, which would cheat tremendously in connection with all dollar contracts; Congress has the power to do that. But Congress has not, according to him, the power to change a contract in so many ounces of gold equivalent to so many bushels of wheat.

I am not sure that that is correct, but on page of 165 of my book, *Stabilizing the Dollar*, I put in this—and evidently, if this lawyer is right, I was wrong in what I then wrote:

It should be pointed out that abrogation, though beyond the power of our individual States under article 1 of our Federal Constitution, is apparently quite within the power of the Federal Congress.

Then, as a footnote:

This power is, I understand, well recognized in a general way, although no case precisely like that here considered seems to be of record. The nearest cases were apparently the famous legal tender cases in reference to which the Supreme Court certified the right of Congress to make United States notes legal tender for the payment of debts contracted prior to legislation. The legal tender act, it is true, related only to contracts to pay money generally, and not to contracts to pay a specific kind of money, such as gold coin of the present weight and fineness; but Justice Bradley, in 12 Wall, 457, 566, 567, said:

“I did not understand the majority of the court to decide that an act so drawn as to embrace in terms contracts payable in specie would not be constitutional. Such a decision would completely nullify the power claimed for the Government.”

That is in the direction of justifying what I said above. That was written by a lawyer, a friend of mine, who helped me when I was writing the book on the technical details, but my faith in my being right has been greatly shattered by this talk that I had with the lawyer in Washington recently, and I said, to him “There must be some way out. What can you do?”

He said, “You can tax,” so I am proposing in this memorandum:

Six months after the passage of this act all bonds, notes, or other contractual obligations then outstanding containing the well-known “gold clause”—“payable in gold coin of the present standard of weight and fineness,” or other words to that effect, shall be subject to a tax of—per cent unless both parties shall have within said six months agreed to substitute in said contract the stabilized dollar in place of the gold dollar of the present weight and fineness.

Mr. GOLDSBOROUGH. The difficulty is in getting a measure like that through Congress. We have to have as little in this bill as we can.

Professor FISHER. That does not go in this bill at all. That is division C or B in this series. I am talking about my A, B, and C. I got through with A, which contains even less than your bill; but, in order to meet successfully all possible contingencies, to deal with this gold clause, if it arises in the future, you will need sometime in the future further legislation, and I tried to forecast what would be necessary in this memorandum. It is my contribution to the problem of how to stabilize the dollar in the United States under all possible circumstances and so far as possible.

Mr. STRONG. That will go in the record?

Professor FISHER. Yes.

Mr. PRALL. I would like to ask Professor Fisher if he considers this an emergency measure.

Professor FISHER. Yes, I do; very much so. That is the reason for the rise in the price level, that part of it. The stabilization is, of course, much more than an emergency measure.

Mr. STRONG. It is very much needed at this time.

Professor FISHER. Yes; I think the two should go together. I have one more comment on this manuscript that I would like to make.

Mr. GOLDSBOROUGH. This afternoon?

Professor FISHER. This, I know, there will be a great deal of disagreement about, but in section C here, if it becomes necessary to try to drive all the banks of the United States into the one system, we can do something analogous to what was done under similar circumstances in the Civil War, when they tried to get the State banks to give up their notes. That interfered with the national bank system, or national bank notes, and so they taxed the State bank notes out of existence. You could have something like this, applied not now to notes, but to circulating credit, deposits subject to check:

"The Federal reserve system is authorized and directed to make a service charge of — per cent on all checks cleared for nonmember banks."

An alternative is to tax State banks' deposits, just as their notes were taxed in 1865 and for the same reason, to help bring about a unified national medium of exchange.

Those three comments, I think, are the only ones that would not naturally occur to you, and I did want to bring them out in committee.

Mr. GOLDSBOROUGH. I promised Mr. Ramseyer that he could go on for a few minutes to-morrow, if it is agreeable to the subcommittee, and we would then like to hear any further statement that you wish to make as soon as he concludes. He will not be long, he says, and then our several Members would like to ask you some questions.

We will now adjourn to 1.30 o'clock to-morrow.

(Thereupon, at 5.10 o'clock p. m., the committee adjourned until on Tuesday, March 29, 1932, to meet at 1.30 o'clock p. m.)

STABILIZATION OF COMMODITY PRICES

TUESDAY, MARCH 29, 1932

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON BANKING AND CURRENCY,
Washington, D. C.

The subcommittee met pursuant to adjournment, at 1.30 o'clock, p. m., in the committee room, Capitol Building, Honorable T. Alan Goldsborough, presiding.

Present: Messrs. Goldsborough (chairman), Prall, and Busby.

Mr. GOLDSBOROUGH. Gentlemen, the subcommittee will come to order.

You may proceed, Professor Fisher.

MISCELLANEOUS COMMENTS

Professor FISHER. Yesterday I reviewed the remarkable growth of the stable money movement; I told you why I believed in this bill, went into some details, and suggested a few additions and changes, and submitted a more elaborate statement that might be of help possibly in the future, if further legislation is considered. I undertook to show the evils of unstable money, both upon inflation and deflation, and that the unstable dollar is at the bottom of the present depression. The fact which stands out perhaps above all others is that the debts, the outstanding debts to-day, not in terms of money, but translated into real commodities, are greater than in 1929; and, therefore, greater than they ever were before in all time.

I did not realize this until very recently, myself, until I attempted to gather together evidence from various sources on debts. I knew the stock market had largely liquidated, as it has; but it turns out that, in every other instance, when we make the study, there has been no liquidation, but there has been an aggravation, and that these other debts, combined, far outweigh the stock-market debt, the brokers' loans.

I would like to add a little to what I said yesterday, in some respects; so I will speak somewhat in a miscellaneous way. I showed then the failure of this liquidation to liquidate and that its perverse action in the ever-increasing debt was due to the very effort to liquidate, in view of the inadequate protection of the dollar against the assault of that liquidation. So that liquidation defeated itself, yet it was not necessary that it should, as it could all have been prevented if that tendency had been neutralized by a sufficient tendency in the opposite direction. As it was, it would have been better if there had been no liquidation at all; that is, if there had been some sort of moratorium.

This is exactly what has happened in some other great emergencies. On the outbreak of the war, we saw the moratorium in Europe. The

word "moratorium" had not been used for so long that it had become almost obsolete, and I can remember people asking in 1914 what a "moratorium" meant. There should have been a moratorium at the time of the stock market crash; I remember advocating something of the sort, but it was objected to as an unnatural interference with the liquidation that seemed to be inevitable and necessary. There should have been something of a moratorium later, and actually we nearly came to it in the case of the inter-governmental debt under the leadership of Mr. Hoover in June, 1931. If we do not stabilize the dollar, we should have a moratorium now. In fact we need it worse than ever.

I said yesterday that the mortgages had been reduced 20 per cent, but I meant to add that that reduction was not out of the profits and real payments, but almost wholly by foreclosures; that that reduction in debt and such reduction as has been made has been really not actual liquidation, but mostly default.

I was asked yesterday about what was the best index number, and I took that question to mean, what existing statistical series is the most dependable and the best to use for stabilization purposes; and I answered that I thought the index number of wholesale prices of the United States Bureau of Labor statistics. Possibly, however, the question was meant to include what would be theoretically best, if we could have what we wanted. I think that a theoretical index number of the cost of living, as suggested by Mr. King, would be somewhat nearer the ideal, but an index number of that sort is based on the least exact data, on restricted data, and such an index number is not very responsive to changes. Again, it has been suggested that the index number of Carl Snyder, which is a general index number, including retail prices, wholesale prices, wages, rent, everything that is exchanged, including stock market prices, might be available; but it is so miscellaneous and so uncertain that it seems very undesirable to use it officially at present.

So I have come back to say that, of the existing available index numbers that are usable, that of the Bureau of Labor Statistics is, I think, undoubtedly, the best for practical use at present.

Moreover I would like to emphasize very much the following point:

People try to confuse the issue as to what is the best, the ideal, index number. But if you once get stabilization by any index number, the divergence between the various index numbers will be less than when we do not have stabilization. When you have an upset, through depression or boom, or through any cause, the index numbers diverge as a consequence of that disturbance; and when you have stabilization, the index numbers will run much more nearly parallel.

So it is really the difference between tweedle-dee and tweedle-dum, I think, as a scientific proposition as to what index number is used. I would like to see the best index number used; but when you come down to it, it would make very little difference which index you do use.

Moreover, what we are after today is not to get the most ideal, which would be unattainable, but to get something better than what we have now. We can certainly avoid those tremendous changes in the value of the dollar, running into hundreds of per cent, that we have experienced during the last century. If we can reduce them down even to 15 or 20 per cent, that would be a very great improvement and I am sure we can do better than that.

ENGLISH EXPERIENCE

Now, almost everything that I said yesterday has been borne out by the experiences of England during the last six months. I am a great believer in experience, although my business is that of a theorist; I believe that all theories need to be checked up by the facts. I am never perfectly sure until I have got my facts and statistics, and I never decide any practical question on the basis of what you might call pure theory alone.

I heard a Federal reserve official say, a few weeks ago when I spoke to him about England's experience a few months ago, shortly after England had gotten off of the gold standard, in answer to my statement that England had gained:

"Yes, at first, and so far; but let's wait and see."

Now, we have waited six months. The fear was, of course, that they would follow the course of Germany. I told you yesterday what a British member of Parliament, or former member of Parliament, said, and he was very positive that nothing of that sort could possibly happen; and this that I am going to read shows that it has not even tended to happen.

This is an article by Charles A. Selden in the Sunday New York Times of March 20, 1932:

It will be just six months to-morrow (March 21) since Great Britain went off the gold standard. In the half year period between September 21, the day of the autumnal equinox of 1931, and the vernal equinox of 1932, the country's economic and financial recovery has been one of the most amazing transformations in her history. Astronomical allusions to the equinoxes as measuring the first days of the recovery is justified perhaps because when the blow fell last fall there were predictions abroad (but not in England) that Great Britain as a first class power had gone into economic eclipse for a long time, perhaps permanently.

As it was, the present announcement of the abandonment of gold which convinced the world at large that England was in difficulties, so now the most striking, if not the most significant, evidence in rebuttal is the repayment this month to America and France, five months before they are due, of huge amounts borrowed last August.

It has been paid back without real loss to her, because the influx of gold from India and private owners of the metal in this country has offset the bookkeeping loss due to the present level of the pound.

What has really happened, we might say, is equivalent to raising the price of gold.

More remarkable is the expectation that the income tax rate, which was increased last September to 25 cents on the dollar to meet the emergency, will be reduced to its previous level.

Abandonment of gold is deemed a blessing in disguise by the very men who fought hard to avert it. Its first result, due to depreciation of the pound, was to stimulate the country's languishing export trade. That meant a considerable revival of the textile industry and the export coal business.

The outlook has been improved by the fact that at last unemployment is beginning to decrease. At any rate, the statistics of the Ministry of Labor for February show that the number of unemployed dropped from the January total of 2,728,411 to 2,701,173. Also, according to world statistics, Great Britain's percentage of unemployment in the year 1931 was less than that of any other country except Poland. The British increase was 7 per cent and that of France 5.23 per cent.

Mr. BUSBY. In that connection, if I remember correctly, doctor, after England went off of the gold standard, the pound dropped to a low of—

Professor FISHER. I can not remember.

Mr. BUSBY. It was something under \$3.30, if I remember right.

Professor FISHER. Yes.

Mr. BUSBY. Yesterday's quotation of the English pound was above \$3.77.

Professor FISHER. Yes.

Mr. BUSBY. And the increase in the quotation of the pound has risen from something around \$3.50, two or three weeks ago, until it is almost \$3.80, notwithstanding the predictions of a member of the Federal Reserve Board that you quoted, and I want to add that I heard Professor Kemmerer only three or four evenings ago make the same statement that was made by the member of the Federal Reserve Board to you, that is, that England apparently profited at first by going off of the gold standard; but it was Professor Kemmerer's opinion that she would later reap her reward for having done so, which is not being borne out by the facts.

Professor FISHER. No; of course, we can still wait, if we wish to; we can wait all of our lifetimes to see. My only prediction is that, as the English are very level-headed on these matters, and they have studied the question under the leadership of Reginald McKenna, Lord Vernon, and the Lord McMillan committee, and the other men that I quoted from yesterday, they are not going to lose their heads and do what Germany did, which, in fact, was done under pressure that England does not have.

England was, until recently, a great protagonist of the gold standard; she was the first to adopt it after the Napoleonic wars as against bi-metallism, and all of the other countries followed suit, especially after 1873, when the Latin Union gave up bi-metallism, and America, in the same year, though on the paper standard, went theoretically onto the gold standard. England went in as a pioneer then, and in those days it was the right thing to do as against paper money, it represented a real advance; and that was done despite the testimony of the governor of the Bank of England, as you will find in my book, *The Money Illusion*. They did not know what it was all about, but it was done because the leaders had level heads.

Mr. BUSBY. I do not wish to interrupt you further, doctor, but the fact is that in recent years the world has learned how, through commodity statistics workers, to ascertain the combined commodity prices in trade—has not that supplied a type of information which did not exist in 1873?

Professor FISHER. Yes.

Mr. BUSBY. And which it was necessary to develop and use, in order to avoid the evil consequences of paper money, such consequences as we feared in the 1870's?

Professor FISHER. Yes.

Mr. BUSBY. And even at a later date.

Professor FISHER. Yes, and still further back, when the gold standard was adopted in England in the year 1818, or thereabouts, after the Napoleonic wars, there was no thought of an index number, scarcely a preliminary conception of it; and that is why the gold standard meant a step forward, at least as far as that country is concerned, at

that time. But now, after the World War, we are ready for another step forward. The index number has developed, and developed very rapidly in the last generation, beginning with the Aldrich report in 1891, and the founding of a systematic series by the United States Bureau of Labor Statistics in 1890; and still more, since, if I may say so, my weekly newspaper, Index Number, beginning January, 1923, brought it before a much larger public and inverted it in terms of the purchasing power of the dollar. There has developed an understandable importance of the index number as never before.

Now, I think even England, under the leadership I have just described, is probably about to do what Sweden has definitely decided to do, to put a new standard, the commodity standard, into effect.

Mr. BUSBY. In that connection, the Government Bureau of Labor Statistics is wholly nonpolitical and an entirely scientific fact-finding arm of the Government, for the benefit of trade and commerce, headed by the very valuable mind who is present today, Dr. Ethelbert Steuart—I believe you have stated that he recognizes it as being somewhat of a foundation stone for the carrying on of this index work.

Professor FISHER. Yes. You were referring to the price of the English pound in terms of dollars; of course, that fluctuates more than the price level in terms of commodities, according to the index number, because it is much more speculative and much more prompt. As a matter of fact, the price level in England only went up, at the maximum, 13 per cent since she went off of the gold standard; and it is now only 6 per cent above what it was.

Mr. GOLDSBOROUGH. That is wholesale prices?

Professor FISHER. The wholesale price index.

Mr. GOLDSBOROUGH. The retail prices, as I remember it—that is, the actual cost of living—went up very little.

Professor FISHER. Very little; still less than that.

That, I think, is very remarkable, considering the smallness of this rise, that we find have such a great effect. I say it is remarkable; I think most people were surprised at it, as this writer says. The students of the subject were not so surprised; it is what they expected. England has been going down hill in her price level since 1919 almost continuously. She had gone down before America had begun to have any deflation, because she got on the gold standard at the old par, which she ought never to have done; she should have followed the advice of Keaynes and the other students, and do just the things the other countries, France and Italy, did. But England tried the ambitious stunt of getting back on the old gold par, and so was caught in a deflationary movement, which has gone on until she has finally gone off of the gold standard. So there was, from 1919 to 1931, an almost continuous deflation and falling of prices.

Of course, that long and drastic deflation bankrupted a great many people, and in that way, England has gotten adjusted more or less to the falling price level; so it is a tremendous relief even to get stabilization at the bottom, a little additional relief from adding to the price level 13 per cent.

I believe, while we should add to our price level more than 13 per cent, that, even if we did no more than England did, we would get a tremendous relief. England has gotten real results in six months' time, which is a very brief period. Sweden is getting results,

Japan got results almost overnight. Every nation that has gone off of the gold standard has gotten results, gotten relief. Why do we not get some results? Why have we not gotten some relief? We have tried many more experiments than England has; the only trouble is, the things we have tried are not the things we ought to try first.

Mr. GOLDSBOROUGH. Professor Fisher, right at that point; when a group of about 100 economists met in Chicago recently, the only thing they actually agreed on as being a measure which would raise the price level was a measure which embodied the same principles as are embodied in the second and third sections of the bill H. R. 8027, that I introduced, and which were enacted into law in the Glass-Steagall bill; that is correct, is it not?

Professor FISHER. No; that is one thing they agreed on.

They agreed, in all, on five or six measures, but that was the most important one.

Mr. GOLDSBOROUGH. Did not they all agree this proposal would raise the price level; not stabilize it, but raise it?

Professor FISHER. They felt there would be a rise in prices, in price level, if that were done.

WAS GLASS-STEAGALL ACT USED?

Mr. GOLDSBOROUGH. Right at this point in your testimony, do you feel like discussing why the passage of the Glass-Steagall bill has not resulted in a rise in the price level, a substantial rise in the price level?

Professor FISHER. I do not know that I am able to answer that in the way I hope you will get the thing answered before you get through, because it is really a very important question.

I have been disappointed and surprised that no appreciable effect has yet been had. I think that probably one reason has been that this depression had gone so far that the member banks were so tied up that they did not take advantage of the Glass-Steagall bill as they otherwise would do.

Mr. GOLDSBOROUGH. Do you think that was the sole purpose of the Glass-Steagall bill, to grant loans to banks?

Professor FISHER. No; of course, the Glass-Steagall bill had two main purposes: One was to facilitate loans to member banks, and the other was to release gold, free gold, and the latter is probably what you have in mind.

Mr. GOLDSBOROUGH. The latter is really the more important, is it not, in times of this kind?

Professor FISHER. Yes, I think it is the more important of the two. They are both extremely important.

Mr. GOLDSBOROUGH. Are you in a position to state whether the Federal reserve system has used its open-market operations systematically for the purpose of raising the price level, since the passage of the Glass-Steagall bill?

Professor FISHER. No; I have not the data to present on that subject. That is why I said I think it would be better to get such data from the Federal reserve people.

Mr. GOLDSBOROUGH. That will be done, but I did not know whether you had made any investigation.

Professor FISHER. It is too early to say whose fault it is that we have not—

Mr. GOLDSBOROUGH. I am not interested, and I am sure you are not, in placing any personal blame on any individual. The point that I would like to bring out, if you care to discuss it, is this: If the public understood, if the banking fraternity, for instance, understood, the business public understood, that the Federal reserve system were adopting a definite policy by virtue of the powers which the Glass-Steagall bill gives them, to raise the price level, and in pursuance of that policy, they were going into the market for Government securities and stay there until the price level reached a given point, do you not believe that business in general, would almost immediately respond?

Professor FISHER. I certainly do. Of course, sometimes, when an economic historian gets all of the facts together, by looking at the present emergency, we shall know whose fault it is or where the fault lies. It may be largely, and probably is, at least partly, impersonal. The Federal reserve is already blamed, but partly unjustly, if not wholly.

I think the free gold situation is one that very few people have realized; but due to the scarcity of commercial paper, and the fact that member banks who are unwilling to borrow on commercial paper that they had, for fear that they would not be able to repay when the time came in the emergency, so that it became frozen assets—the result was the Federal reserve notes could not be issued without depositing gold. Although we have much more than the legal 40 per cent gold reserves, in order that the Federal reserve banks should get any more notes from the Federal reserve agent, they had to deposit 100 per cent collateral of some sort, and it had to be either commercial paper or gold.

Mr. GOLDSBOROUGH. That was prior to the passage of the Glass-Steagall bill?

Professor FISHER. Paper not being available, gold was put in; they used gold, so that the Federal reserve, during the depression, just at a time when trade ought to be free, was a sponge to absorb the gold, instead of the basis for spreading credit to other banks; and the Glass-Steagall bill, by making it legal to substitute Government bonds, of which the bank and the Federal reserve banks had plenty, for this commercial paper, as their deposit for the Federal reserve notes, have been enabled to get Federal reserve notes almost ad libitum, if they will do it.

The best exposition of this whole gold situation in this country and abroad, as well, is in my colleague's book, Professor Rogers of Yale, called "America Weighs Her Gold," which I think the committee might like to read.

Mr. GOLDSBOROUGH. Professor, I may have a feeling that I know why the price level has not been raised; but the Members of Congress, and the country as a whole, are going to want to have the views of the witnesses that appear before the committee. Now, in going on the floor, I, among others, occupying positions on the Banking and Currency Committee, have told the country that we thought the Reconstruction Finance Corporation would be a good thing, and that it would be patriotically administered. We also told the country that Glass-Steagall bill was an inflationary measure, that would

be used to raise the price level, and as far as this depression was concerned, would be of very great service.

Now, as far as the Members of Congress and the country, can see, up to this time, neither one of those measures has done anything like we said it would do.

Now, we probably are about to go on the floor with another measure, which will have to be administered by the same personnel that administers the Glass-Steagall bill, and very largely by the same personnel that administers the Reconstruction Finance Corporation, and we will be asked: "Why do you think that the passage of this legislation will result in raising prices, and in the probable normal resumption of business?"

A DECLARATION OF POLICY

Professor FISHER. I should expect it to be more efficient than the other legislation, largely because it would be mandatory to the Federal reserve, despite all opposition or divided counsels, to utilize the powers they have got under the Glass-Steagall bill.

Mr. GOLDSBOROUGH. Now, suppose they say, "you have told us to do something, to use all of our power to raise the price level. Now, we have not any powers to raise the price levels that we know of. We do not know what to do, and as we do not know what to do we can not be expected to do anything."

Now, it is perfectly possible that they will take that position, and if they do, and that same personnel remains in the Federal Reserve Board, the country will be in just exactly the same position it was when we started.

Yet when I, as one member of this subcommittee, am confronted with the alternative of writing a specific direction to that board to go out on the market to do a certain thing, on a certain day, or to continue to buy securities in a certain amount until the price level is raised to a certain point, that alternative is very difficult for me to seize. The situation is too serious, in my mind, for us to mince words about it, as long as we are speaking calmly, and have no personal animus against anyone; and I am frank to say that, while this legislation was drafted by me, and I believe in it, I think it is perfectly possible, if it is not administered by a sympathetic board, for it to be, in a measure, ineffective.

Mr. PRALL. May I ask a question?

Mr. GOLDSBOROUGH. I would like to get Professor Fisher's reaction to that, and then, if you will, you ask your question.

Professor FISHER. I think it is perfectly possible, of course. If you put a chauffeur in the driver's seat and tell him where you want to go, and order him to go there and he then goes in the opposite direction, you will not get it. But I can not imagine that these men would do such a thing. I believe that, while they are divided by differences of opinion and many men in the system would disagree with many things as I said yesterday, and many men in the system will bitterly oppose this bill for reasons, some of which, from their standpoint, are good; nevertheless, if Congress gives a definite mandate to them, I can not conceive of their deliberately flouting Congress; and if they did, they certainly would receive, and deserve, the castigation of the whole country; and I should suppose there would be

legal redress, as we have legal redress against the President, when there is malfeasance in office.

Mr. GOLDSBOROUGH: You do not think they could say "Well, we do not know what we are to do. We are afraid that, if we go out in the open market and buy securities, either with or without declaring a policy, we will be acting blindly as to the result; we do not know whether doing that would interfere with some of our other duties, such as fixing the discount rate in order to subserve the convenience and necessity of commerce and business; we do not know what the result of undertaking this business would be, and therefore, we are afraid to do anything."

You do not think they could relieve themselves from doing something that they do not want to do, by adopting that sort of attitude?

Professor FISHER. Well, Mr. Chairman, I know that there are men in the Federal reserve, including their scientific experts, who understand perfectly well the mechanism, and we have the records of of Governor Strong—you have a record of his testimony here some time ago—in which he showed, substantially, that they did have and exercised powers affecting the price level.

You have the testimony of Congressman Strong on your own committee as to what Governor Strong had said to him, and his final belief that, in the long run, a mandate would be advantageous, so that before he died he favored the Strong bill.

You have similar testimony from John R. Commons, with whom I have talked; and with all that, it seems to me that it is almost inconceivable that they should not make the effort if this bill passes. In fact, if they wanted to show that they could not do it, the best way would be for them to make the effort and to point to what they had done, rather than to make no effort and say they did not know how, or that they do not know how.

Mr. GOLDSBOROUGH. Now, pardon me, Professor Fisher, I think it is a fact that within the last three weeks, at least, that is, since the passage of the Glass-Steagall bill, there was a meeting of the governors of the Federal reserve banks, and by a vote of 11 to 1 they decided against going into the market under this Glass-Steagall bill. I think that is a fact.

Professor FISHER. I think if it is a fact, it should be brought out by the committee and spread on the record.

Mr. PRALL. We could have them here and testify.

Professor FISHER. Mr. Chairman, if there is any occasion for your fear, then it is essential that this bill should pass, the first section of this bill, in order that the legislative direction shall be given, because the Federal reserve is an instrument of the people and subject to legislation that is enacted by Congress; their powers are entirely within legislative specifications, and they have no choice in the matter, if you lay down rules for them to follow.

Mr. GOLDSBOROUGH. Therefore, your definite and deliberate judgment, as I understand it, is that this legislation, if passed, will be administered by the Federal Reserve Board in the true spirit of the legislation?

Professor FISHER. That is my interpretation. The men who differ with you and me on the subject are men who want to restore prosperity but, according to their lights, are trying to do right and not do the wrong thing. That is my deliberate opinion.

Mr. GOLDSBOROUGH. We both agree on that.

Professor FISHER. I do not think there is any effort to the contrary.

Mr. GOLDSBOROUGH. I fully agree with you on that.

Professor FISHER. I have talked with several of them, and if you pass the legislation, if they do not agree with it, they have no choice but to follow it, or resign.

Mr. GOLDSBOROUGH. Mr. Prall, you had a question you wanted to ask.

Mr. PRALL. I might ask right here, do you believe that the honest effort to help in the premises now is from purely a banking or bankers' standpoint of view; in other words, do you think the board is actuated by the banker mind?

Professor FISHER. I do not believe I know enough about it to express an opinion. The opinion I expressed yesterday—whenever I express an opinion, I try to have an actual basis of fact, and not conjecture, to make my opinion worth anything. It is not that I am trying to escape your question, but simply that I do not feel I have any better information than the man on the street in regard to that question.

COOPERATION OF BANKS NEEDED

Mr. PRALL. The other question I wanted to ask you was with reference to the so-called Glass-Steagall bill:

Is not it true that the cooperation of the banks of the country is necessary to make it a success; in other words, if they do not take advantage of the provisions of that bill, it is not necessary for them to do so? In other words, we may lead a horse to water but not be able to make him drink.

Professor FISHER. That statement has been made, and it is undoubtedly true, that the cooperation of the member banks is of extreme importance, and ought to be secured, in order to get the best results; and without any cooperation, you can not get the best results.

Nevertheless, I do believe you can get some results, even if the member banks should balk—refuse to “drink.”

The Federal reserve banks and the board can have resourcefulness in their efforts to get results to some degree under the Glass-Steagall Act, especially that referring to the open-market operations. In the first place, they can deal with others than member banks, if they wish, in the open market. They have not done so, but open market, by its very terms, implies that they can; and they can issue this money, whether physical money or credit, into circulation, and if it returns to them, issue it again; or they can buy securities for credit on their books; and even if all of the banks in the United States—or, let us say, not to go to extremes, nine-tenths of them go out of existence—it would still be possible, under this bill to create credit on the books of the Federal reserve, and so on the books of the member banks that remain and so be used as checking accounts of individuals.

That is my opinion, and it is expressed in more detail in that memorandum that I did not read yesterday, about how to make this stabilization work under all possible circumstances, and in which I give three different sets of measures: A, B, and C; A, being somewhat less than this bill that we are now considering, and B going a

good deal further. You will find a full answer there, as to how the Federal reserve system could, under a mandate, do some reflation, in spite of the noncooperation of the member banks. Nevertheless, I think the cooperation of the member banks and also the nonmember banks, is very important.

Mr. PRALL. May I ask you, professor, do you consider it wise to direct the Federal Reserve Board to do any certain thing in a manner affecting the finances of the country, affecting the finances of the Nation?

Professor FISHER. Do you mean to include in that question a legislative direction, the legislative direction in section 1 here?

Mr. PRALL. Yes; I mean in that particular way, would it be wise to—

Professor FISHER. To say that they should buy Government bonds on a certain date?

Mr. PRALL. Yes.

Professor FISHER. I think it would be very unwise, just as it would be unwise to do back-seat driving in an automobile. In other words, you ought to get your chauffeur and tell him where you want to go, and then he is the one who understands how.

Mr. GOLDSBOROUGH. I understand your question to be, Mr. Prall, as to interpreting the legislative direction involved in the first section of the Goldsborough bill?

Mr. PRALL. No; I make it more general. I say, is it a good thing, or is it wise, to command or direct or make mandatory a direction by congressional authority?

Professor FISHER. I can not see any possible objection to it. I do not see how the chauffeur should take offense because his master tells him what to do.

Mr. PRALL. Suppose, after this act became a law, conditions were such that such a command would be very detrimental to the country, and they had no other discretion under those circumstances or conditions, would it be a good thing?

Professor FISHER. Of course, if you should give directions to the Federal reserve to deflate in depressions, and to inflate in a boom, you would be telling them to do something that was extremely wicked; it would then be their duty to do it, or to resign; but if you tell them to stabilize, they should have the intelligence, and I believe they do, and understanding, to realize that they should do it because it is right and good for the country and not simply because it is the law.

Mr. PRALL. Well, I wondered if it would be wise to take the discretionary power from a board of that kind, that perhaps by its experience knew the conditions very much better than we might, to-day, know it a year from now, or two years from now; that perhaps our views or our ideas of what they should do at that time would not be appropriate.

Professor FISHER. But in this bill you are giving really a general policy to lift us out of the present depression by means of raising the price level, and when raised to the proper point, which is an important matter to settle, then to stabilize.

Those two directions, certainly, according to every student of the subject who is a competent witness, are proper directions to be given. The first is necessary at this time and the second is advisable at all times.

Mr. BUSBY. Under the terms of this bill, could not the machinery be used to pull the prices down, if they were too high, as effectively as they could be used to lift them up when we find them too low?

Professor FISHER. Of course, they are directed to stabilize when they get to a certain point, and not let it get too high, or too low, if they can help it.

Mr. BUSBY. And for that reason I see no fear, such as might be suggested by Mr. Prall's questions, of a further, different, or theoretical situation pertaining to this bill, or this type of legislation.

Professor FISHER. It seems to me that Congress will be derelict in its duty if it does not pass this bill at this time. It seems to me the public will have a right to complain that this legislative direction has not been given; and I can not see how the Federal reserve system could, and I can not expect them to be, at all, resentful; that would seem to me quite inconceivable and childish.

Mr. GOLDSBOROUGH. Professor Fisher, the question was asked you by Mr. Prall as to whether or not, in order to make this sort of legislation effective, the cooperation of the member banks would be necessary. Now, do you not think that any bank would like very much to be in the frame of mind where it could resume its normal activities, and do you not think that, if a member bank, or the member banks knew that the Federal reserve system had adopted a definite policy of going into the market and staying there until the price level was raised, that that would immediately reassure the responsible officials of the member banks and induce them to resume their normal activities, which would, in itself, assist the Federal Reserve Board in doing the very thing that it started out to do?

Professor FISHER. Certainly.

Mr. GOLDSBOROUGH. Is not that so?

Professor FISHER. Certainly, and it would tend to stop hoarding. Just as soon as the people realized or even thought it was possible that the prices would rise, people would try to buy, in order to take advantage of the low prices, when they thought that they had reached the bottom, and money would come out of hoarding and go into the banks, and each dollar that came into the bank would be capable of being multiplied by something like 10 in credit, and the whole thing ought to operate very fast, just as it has in England.

Mr. PRALL. That would be all right, if it was not for that "if" that comes in there. If the board could go into the market to buy bonds and stayed in until this thing happened—

Professor FISHER. If the bank should do that; yes, sir.

Mr. GOLDSBOROUGH. Professor Fisher, the opponents of this bill are going to say this: It is true that the price level has been raised in the countries that have gone off of the gold standard, but that was because they did not have enough gold, and the people wanted credit and could not get it. Therefore, of course, when a country went off of the gold standard and credit became available, they demanded it; but in this country we have plenty of gold, there is plenty of credit available, and they do not want it. And, therefore, an inflationary policy would not force people to take something that they did not want. Now, what would be your answer to that argument?

Professor FISHER. I think if there is anything in it we ought to go off of the gold standard ourselves. It is not of very great importance

whether we stay on the gold standard or go off of the gold standard, in comparison with the rise in the price level and its stabilization.

Mr. GOLDSBOROUGH. That contention is that we have got to have a demand for credit, and take the credit, in order to have a rise in the price level.

Professor FISHER. Yes.

Mr. GOLDSBOROUGH. And they will contend there is no demand for credit, because we have got plenty of gold, and there is no way we can raise the price level.

Professor FISHER. My feeling is that it is not the demand of credit so much as it is the supply of credit that raises the price level; and if the Federal reserve will use the power they have, then we can raise the price level, even if there is little demand for loans. But as a matter of fact there is a demand for loans on the part of many customers. I could give you many examples, and I know Mr. Rogers has inquired, and others have inquired. The difficulty is with the banks now, not a lack of demand from their customers.

MISCELLANEOUS OBSTACLES AND OBJECTIONS

Mr. GOLDSBOROUGH. Now, another thing that is going to be said will be this: That if we raise the price level, that will let in cheap foreign goods, and as soon as that is done that will interfere with our manufacturers and lower the price level again, and we will have to further decrease our gold reserves by attempting to raise it. What will be your answer to that?

Professor FISHER. Well, raising the price level will help our exports, not the imports. That is what it has done to England, and that is what it has always done when the rise is in a different standard than abroad, as is the case now except for France and a few other countries still on the gold standard. On a rising price level, the expenses of production lag behind the price that the merchant gets. In a falling price level, they lag behind the other way. It is always, both in theory and in practice, a fact that a country with a rising price level will have its exports stimulated and imports discouraged, compared with a country on a different monetary standard. When Germany was inflating with her paper money she had an advantage in exporting in comparison with gold-standard countries. When, after 1873, silver-standard countries had their price level rising while gold-standard countries had theirs falling, the silver-standard countries, like India and China, had an advantage in their export trade. On the same principle if the United States should raise its price level it would have an advantage in its export trade as compared with England on a paper standard. The only important country which would be in a different situation would be France because she would have a gold standard in common with us. Our raising of our price level would tend to raise the price level of France and other gold-standard countries and our gold would tend to go abroad to those gold-standard countries which of course, sorely need it. But as to England, Sweden, Japan, and other nongold countries there would be no such tendency. The difference in price level would simply register in the foreign exchange which would show a reduced dollar—which is what we are after. The only new tendency toward commodities flowing into the United States would be from gold-standard countries and that would be temporary.

Mr. GOLDSBOROUGH. That is going to be one of the chief arguments against this bill.

Professor FISHER. I would go further than that and contest the proposition that the importation of goods from abroad is detrimental to this country.

Mr. GOLDSBOROUGH. So would I, Professor, but you have got so many people that do not think that way.

Professor FISHER. There are people that think, if we had manna from Heaven, it would be a terrible thing, because it would interfere with the bakers.

Mr. GOLDSBOROUGH. I fully agree with you on that, Professor Fisher, but you must, of course, bear in mind that a great many of our most powerful bankers and business men and Members of Congress, who reflect their views, believe just to the contrary. Personally, I think, the more good things we can get, the better off we are.

Professor FISHER. Moreover, any imports will have to be balanced by exports. So that we employ American labor for the export of goods. But I think your main answer to the people whose philosophy on that subject is, according to the economists, fallacious, is that you are really stimulating exports and discouraging imports by this bill.

Shall I go on, Mr. Chairman?

Mr. GOLDSBOROUGH. Yes; proceed, sir.

Professor FISHER. I was referring to the Federal reserve system before the Glass-Steagall Act, being a system which acts as a sponge for absorbing gold, at the very time when gold ought to be especially free, namely, during depression, and that is exactly contrary to the original intent of the act.

I can remember, before the Federal reserve system was created, dining with Paul Warburg at his house in New York, and he spoke about this simile, that our banks now were very much like each house having its own water tank on top to put out a fire; and that in case of a fire, each house having its own water tank, would be in danger of using up its water; whereas, if you had a common tank for the whole town, a reservoir, so that each house could only get its quota, for the time being, you could put out the fire much more quickly; and that the Federal reserve was the common reservoir for the banks, but in a depression, it has acted rather to rob the banks of their water supply, and to compel the banks to put out their own fires.

We want to go back to the original idea, so that we can get the cooperation of the banks in having the whole system work in such a way that you have a common reservoir. That defect has been temporarily remedied by the Glass-Steagall Act, but it ought to be made permanent. I believe that if the Federal reserve had had the mandate that it has in this bill, so that they would come to regard the stabilization of the unit of value as a major duty, I would say its main duty, we would not have had this depression. If the clause which Senator Owen inserted in this Glass-Owen Act, following the Federal reserve act, had been finally adopted, I do not think we would have anything like this present depression; or if the original Goldsborough bill, or the original Strong bill had been enacted; because I think the Federal reserve, under no circumstances, would have failed to utilize its powers, or even come to Congress to ask for more; they would have found out how to do it, if they had realized that it

was definitely their duty. As it is, the Federal reserve system does not seem to know to use the slang, "where they are at" in this all important matter.

One man in the system tells me that, of course, they want to stabilize; that they do try to do it, always have, and always will, if you will just let them alone; that their trouble in 1929 was dissension as to how best to do it. Incidentally I believe there will be little dissension, if they know they are expected to do it, and that stabilization is their main duty. I know one very high official in the Federal reserve, who tells me recently that he had never looked at the figures on individual deposits, subject to check without notice, or even knew of their existence, and was surprised to find they had been contracted, and he had not regarded it as his job. But if there had been a mandate to stabilize, those figures would have been not only familiar to him, but he would have known that Carl Sneider in the Federal Reserve Bank of New York, had contributed, perhaps, more than anyone else to the understanding of how the relationship exists between the deposits, the real currency of this country, and the price level. But this man was ingrossed in what he regarded as more important matters.

As soon as they have this mandate before them, they will begin really to study the problem, and they will get a concurrence between their different views, or at any rate will take a definite policy and put the responsibility on a definite committee. Seeing that the dollar is stabilized should be one of the concerns of the Federal reserve. If they should do it, their action would be dependent upon a great many considerations that would all be carefully weighed.

No wonder that, under these circumstances, in view of the fact that many of the Federal reserve people do not know "what it is all about," do not know even that there is an unstable dollar and have not studied it in the least—no wonder I say that they have not given us a satisfactory price level; no wonder they are tardy and hesitant and vacillating and have dissension. If they now had the mandate, their open market conferences would probably be converted again into a working commission.

I talked with the president of one of the largest banks in this country, one of the very largest, and when I spoke about the open-market operations, his sole thought was in reference to the effect that it had on the rate of interest. Well, there is a big difference, as my friend Rogers said, between cheap money and plentiful money, or between dear money and scarce money; but the banker who has not studied this question, confuses those two. To buy bonds is not an effort to make money cheap, but to make it abundant.

If you had such a mandate, the bankers would immediately become conversant with this problem, as nine-tenths of them are not to-day, and their opposition to stabilization would decrease, because it was the law. They would have to bow to the law, and the Federal reserve banks would say to their member banks: "Don't you see, we have no choice. You must not blame us, you must blame Congress and the law. It may be repealed, if you do not like it, but until it is repealed we have got to do this." They have got to go out on the market and buy or sell, whatever is necessary, whether they think it interferes with the bond market, or not.

Such a "mandate" would simply be a declaration of policy similar to what has been suggested in England by the Lord MacMillan report and in Sweden by the statement regarding the Riksbank. In both instances, as I have shown, the hope was expressed that similar declarations of policy would be made by other countries. When all important countries have let it be known that a higher and thereafter a stabler price level is to be sought we shall, from that very declaration, anticipate that result and the whole work would be on the highway to recovery.

I believe, if a mandate were given, the Federal reserve would find a way better than anyone knows to-day, and if they do not, I think, as Mr. King said a few days ago, you must find some other agency to take over this duty of stabilization. One great student of stabilization told me that he thought, with the traditions of the Federal reserve, that they were not fitted to do it, and that a new institution should be formed to do it. I told him the trouble with that was that the Federal reserve has the power to interfere with that institution; and if a new one were formed, the first thing to do was to take away the powers from the Federal reserve, so they could not interfere. That will have to be done, if they do not perform that duty, because stabilization is an absolute necessity.

There are those who say it can not be done. That is not true, but it is true that it can not be done with absolute perfection; and it will require long tradition, technique, to get the highest approximation to perfection. We have already seen that something can be done, or else all the economists are wrong on the subject, the president of the greatest bank in England is wrong, and also certain directors of the Bank of England, Governor Strong was wrong, and many others, who are supposed to know about this subject.

As a matter of fact, something has been done. We know Governor Strong did a great deal; he never denied it. He only denied that he could always do enough, and must not be expected to do more than he could.

In order to get the cooperation of the banks, which is important, we may have to help them somewhat by guaranteeing deposits. I believe that is worth very careful consideration now, especially as an emergency measure, despite the unfavorable experiences we have had in the States that have tried it, all of which have given it up; but it is used successfully in Germany, and has been helpful there in this emergency. I think it should be very carefully considered as one thing to be used now, in order to answer the objection that the chairman has suggested as having been made to him, that the member banks are not cooperating because they can not.

One way for their cooperation, that I believe is very important, is that they should have a concerted policy as to interest rates. It is not necessary that the interest rate should be the same for all parts of the country, or for all banks in the same cities, or for all classes of risks. But I think they should go up and down together in sympathy with the rediscount rate of the Federal reserve, and not be fixed inflexibly as they are now. A flexible interest rate is one of the most desirable things. Once you get stabilization, they will not need to fluctuate as widely as when you do not have stabilization.

I feel very strongly about that, and have taken it up with members of the Federal reserve system, and tried a year ago to get a drive

made by the Federal reserve system among the thousands of banks dealing with them. I believe that, if the suggestion that was then made had been accepted, we would not be in our present depression as much as we are; that the banks would have responded and lowered their discount rate, and would have prevented the cumulative depression that has followed.

I have a few more objections to answer; one that I hear very frequently, when it is suggested that the Federal reserve should not try to raise the price level and stabilize it because "the people of the United States would never consent to giving the Federal reserve so much power." My answer to that is they already have it, and this mandate does not give them any more, but asks them to use what they have got. I can remember that Governor Strong told me, in 1914, shortly after the passage of the Federal reserve act, that nobody realized what enormous powers had been put into his and other people's hands, and said: "What shall I do to use this power wisely?"

The Federal reserve naturally does not like to have it brought out in the limelight that they have this power; they would prefer not to have the public fear them as a tremendous power; but I think the lack of having it in the limelight—the failure to bring it out into the open that they were able to effect price levels—has, in the end, resulted in their getting much more criticism than if they had taken the bull by the horns originally and accepted this responsibility openly.

Then there is the objection that they can not do anything, because there are so many other factors involved. It is true that there are many other factors, but the skipper might just as well say: "I can not steer this ship. I have got a rudder, but there are so many other influences besides the rudder that I can not possibly steer the ship. I have really tried to steer it, but there are all sorts of influences constantly interfering. I have turned my rudder in a certain angle, and the ship will not go in that direction, because something interferes with it." The answer to that is: Then turn your rudder some more. If any interference comes, turn your rudder to correspond, and in that way you are able to steer provided your rudder is big enough and provided the storm is not too big. Of course it may that the time will come when the skipper can not steer.

Then I think that the burden of the objectors' minds is always, "Leave it where it is." You remember the play *Bunty Pulls the Strings*, in which Bunty said, "Anything new is scandalous." Any innovation is going to excite opposition. As the Secretary of the Treasury, Mr. Mills, is quoted as saying: "We are suffering now not so much from frozen assets as from frozen minds, and we must thaw them out to-day, if we are to get anywhere."

I can remember once, in reference to this very problem of our unstable dollar, I testified at a hearing in Boston concerning a strike of motormen. I said that, when there is such a rise in the cost of living, wages ought to be raised too. But the company said they could not afford to raise them on a 5-cent fare, and wanted to know what to do about it. I said, "The obvious thing to do is have a 6-cent fare." They replied: "That is something that could not be considered." The 5-cent fare had been so long in operation that it could never, so they thought, be anything else; but a few years later they

were forced to it, and the fares went up to 10 cents. And then they wouldn't come down.

Of course, there are numerous illustrations of getting into ruts. The unregulated gold standard is the worst economic rut of all.

Now, Mr. Chairman, I have taken a great deal of your time. I have a brief summary here, and if you would like me to read it, it might be helpful; it might be well to have it in the record for people who do not want to read the whole thing.

Mr. GOLDSBOROUGH. Mr. Prall would like to ask you a question.

Mr. PRALL. I think it would be more interesting, Professor Fisher, if you would tell us or give us your views on the cause or causes leading up to this depression.

Professor FISHER. I tried to do that yesterday.

Mr. PRALL. Yes, sir; I guess that was before I came in.

Professor FISHER. Yes; in order to amplify that, I would like to offer you for reading, if you care to take the time, the manuscript of my book on that subject. I have two-thirds of it here in my bag. The factual part, the middle part, has not yet been typed and mimeographed, but I have the other two parts and will get them now.

SUMMARY

To summarize what I have said, I have said that I think this bill is the most constructive legislation we have had offered, both as an emergency proposition for the depression, as a measure of farm relief, as a measure for unemployment, as a measure underlying that problem of balancing the budget, and also as a permanent proposition for avoiding future depressions.

Mr. BUSBY. May I ask if you would add to that, also, as a proposition to prevent bank failures.

Professor FISHER. Yes; of course, that is part of the depression.

I have reviewed the movement for stabilizing money for the past hundred years, shown its great growth in the last five years, and that it has had the support of practically all economists and of a great many industrial leaders whom I have mentioned, I believe that this problem has been helped forward toward solution by the development of the theories of index numbers, especially in the last few years. And now we have in this stabilization movement the understanding support of the farmers and the labor groups—understanding it, as I say, through the stabilization committee of the American Farm Bureau Federation. We have had some actual stabilization through Governor Strong, and we are about to have it with the Swedish Riksbank, and apparently also in England.

I have shown how unstable the dollar is, how unjust and uneconomic its evils, how depressions, through deflation, cause bankruptcy and unemployment. I have tried to show how the great reason for all of this is the money illusion, the idea that the dollar is stable, when it is not. I have shown that the total debt in this country was, doubtless, considerably over \$200,000,000,000 in 1919, and that, in terms of 1919 dollars, it is a great deal more than that now and just because we tried to make it less.

I would add that, unless we can actually get a commodity dollar, a stable dollar, in terms of commodities, instead of in terms of gold weight, that our capitalistic system is going to be very much handi-

capped in the future, if in fact it can permanently survive such depressions as our unstable money involves. The capitalistic system merely means a profit system, and a profit system means debt; it means that a leader in industry makes commitments for the future, debts, and then stakes his skill to make a profit; but if he has to assume also the risk of the unit of debt increasing, in the interval, he may be bankrupted through no fault of his own, and that is exactly what has happened in the last few years to countless first-class business men. If we want really to save capitalism and to justify it as a system good for the business man, the farmer, and the laborer, we must have a stable dollar.

I think I will not add to my statement, Mr. Chairman.

Mr. GOLDSBOROUGH. Professor Fisher, the subcommittee desires to extend to you their most profound thanks for the very illuminating, detailed, and painstaking statement that you have made, and I believe it will be very helpful to the Congress and also to the country.

STATEMENT OF C. WILLIAM RAMSEYER, REPRESENTATIVE IN CONGRESS FROM THE SIXTH CONGRESSIONAL DISTRICT OF IOWA

Mr. GOLDSBOROUGH. Mr. Ramseyer, will you please tell us what district you represent and when you were first elected to Congress?

Mr. RAMSEYER. Mr. Chairman and gentlemen of the committee, I represent the Sixth Iowa district, I was elected to the Sixty-fourth Congress, and have served continuously since.

As I assured the Chair before, I do not expect to take much time. I am interested in moving this thing along and getting a bill reported out. Members of this subcommittee are all familiar with the problem of monetary stabilization. The Chairman is a pioneer in monetary stabilization. I remember seven or eight years ago, I do not remember exactly the year, I happened to be in the House when the Chairman (Mr. Goldsborough) was making a speech on the subject. I had not thought much about it before. I sat and listened to it with some understanding and much interest; and Mr. Strong, who is on this committee, came in at a later date with his bill.

I was in Congress during the World War, I saw inflation, and then I saw deflation. In 1923, in May or June, the Manufacturers' Record, published in Baltimore, published the minutes of the proceeding of the Federal Reserve Board at their meeting in May, 1920. That record showed that the board, with the other men making up the Federal reserve system, had determined to start the deflation, and they did deflate. They had the power, and did exercise the power, to deflate.

I think that the war-time inflation was a controlled inflation. I have been told, from reliable sources, that at the time of the armistice the Federal Reserve Board was inclined to start either a gradual deflation or to hold the price level there, but the Treasury officials objected to that, insisting that they must continue the rising price level in order to put over successfully the Victory liberty loan, which was floated in May, 1919.

Now, in Iowa, where we suffered more than any other place in the country because of the inflation of farm land prices, at the time of the armistice the farm land prices, I am reliably informed, had not in-

creased over 10 per cent over the pre-war prices. The farmers, it is true, were getting high prices for their commodities during the war, but they all felt they were war prices, and when the war was over they would have to take less. And farm commodity prices did trend downward for awhile after the armistice. Then they started up again, and in the spring of 1919, with rising farm-commodity prices, is when the speculation in farm lands went wild, and in Iowa the farm land prices went up to double what they should have been, with the result that, when the deflation started in, many farmers and many bankers, and so on, went under.

In June, 1930, the Iowa Bar Association appointed a committee to study and report on stabilizing the purchasing power of money. I was not at the convention of the association, and I did not know of the creation of the committee until some time in August, when I got a letter from the president of the association, asking me to head this committee. I first declined, but after some weeks of consideration, I took the chairmanship of the committee.

To make a long story short, that committee filed a report with the Iowa Bar Association in June, 1931. It being a report on an economic subject before the Bar Association which, as you know, deals chiefly in legal subjects, the report attracted considerable attention. The report is not very long; it is somewhat philosophical. The purpose of the report was to bring before the bar associations the problem of monetary stabilization, and the importance of the problem, without recommending any specific remedy. If there is no objection, at the conclusion of my testimony, I ask to have this report printed.

Mr. GOLDSBOROUGH. It will be so ordered, without objection.
(The report above referred to is as follows:)

REPORT OF THE COMMITTEE ON STABILIZING THE PURCHASING POWER OF MONEY

Mr. President, members of the Iowa State Bar Association, last year this association upon the recommendation of its president, Mr. Justice Grimm, of the State supreme court, authorized the appointment of a committee of three to study the problem of stabilizing the purchasing power of money. On this subject in his annual address he said:

"By many of the best informed it is believed, if accomplished, this may prove to be a great source of relief from many of the economic and social turmoils which now occasionally rock every civilized government."

Politics is defined by Webster's Dictionary as:

"The science of government; that part of ethics which has to do with the regulation and government of a nation or state, the preservation of its safety, peace, and prosperity, the defense of its existence and rights against foreign control or conquest, the augmentation of its strength and resources, and the protection of its citizens in their rights, with the preservation and improvement of their morals."

Note especially the place of "prosperity" in this definition—"the preservation of its (the nation's) safety, peace, and prosperity."

From time immemorial the government in power has been held accountable for the safety, peace, and prosperity of the people. The government is whatever the people make it or permit it to be. In the preservation of the nation's safety, peace, and prosperity the people contribute character, intelligence, loyalty, industry, and initiative; the government contributes within the limits of power conferred upon it protection, stability, and opportunity to the people to help themselves. It is true, as often stated, that the government owes no man a living; but, on the other hand, it is a function of government to maintain conditions under which no man is denied the opportunity to make a living.

In I Samuel xxii, 2, is described the gathering at the cave of Adullam under David, as follows:

"And every one that was in distress, and every one that was in debt, and every one that was discontented, gathered themselves unto him, and he became a captain over them; and there were with him about four hundred men."

Here are set forth the causes of revolution in a nutshell—"distress," "debt," and "discontent"—engendered by economic conditions chiefly.

The problem of the ages seems to be how to live together in organized society on a basis of economic justice and equity, which at the same time will permit and encourage the highest social, moral, intellectual, and spiritual development of the people.

In this study we are concerned with the economic phase of the problem. Our national wealth is near \$400,000,000,000. It would serve no useful purpose at this time to recite facts and figures on the productiveness of our farms and factories, the efficiency of our labor, and highly developed communication and transportation systems.

The goods produced in this country and the goods which we obtain from abroad in exchange of goods of which we have a surplus, give us a sum total of goods sufficient to supply the necessities and comforts of life to every man, woman, and child in the land.

In 1921 President Hoover, then Secretary of Commerce, in his report as chairman of the President's Conference on Unemployment, said:

"There is no economic failure so terrible in its import as that of a country possessing a surplus of every necessity of life in which numbers, willing and anxious to work, are deprived of these necessities. It simply can not be if our moral and economic system is to survive. * * *

"What our people wish is the opportunity to earn their daily bread, and surely in a country with its warehouses bursting with surpluses of food, of clothing, with its mines capable of indefinite production of fuel, with sufficient housing for comfort and health, we possess the intelligence to find solution. Without it our whole system is open to serious charges of failure."

Mr. Daniel Willard, president of the Baltimore & Ohio Railroad, in an address last March on unemployment and the distribution of resources before the Wharton School of Finance and Commerce, said:

"The mere existence of the (unemployment) problem presents a serious challenge to our economic system." After discussing our natural and humanistic resources, our productive capacity, and our surpluses, he said:

"And with all this surplus of wealth and resources we have millions, so it is said, in dire need of food and clothing—in short, more of everything to eat and wear than we can possibly use and at the same time millions of human beings hungry and cold. That is another problem, although closely related to the first, and the two problems together—unemployment and the distribution of resources—bring into question the very foundations of our political and economic system."

Here is the problem stated by two eminent authorities. It is not a new problem. It is not a problem incident to the world-wide depression. The depression merely emphasizes the existence of the problem. It is the recognized paramount problem before the American people. The recognition of the existence of a problem is the first step toward its solution. Have we "the intelligence to find solution"?

Your committee is aware of the position of some recognized authorities that the economic distress through which this country, together with the rest of the world, is now passing is due to the aftermath of the World War and our rapid scientific progress resulting in technological unemployment. The economic destruction and financial loss of the World War to date is estimated at nearly \$400,000,000,000, or equal to the national wealth of the United States. The world can not pass through such an upheaval without suffering and distress for many years thereafter.

Due to our scientific progress we have witnessed since the World War greater and more rapid changes in modes of living and in agriculture and industry than has taken place in any other like period of time in history. In 1918 it took one man a whole day to make 40 electric-light bulbs. Soon thereafter there came a machine that made 73,000 bulbs in 24 hours, and each machine destroyed the jobs of 992 men. In the boot and shoe industry 100 machines take the place of 25,000 men. According to a recent report from a coal mine in southern Illinois, with a new machine used in the mine to load coal 250 miners do the work formerly done by 1,100 miners. The harvesting combine, which can be operated by a man and two boys, does away with the reaping and shocking of grain, and at the same time displaces a whole threshing crew. Instances of changes in agriculture and industry of this kind could be multiplied many times over.

These changes in industry and agriculture add to our unemployment problem. The problem may become more acute with every new invention. New industries do not create jobs as fast as new machines in old industry destroy jobs. Technological unemployment is one of the hazards of living in this scientific age. Means to mitigate this and other hazards of unemployment call for sympathetic understanding, foresight, future planning, and cooperation among employers and employees.

Now to approach more directly the subject matter of this report stabilizing the purchasing power of money and the relation of the fluctuating purchasing power of money to employment and the distribution of resources. The fluctuation in the purchasing power of money has agitated this country and the world for generations. Gold is the basis or measure of value of the leading commercial nations of the world. A study of the index number of wholesale commodity prices over a period of time will disclose that the index number rises with the increase in the gold supply and falls with the decrease in the supply of gold.

After the Civil War, from the early seventies to 1897, there was a gradual decrease in the supply of gold and a constant decrease in commodity prices. During that time we had the granger movement, the fiat-money agitation, and the free-silver issue. Whatever we may now think of the issues of those days, it must be conceded by every unbiased student that back of it all was the purpose to stabilize the purchasing power of money. As money became less in volume its value increased, thereby reducing commodity prices and making it more difficult for those in debt to pay off their obligations.

Following 1896 gold was discovered in the Klondike and only a year or two later South Africa poured a great stream of gold into the world's supply. This increased the money supply, and ere long there was an upward trend to the index of general prices. The condition of the debtor class was improved, and thereby was removed in a large measure the spirit of discontent, especially in the West. The increase in commodity prices was more rapid than the increase in wages, which resulted in 1910 in the beginning of a strong agitation against the high cost of living.

The index number of the United States Bureau of Labor Statistics on the basis of the average wholesale prices for the year 1913 is 100. Beginning with 1914, there was an increase in the index number, which rose to 225 in 1920. After the middle of the year 1920 there began a contraction in money and credit, and the index number fell to 140 in 1921. In this inflation and deflation of the World War period other factors than the gold supply played an important part.

We appear to be in another period of diminishing gold supply. George E. Roberts in an article dated April 1, 1931, observed: "A recent inquiry conducted under the auspices of the League of Nations has developed that mining engineers over the world are in general agreement that, based on present prospects, the gold production is more likely to diminish than increase." A continued period of falling commodity prices, such as distressed the people of this country from the early seventies to 1897, must certainly be averted.

Any change in the purchasing power of money touches every kind of moral question and every kind of obligation. To every business transaction not on a cash basis there is a promise on the part of one to pay and on the part of another there is a promise to be paid. Those who promise to pay are in the debtor class and those who hold such promises to pay are in the creditor class. In the latter class are holders of life insurance, savings-bank depositors, pensioners, annuitants, wage and salary earners, owners of notes and bonds, the endowment funds of colleges and hospitals, etc. Cheap money, resulting in the rise of commodity prices, adversely affects the creditor class; on the other hand, the debtor class in time of inflation can more readily pay off the debts contracted before the inflation.

In the increase in commodity prices from 1914 to 1920 the creditors had the value of their investments and incomes more than cut in two. During the same period the debtors were enabled to pay their debts at the peak of 1920 with dollars less than one-half in value of the 1914 dollars. It is estimated that in this period by the process of inflation \$60,000,000,000 were transferred from the pockets of the creditor class to the pockets of the debtor class. With the deflation of 1920 the operation was reversed in a somewhat less degree to the benefit of the creditors and to the distress of the debtors. Those who gave mortgages on real estate at the peak in 1920 had almost double the load, a few years thereafter, they had originally contracted to assume.

Says Owen D. Young:

"The proper handling of price stability is one of the most important matters facing the capitalistic system. In it will be found the roots of those maladjust-

ments which result in unequal and unfair distribution of wealth, in unemployment, and other serious problems."

Sir Josiah Stamp says:

"A stable price level is the most bitterly practical of all questions."

H. G. Wells has said that civilization is at the cross roads; that the test of civilization is whether or not we can learn to control the purchasing power of our money.

The International Labor Conference at Geneva, May-June, 1929, in an exhaustive report on Unemployment and Monetary Fluctuations, had this to say:

It seems to be possible to declare emphatically that abrupt, or even slow but prolonged, variations in the general price level, or, in other words, disturbances in the equilibrium between production and the means of payment, play no small part in determining the alternating acceleration and retardation of economic activity, and are hence an important cause of the recurring unemployment crises which mark one phase of the cycle.

"If, then, the magnitude of variations in the general price level could be reduced, an important cause of unemployment would be rendered less potent. But is such reduction feasible? This is the vital question, to which these competent in the matter are becoming more and more inclined to return an affirmative answer."

The Stable Money Association, which has among its officers and directors leading industrial and financial leaders, economists, and statesmen, including such leaders of thought as Chief Justice Charles Evans Hughes and Hon. Frank O. Lowden, in a recent statement said:

"This is a world problem. Every leader of public opinion in the world, therefore, should feel it incumbent upon him to make it his own problem.

"Responsibility for progress in the stabilization of money and credit must rest to a very large extent upon the shoulders of us in America, because we have a disproportionate share of the world's gold; and as the world's creditors we are able to draw gold from the rest of the world at our discretion; we have a closely integrated, highly organized, and widely used banking and credit system; and our statistical material is abundant; yet no one country can or should attempt to control the situation alone, and every country should assist."

Quote from report of the committee on stabilization of money standard of the South Carolina bankers' convention, 1930:

"Unless some improvement develops in the utilization of gold, inevitably the long trend of price level must continue downward. The benefits will accrue to the creditors and the owners of fixed income-bearing securities, the losses will fall on the debtors and the producers, who must sell on a declining price level.

* * * * *

"Stabilization is vital to the well-being of both possessor of money and the seller of things money will buy. During a period of inflation the owner of money finds its purchasing power reduced, and during a time of deflation the seller of goods finds his products generally bringing lower prices. The well-being of the world requires a reasonably stable money, so that upsets may be limited and the disasters that always result from such changes may be avoided."

The stabilization of the purchasing power of money is of vital importance to our State. Iowa is primarily a State of production, and her prosperity depends on a satisfactory level of prices. Many of her citizens are debtors, who suffer with tragic consequences when the price level declines.

The index number heretofore referred to is made up of the weighted average of wholesale prices of 550 of the leading commodities in the United States, and is compiled monthly. There is a distinction between the price level of all these commodities as reflected in the index number and individual prices. The price level is affected by inflation and deflation. To stabilize the purchasing power of money is to stabilize the price level, and to stabilize the price level is to prevent inflation and deflation. Even though the price level is stabilized and the index number remains stationary, or nearly so, individual prices may move up or down according to the law of supply and demand.

This problem of stable money has been tackled during the last year by the American Farm Bureau Federation, the National Grange, the American Federation of Labor, some State bankers' associations, and other organizations, including the Iowa State Bar Association. Committees are at work on the problem, some reports have been submitted, but to date no definite specific program has been recommended.

There are some plans that have received wide discussion. One plan is that we do away with the gold standard altogether and have nothing but credit money.

This has the support of John Maynard Keynes, eminent British economist and financier. This plan has not received widespread approval on account of the feeling that we should have a money redeemable in some certain metal or metals.

The late Professor Lehfeldt, of South Africa, proposed a plan that the gold-producing nations buy up the gold mines and operate them in the public interest. His proposal was that when there is too much gold, resulting in rising price level, shut down some of the mines; and when there is too little gold, resulting in falling prices, operate more mines even at a loss. Thus by regulating the world supply of gold the price level would be regulated.

Another plan which has received much discussion is by Prof. Irving Fisher, of Yale. His proposal contemplates a change in the number of grains of gold in the dollar, so as to maintain a stable price level. When gold becomes cheap put more grains of gold in the dollar, so it will buy the same quantity of commodities in general. When gold becomes dear reduce the grains of gold in the dollar, so it will buy the same quantity of commodities in general. Thus he would stabilize the purchasing power of money and maintain the price level.

What we have to find is a method of arranging means of exchange and also means of payment in such a manner as to prevent violent fluctuations in the price level. This is another way of saying that means of payment should be adjusted to the commodity price level. In a period of falling prices it is not so much that commodities have fallen in price as the value of gold has gone up. In other words, the Fisher plan contemplates that the value of gold in the dollar should be determined by the general price level of commodities instead of determining the price level of commodities by the value of gold in the dollar.

Every question that involves the welfare, happiness, and prosperity of the people is of concern to the members of the legal profession. A well-known maxim is, "Equity will not suffer a wrong to be without a remedy." This maxim should be applied to economic wrong. It is the business of every well-wisher of the Republic to find remedy for wrong.

The problems that have confronted our Government and our people in the past have been many, complex, and trying. The problems have been political, social, moral, and economic. Each problem was faced with frankness, courage, intelligence, and toleration, and solution was always found. The problems confronting the country since the late war have been the greatest and most complex since the foundation of our Government. We can depend upon the intelligence and spirit of our people to carry forward and onward in the future as in the past.

Mr. RAMSEYER. As a result of this report, which fell into the hands of the President of the American Farm Bureau Federation, I was asked to join a committee of that organization on the stabilization of the unit of value. This Farm Bureau committee had several meetings in Chicago last fall, and the committee saw the importance of two things, and acted on them. One was to get out a brief and readable statement on the money problem to arouse interest, with the result that, the first of this year, under the direction of this committee, the booklet which I hold in my hand, entitled "Honest Money," which you have all seen, was published. Mr. O'Neal, the president of the American Farm Bureau Federation, referred to this publication in his testimony before this committee, and every Member of the House and Senate has one of these. The second was to get all of the farm organizations united in a program, and not make it a bureau proposition alone.

At a meeting of the American Farm Bureau Federation the early part of December, last year, for the first time in the history of the three national organizations, the presidents of the three organizations stood on, and spoke from, the same platform in Chicago. These presidents were here in December, and decided to meet early in January, with the result that, on January 6, 7, and 8 the three presidents, O'Neil, Taber, and Simpson, were in session here and agreed,

together with other farm leaders on a resolution setting forth a united program, one of which is on the monetary stabilization. This has also been called to the attention of this committee.

Then, to arouse the interest among all the Members of the House, the House Members who had introduced bills on monetary stabilization, called a meeting of the Members of the House in the caucus room of the House Office Building for January 9, to be addressed by the three presidents of the farm organization. Such meeting was held, and about 100 Members of the House showed their interest in the problem by their presence at that meeting, and were present, and the meeting was addressed by the presidents of the three national farm organizations.

The next move, of course, was to get a hearing before this committee. Of course, this committee was busy on nonpartisan bills, which had the support of the leaders in the Senate and in the House, and of the administration. Your committee was busy with other problems. Since the 16th of March you have been holding hearings on this problem of monetary stabilization. The farm leaders testified before you, and have shown a united front for legislation such as you are considering.

Another thing, the committee decided, before I go further, that in addition to getting all of the farm organizations back of this movement, it was important to get labor.

Mr. GOLDSBOROUGH. What committee was that?

Mr. RAMSEYER. I refer to American Farm Bureau Federation Committee on the stabilization of the unit of value. I spoke a moment ago that the object of this committee was to get all the farm organizations together; then, further, to get out a brief and comprehensive statement on the monetary question; then the leaders of the farm organizations did contact the leaders of labor, with the result that, last week, there was a representative of the American Federation of Labor here and indorsed, in principle, the program of the farm organizations on restoring and stabilizing commodity prices.

On the first Monday in December, I introduced a bill (H. R. 128), on monetary stabilization but I want to make this statement now to the committee and to the country, if the country finds out what I am saying here, that I am wholeheartedly back of the Goldsborough bill. Of course, it has some defects, which will have to be ironed out, and which I am sure the committee will do.

Now, in addition to hearing the agricultural representatives and labor representatives, you have heard the economists. I had the pleasure, the other day, of sitting through all of Professor King's testimony, and I have heard part of Professor Fisher's testimony. The problem has been thoroughly presented to you gentlemen, but the end is not yet.

There has been progress made, and I think a lot of progress has been made in arousing the interest in the House of Representatives; because nearly every Member of the House that I talk to now concedes that something must be done to raise the commodity price level; and I think Members who, at first, were afraid of raising the commodity price level, because it might hurt labor, have gotten over

that fear, especially since labor has come in and indorsed this proposition. Of course, the history of these inflations and depressions—

Mr. PRALL. May I interrupt there?

Mr. RAMSEYER. Yes.

Mr. PRALL. I think everybody that has testified, in addition to the labor representatives of the American Farm Federation, and the labor representatives, have also agreed that it would be beneficial to labor.

Mr. RAMSEYER. I think so.

Mr. PRALL. That is the general testimony, the general opinion.

Mr. RAMSEYER. Every period of declining commodity prices is accompanied by unemployment; and every period of rising commodity prices is accompanied by increasing employment, and better conditions all around.

Now, as I have a chart open here I just want to make one observation. You probably have all thought about it. Different witnesses testified here before you in regard to the relation of the gold supply to the increased volume of business. They testified that, from the Civil War, or soon after the Civil War, down to 1896, the gold supply of the world did not increase as rapidly as the volume of business increased; along about 1880 there was an upward movement in commodity prices. From about 1880 to 1896 there was a constant decline, a downward movement of commodity prices.

Mr. GOLDSBOROUGH. Mr. Ramseyer, if you will excuse me, right at this point, after Mr. Prall's question and your answer about unemployment, I am going to suggest, if Mr. Prall would like to do it, that we put in these charts which have been brought here by Mr. Ethelbert Stewart, bearing out your statement that, during the period of a rise in prices there is employment, and during periods of declining prices, there is increased unemployment.

Mr. PRALL. Yes, and they follow very closely together.

Mr. RAMSEYER. Yes, I would be very glad to have them put in with my testimony.

There is another thing that has been called to the attention of the subcommittee, and that is along about 1897 or 1898 there started an upward trend in commodity prices, and that is about the time that gold was discovered in the Klondike and in South Africa, and which brought in a large supply of gold and, to use plain language, cheapened money and raised the prices of commodities.

Gentlemen, I wonder what would have been the history of the country, if the discovery of gold had been made 10 years earlier. Would not the effect have been that, instead of a declining commodity price level, with all of the agitation in the country on the question of greenbacks and free silver, we would probably have had ascending commodity prices during that period; and the history of the country, especially the political history of the country, might have been very different.

Now, I think it is important for this committee, as soon as possible—I am not suggesting that you curtail the hearings—but as soon as possible get something concrete before the House of Representatives. Now, it is going to require some more education to get this proposed

legislation enacted. Right in this connection here, if this manufacturers' excise tax had remained in the revenue bill, I had intended to offer an amendment at the end of the last paragraph of title 4—you will see the double purpose in my mind as I read the amendment—as follows:

Page 250, line 24, strike out the period and insert in lieu thereof a colon and the following:

Provided, That, if at any time prior to June 30, 1934, the President finds that for a period of 60 days the average wholesale all commodity price level is within 10 points as high as the average wholesale all commodity price level of the calendar year 1926, indicated by the figure 100 in the Revised Index of the Bureau of Labor Statistics of the Department of Labor, he shall issue a proclamation to that effect, and after the date of the issuance of such proclamation no sale or importation shall be taxable under this title.

The purpose of that is to let the country know the reason for the extraordinary taxes was the low commodity price level, and to assure the people that, if there was a rise in price back to near normal before the date of the expiration of the taxes on June 30, 1934, and that the normal conditions existed or continued for 60 days, the President should issue a proclamation, and that would bring to an end these taxes. Another thing it would accomplish is to impress the fellow who had to pay those taxes with the necessity to study index numbers, he would start to think about the relationship of the volume of money and credit to the commodity price index. You know, we say that commodities are cheaper than they were two years ago, or three years ago; but in relation to what are commodities cheaper than they were two years ago? The answer is in relation to money. Now, if we would say that money is dearer than it was a few years ago, we would express the same thing in a more understandable way; and that is the thing that the people have to get into their minds.

I was talking to one of the farm leaders when they were before this committee, and he was telling me of a speech that he had made to the farmers along this line, and a young fellow came up to him after the meeting and told him that it was a good speech, but he just could not understand it. An old fellow, who had been through the battle back in 1896, came up and congratulated him and said: "It just reminds me of the days back before 1896."

We have not had a money campaign in this country since 1896, and the people have not thought about the relationship of the volume of money and credit at work to the commodity price level. For 20 years prior to 1896 money was an important issue in every political campaign.

As the commodity price level declined the burden on the debtors became heavier and heavier, especially out in the Middle West, where the agitation for relief was more centered. As an impartial student of the history of those times back of 1896, I say back of the movement, what the people back there really wanted was price stabilization; so that if a man made a debt at a certain time, he could pay it back with dollars of about the same purchasing power in six months or a year or five years hence.

Now, with the change upward in commodity prices in 1897 or 1898, up to 1910 and 1912, people were prosperous; the people out in the Middle West were making money, and paying off their debts. The commodity price level during that period went up faster than the rise in wages. Now, here comes your wage problem again. The result was, in 1910, we had a campaign against the high cost of living, from the centers of population, especially labor, and that campaign was directed chiefly against the high cost of food products. If the wages had been adjusted to that rising commodity price level, we would not have had any political agitation in 1910 and again in 1912 on the high cost of living. You have got to have a proper relationship there between wages and the price level, in order to keep people satisfied, and do justice to everybody.

Now, I am not going to go into the details of the bill. In closing, I simply want the subcommittee to understand that it is my idea that while the interest of the people has been considerably aroused in this problem, the outcome of the battle in the House will depend on arousing a greater public interest. If the bill is held too long in the committee, people will either lose interest, or a lot of them whose interest has been aroused will say:

Well, that is one more of those promises or assurances, of which we have received so many during the last 10 or 12 years, and nothing is going to come of it.

Therefore I hope, and I am going to assist the committee in carrying out that hope, by bringing my testimony to an end, that at the earliest possible date the bill will be reported to the House by the full committee; and I am here to assure you also that, in every way I can, I will help you in carrying on this educational campaign in organizing on the outside, or within the House of Representatives, to center interest and attention on this all-important problem. I think this problem is in a class by itself; and the other issues that are before the country and before Congress do not compare, at all, in importance with this issue here. The other relief measures, unless we have stability in the commodity price level, and stabilization thereafter, will prove to be partial and temporary. This is something of a permanent nature, and it has simply got to come, if we are to survive as a people.

Mr. GOLDSBOROUGH. Mr. Ramseyer, the subcommittee is very grateful to you for the very satisfactory and illuminating statement you have made; and I also desire to say that they, and the county, should be very grateful to you for the great amount of work you have done in the last year, especially in arousing interest in this subject throughout the country.

Mr. RAMSEYER. May I take just another minute, Mr. Chairman?

Mr. GOLDSBOROUGH. Yes.

Mr. RAMSEYER. I want a word on the powers of the Federal Reserve Board to stabilize commodity prices. A few weeks ago I got hold of this "Post-war monetary stabilization" by Cassel, which contains three lectures which he delivered in this country, I think it

was in 1928, and in the last lecture I am going to read four or five sentences, as follows:

The result is that the monetary policy of the United States determines the value of the currencies of every other gold standard country. The Federal reserve authorities, therefore, control not only the general level of prices in the United States, but also the price levels of all of the gold standard countries in the world.

Here is another sentence:

Thus the Federal reserve system exercises an independent influence upon the American level of prices.

Here is the last I shall read:

Consequently, the price level of the United States has been a determining influence on the world price level, which is thus actually regulated by the leaders of the United States banking policy.

When you give directions to the Federal reserve system to use their powers, as the Goldsborough bill contemplates, you are talking with authority to an organization that has the power, and that should exercise that power for the purpose of stabilizing the price level, by taking their minds off of the stock exchange and centering them on the commodity price level, and so conduct their operations to hold the commodity prices on a fair and reasonable level.

Mr. GOLDSBOROUGH. Mr. Ramseyer, it has been testified to before this committee that the reason, as understood by witnesses, why in the spring of 1930 a deflation policy was adopted by the Federal Reserve Board, was because there was, apparently, an unwholesome rise in the stock market, which the Federal Reserve Board undertook to check.

Assuming that that inference of the witness was correct, is it your view that it is one of the Federal Reserve Board's duties to control the operation of the New York Stock Exchange?

Mr. RAMSEYER. Of course, the question, as far as I am concerned, answers itself. Naturally, I answer that question in the negative. I do not now recall what they actually did in the spring of 1930.

Mr. GOLDSBOROUGH. They had been in the market, Mr. Ramseyer, and there was a partial recovery.

Mr. RAMSEYER. Yes.

Mr. GOLDSBOROUGH. The country was recovering from the collapse of 1929 in a normal way, apparently, as far as I know, and the thing was halted by the first of April, 1930.

Mr. RAMSEYER. Well, they ought to conduct their operations to benefit the producers—I mean the farmers and other producers—to maintain a stable price level, and not for the purpose of regulating the speculation on Wall Street.

The accompanying charts show the trend of prices and of employment according to index numbers computed by the Bureau of Labor Statistics of the United States Department of Labor.

Chart No. 1 draws a comparison between employment and wholesale prices for the years 1923–1931, inclusive, and for the months of

1929, 1930, and 1931. The index numbers of wholesale-commodity prices contained in this chart are based on 550 price series.

CHART No. 1

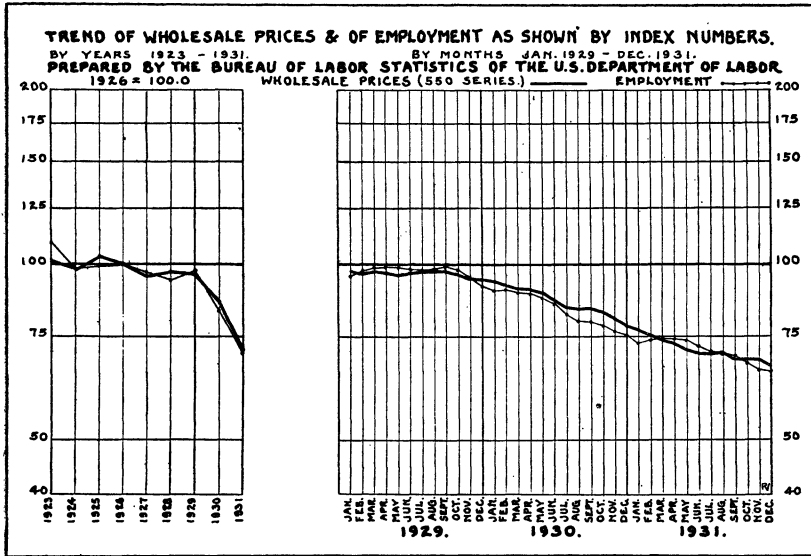
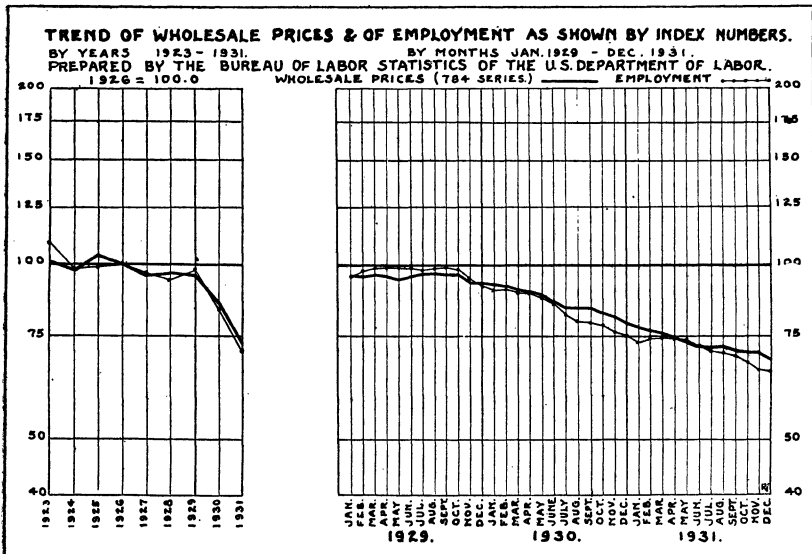


Chart No. 2 shows corresponding data, but instead the index number of wholesale prices is based on 784 price series. The index number including 550 price series was discontinued by the bureau with the close of 1931, and the series including 784 items was sub-

CHART No. 2



stituted therefor. All index numbers as shown in both charts are based on the average for the year 1926 as 100.

I thank the subcommittee.

Mr. GOLDSBOROUGH. We thank you very much, Mr. Ramseyer.

**STATEMENT OF HON. CONRAD G. SELVIG, MEMBER OF CONGRESS
FROM MINNESOTA**

Mr. SELVIG. The bills now under consideration by the members of your committee are the first before the present Congress that strike at the heart of the economic problems before us. The other bills, that we have passed, were mere palliatives and nothing else. This committee now has the opportunity to report a bill that will create prosperity, restore confidence, keep the way clear for continuance of trade, and help rehabilitate agriculture.

At the outset I desire to express my appreciation to the members of the committee who have studied this problem and who have presented much valuable data for us to consider. I have taken advantage of this opportunity to speak a word of encouragement to those of you who are deeply interested in this problem, and have come to a determination to use my best efforts in support of a money value stabilization bill.

The basic industry of our country is agriculture, and agriculture is in distress and has been more or less in distress since the deflation of 1920. The distress of the farmer is largely due to the shifting value of money. He has to contend with the law of supply and demand for his products, and also the supply and demand for money. Nature and the farmers' own industry may be responsible for the variations in supply and demand for his products, but the supply and demand for money, and the variations in the value of it, are man made.

Control of the supply and demand for money is too often exercised arbitrarily by the big financial interests of our country, for their own benefit, and with utter disregard and callous heartlessness as to the effects upon the farmer and the laborer and the small business man all over our country. Our captains of industry have failed to take into account the welfare and happiness of our more than a hundred million common people, and think only in terms of profits to themselves.

It is time for Congress to consider the money problem from the point of view of those who have but little money, instead of from the point of view of those who have accumulated much money and to whom the accumulation of money has become a game rather than a necessity.

There is nothing that Congress can do, at this time, that would have a more beneficial effect upon the economic condition of the farmer and laborer and small business man than effectively to stabilize the value of money, basing it upon the value of commodities rather than of gold, but at the same time retaining gold as one of the basic mediums of exchange value with other countries. If a farmer would only have the supply and demand for his products to contend with as a price fixing factor he could look into the future with a greater feeling of security.

There is a story to the effect that in the Middle Ages in England the length of the yard was the distance around the king's middle. The yard fluctuated as the king grew fat or thin and when there was a change in kings there often was a violent fluctuation in the length of the yardstick, until at last the tradesmen got together and prevailed upon the king to decree that the distance around his waist on that day should forever be the length of a yard. A fluctuating yardstick as the measure of length is no more ridiculous than a fluctuating currency as a measure of value.

I quote the following from *Honest Money*, a booklet issued by the American Farm Bureau Federation:

The value of every product depends on supply and demand. That is just as true of money as it is of wheat and hogs. When the price of hogs goes down while other prices are stationary, the reason is that there are too many hogs in proportion to the demand for pork. But when the average level of all prices drops one-third that is not due to supply and demand of goods. The cause in such a case is the change in supply of money and credit. The price of money can not change, for it is fixed by law at 22.23 grains of gold to the dollar. So when the supply of money and credit changes the effect can only be shown by a change in the price of goods. Commodity prices not only must change to compensate for changes in their own supply and demand, but also to compensate for the changes in supply of money and credits and the demand for them.

It is proposed that changes in the purchasing power of the dollar shall be measured by what is known as the wholesale commodity price level on something over 500 commodities, figuring each according to its own importance, and using the prices that existed in 1926 or over a period of years before the present depression began as the basis. Building on this the Federal Reserve system would be given a mandate to keep the price level there by fitting the value of money and credit to the volume of business. I sincerely hope that you can work out a plan that will carry that idea into effect.

I am happy to note that the three great American farm organizations, the Farm Bureau Federation, the Farmers' Union, and the National Grange are combining their forces in favor of this measure. The value of the dollar should be stabilized on the basis of the average value of the commodities as a whole, leaving the average purchasing value, as based on all the commodities, always the same but permitting the individual commodities to fluctuate according to supply and demand.

I have appeared this morning not as a financial expert, but to express approval of the broad principles underlying the bills before you and to express the hope that your committee will bring out a bill to embody the best and soundest plan to accomplish the purpose. If you can do this you will forever have the gratitude of the great mass of American citizens.

Mr. GOLDSBOROUGH. Mr. Shibley, the subcommittee will be very glad to hear you now.

STATEMENT OF GEORGE SHIBLEY, WASHINGTON, D. C.

Mr. SHIBLEY. Mr. Chairman, and gentlemen of the committee, my name is George Shibley, an independent economist. I am doing my work through the Research Institute of this city. I finance the institute.

Mr. GOLDSBOROUGH. Mr. Shibley, the subcommittee would like for you to go a little back of that. What, if any, connection did you have with the writing of the Federal reserve act?

Mr. SHIBLEY. I would like to make a statement about my qualifications as an expert.

Mr. GOLDSBOROUGH. Proceed in your own way.

Mr. SHIBLEY. First, I qualify as an expert in the science of money and prices.

Back in 1896 I was the author of a 740-page book, *The Money Questions*, with a subtitle, *Stable Money*. The publisher was the Stable Money Publishing Co. That was 36 years ago.

That treatise received the highest kind of testimonials from liberals in England, France, and our United States. I was the first writer to propose a practicable plan for the stabilization of the height of the price level. That is, I pointed to the frequent measurement of the height of the price level in England, and the need was that the Government in each nation should provide for the scientific regulation of the daily flow of paper currency and bank credit, in connection with the use of gold and silver as standard money. Later Professor Fisher pointed to the possible change in the quantity of standard money in the unit of value, thus to help maintain a stable price level in connection with the use of gold as standard money.

Thus was proposed by both of us the all-commodity dollar, to become the stable multiple standard, to be used in connection with one commodity, the gold standard.

In 1899, I, as a philanthropist and an expert in social science and who for eight years had been devoting myself exclusively to researches in social science, founded with the cooperation of Prof. John R. Commons, and then with the cooperation of Prof. Edward W. Bemis, and Willis J. Abbot, the liberal journalist, the Bureau of Economic Research, located in New York City. This was the start in research work in behalf of the public, as the university professors were not free but were and are employed by boards of trustees who usually fix the institution's teaching on the hot political issues. For example, in 1896, the money question, and the dismissal from Brown University of President E. Benjamin Andrews. I mention also that in 1899 both Professors Commons and Bemis lost their positions in universities because they insisted on speaking to the public on hot political issues.

In the Bureau of Economic Research I was director of the department of money and banking, and I paid for experts to measure the heights of the price level in this country for 25 years, and then the weekly measurement of the price level for a time, with publication of the all-commodity index in the Monday morning papers.

The general measurement of this country's price level was preliminary to issuing a book on the coming platform on the money question in 1920 by the three liberal parties, the Democratic, Silver Republican, and the Peoples Parties. The Financial Plank of the Allied Reform Parties for 1900, the Humboldt Library, New York.

In contrast with a falling price level in 1896, in 1900 there were rising prices, and I secured from the national convention of the People's Party, dominated in behalf of Colonel Bryan, a new form of declaration of the money question, as follows:

We affirm the demand for the reopening of the mints of the United States to the free and unlimited coinage of silver and gold at the present legal ratio of 16 to

1, the immediate increase in the volume of silver coins and silver certificates thus created to be substituted, dollar for dollar, for the bank notes issued by private corporations under special privilege granted by law of March 14, 1900, and prior national banking laws, the remaining portion of the bank notes to be replaced with full legal tender Government paper money, and its volume so controlled as to maintain at all times a stable money market and a stable price level

That plan was for the restoration of the two-metal standard, bimetallism, in connection with a stable multiple standard. Then neither inflation nor deflation could be inflicted upon humanity.

That platform of the People's Party was by directions given by Colonel Bryan placed in the Democratic platform of that year, 1900. The wording was different but meant the same. The wording is, "We demand the retirement of the national bank notes as fast as Government paper or silver certificates can be substituted for them."

Thus in 1900 with rising prices I secured from two of the three liberal parties an appropriate declaration in behalf of stable money.

Thirteen years later, in the opening months of the Wilson administration, I suggested an amendment of the administration bill for the Federal reserve system. That bill before the amendment gave as the criterion for regulating the quantity of money and bank credit "to accommodate commerce and business." I secured the writing in the bill "to maintain a stable price level." (H. R. 6454, 1913, sec. 14.)

Later I was employed by the Senate committee as an expert on the money question.

The House was the first to consider the bill and the clause providing for stabilization was stricken out, and the Senate accepted the elimination. Other parts of the bill provided for an inflation, which came after the starting of the World War and the coming of gold to our shores in vast quantities.

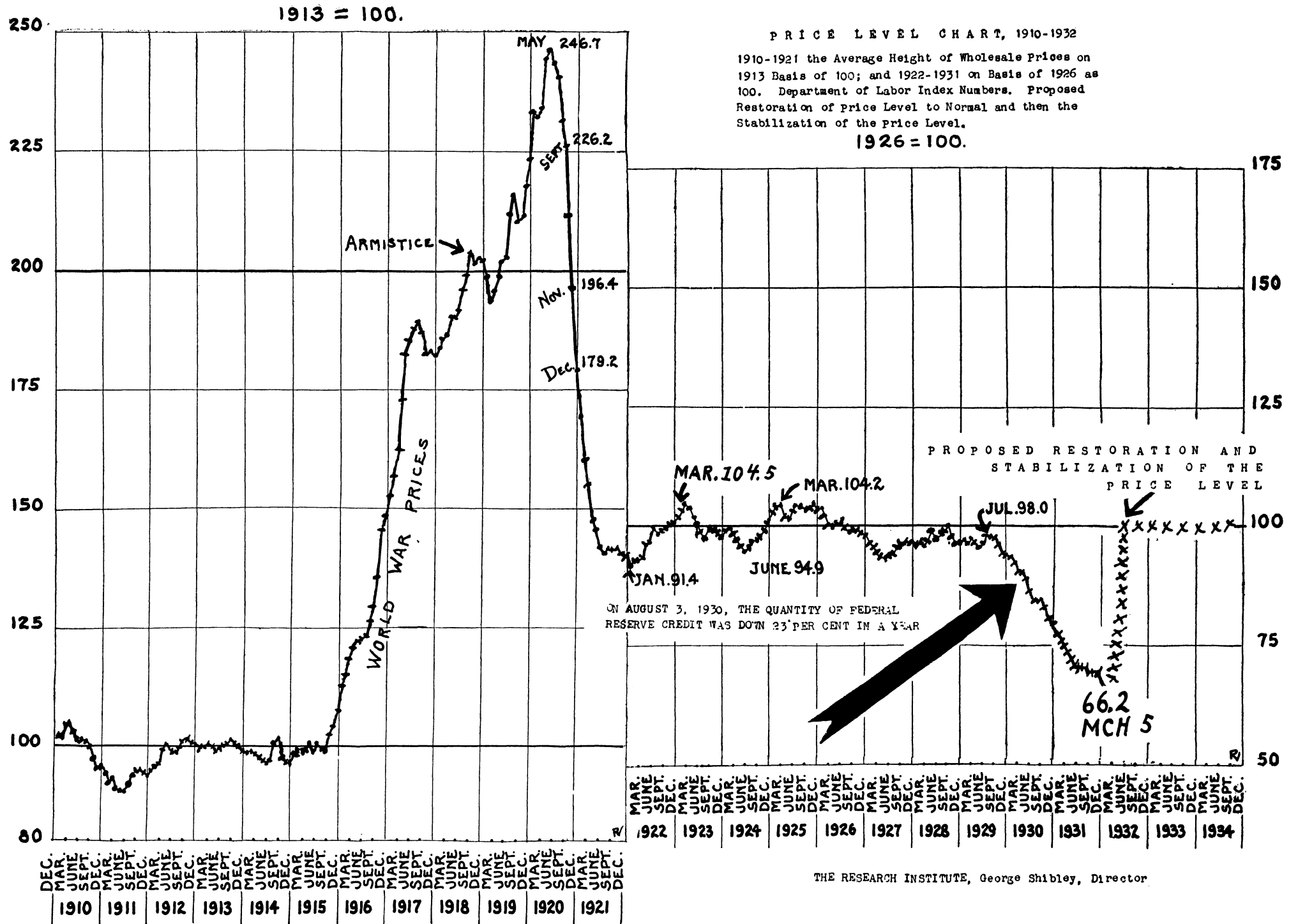
Senator Owen as chairman of the Senate Banking and Currency Committee, who had accepted my suggestion for the stabilization feature and had secured the assent of President Wilson and his Cabinet, tried to restore in the House bill the provision for stabilization and failed.

Nine years later the issue of stabilization was again brought up in Congress. Congressman Goldsborough, of Maryland of the House Banking and Currency Committee, had become convinced of the practical nature of stabilization by the method advocated by Professor Fisher, the frequent change in the quantity of grains of gold in the standard dollar. Mr. Goldsborough's bill, H. R. 11788, came up for hearings, and I put in a statement in behalf of the regulation of the daily outflow of money and bank credit to the end of maintaining stability in the all-commodity index. And two years later in Mr. Goldsborough's bill that criterion was added in connection with a possible shift in the quantity of gold in the dollar at long intervals.

Two years later, 1926, I took to Congressman James G. Strong, of the Banking and Currency Committee, and of the party in power, my bill for stabilization of the price level. He introduced it and I made the opening statement.

Such in brief is my record of advocacy of the stabilization of the price level. For 38 years I have been on the firing line for stable money, and was the first economist to propose a practicable program and I succeeded in applying it in two party platforms, and in 1913 I succeeded, with the aid of Chairman Owen, in placing it in the administration bill for the Federal Reserve System.

CHART No. 1



THE RESEARCH INSTITUTE, George Shibley, Director

THE MONEY QUESTION

I have charts here which illustrate the whole subject of the money question. The first is chart 1, which is the general price level from 1910 on, and it is different from most of them, in that I have connected together the 1913 price level and the 1926 price level. (Charts 1 to 12 inclusive.)

The meaning of price level is the average height of the prices of commodities at wholesale. And the height is measured each week in our United States by our Government operating through the statistical bureau of the Department of Labor. The method is simple when enough of the details are stated, as is the form of statement in these hearings by Ethelbert Stewart, Commissioner of the Bureau of Labor Statistics, Department of Labor.

In the accompanying chart 1 is pictured to the eye the price level in our United States for 1910 to date. The reason why the height varies considerably is the refusal by the Government's commission, the Federal Reserve Board, to attempt to supply just enough paper currency and bank credit each day to keep the price level stable, and then the board has operated in behalf of the bankers, the creditor class, except each two years to raise the price level and help win the election until 1930 and then the deflation was continued.

The evidence is conclusive: the official index of the price level that is charted; also the statement by the board in its 1923 annual report, cited by Commissioner Adolph C. Miller in his statement at the hearings on the Strong bill of 1926, which asked Congress to issue a mandate that the Federal Reserve Board must aim to stabilize the price level. (P. 634, 1926 hearings.)

Each of the other commissions that are assisting Congress are definitely instructed as to the policy which Congress desires to have applied, while the commission which gages the daily supply of the people's medium of exchange is left free to deflate terrifically in behalf of the creditor class, as has been done during the past 11 years of the Republican Government. (See chart 1.) The Wilson government, which framed the Federal reserve system, placed in its bill an instruction to the Government's commission to aim to maintain a stable price level, thus to benefit the producing groups and do justice to the bankers, the creditor class. But in the House, which first considered the bill, the stability clause was stricken out and I wrote a letter and asked to be heard for the retention of that clause, but no hearing of any kind of a public nature was permitted, and the Senate did not restore the stability clause, for a good reason I believe; the leading of the spirit, for the World War was at hand and a rising price level helps a Government to win a hard-fought war. But beginning in 1922 Congressman Goldsborough began introducing a bill to instruct for the stabilization of the price level; and he did so in the next Congress; and in the next Congress Mr. Strong introduced a bill asking Congress to instruct the Federal Reserve Board to aim to stabilize, but Commissioner Miller and the other members of the commission said that they preferred to do as they pleased, and they have pleased to deflate in behalf of the bankers and the other portion of the creditor class.

My duty, too, is to point out that the daily policy of the Government's commission, the Federal Reserve Board, is under the direct control of the President. He has on the board of eight members

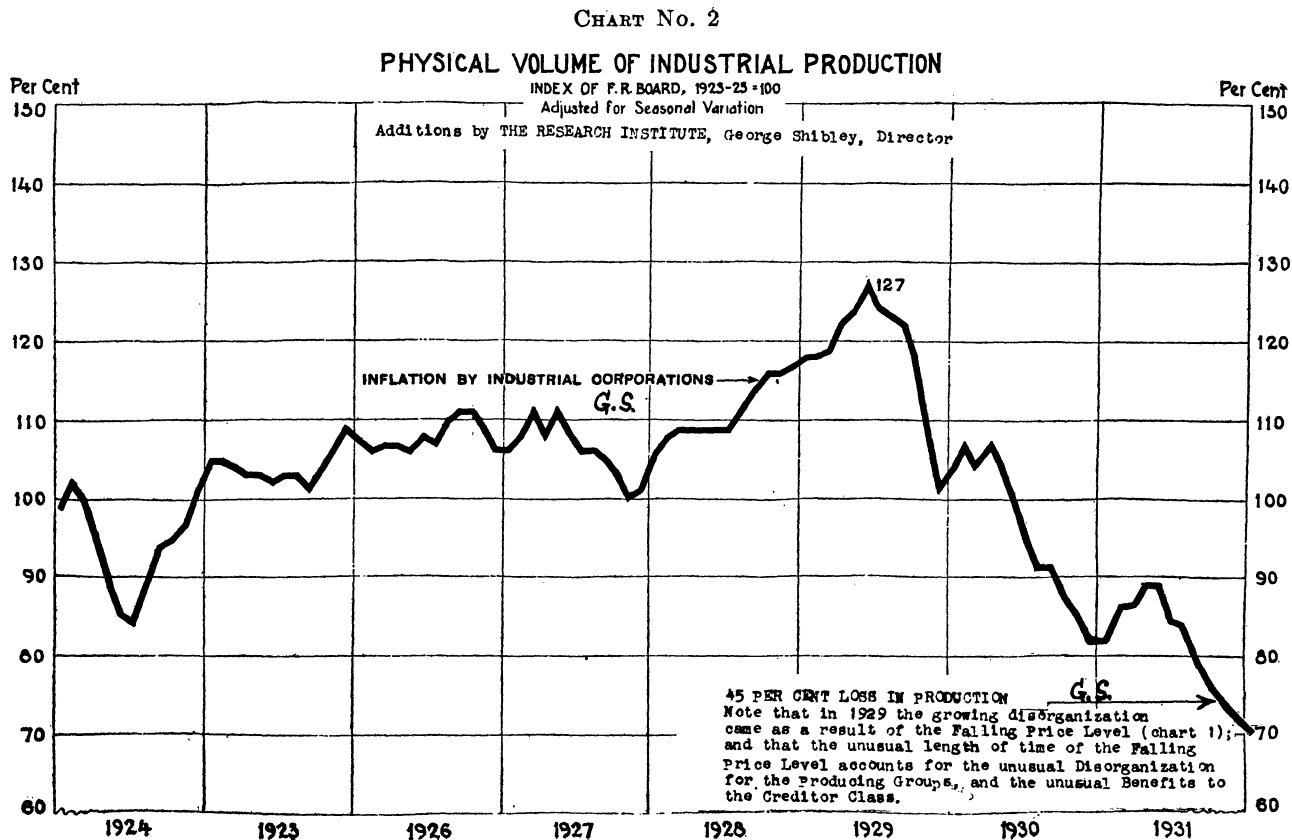
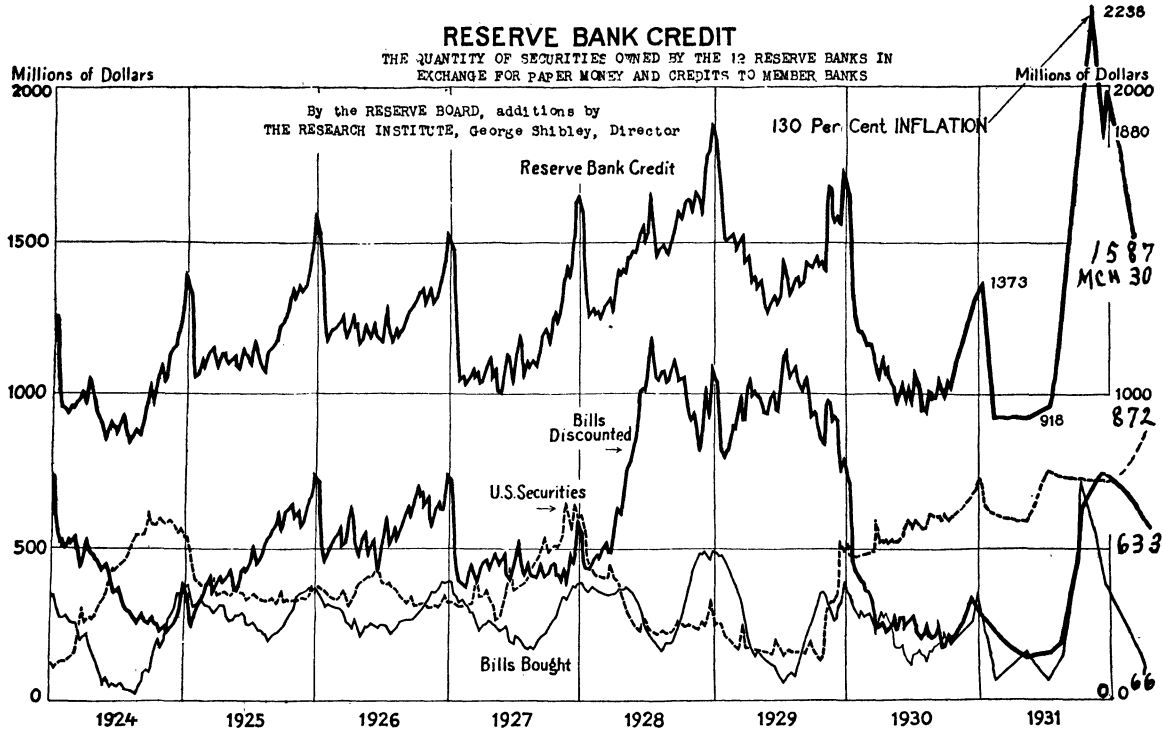


CHART No. 3

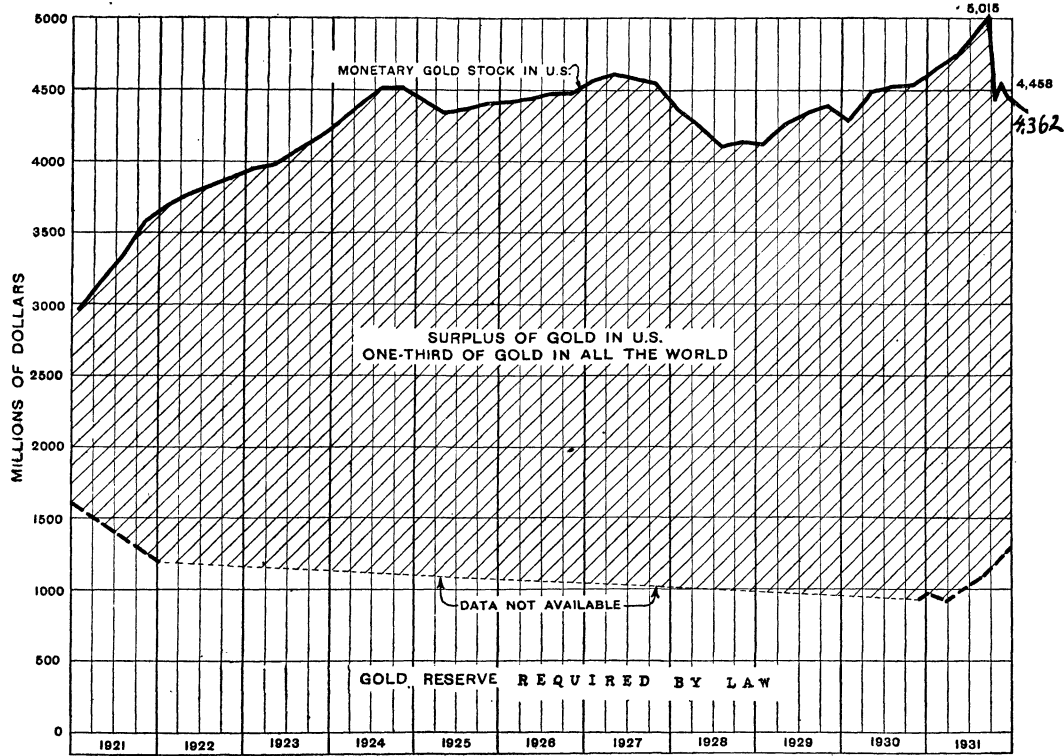


Note that in 1930 the quantity of Reserve Bank Credit was down 23 per cent in a year, whereas had the Government's commission, the Federal Reserve Board, under the control of the President, ordered the Open-Market

Committee of the Reserve Banks to purchase securities in the open market until the price level should start up strongly, it would have ended the Depression for the producing groups, and have ended the unjust

benefits to the Creditor Class if the price level should have been permitted to rise to the normal height and then have been stabilized.

CHART No. 4

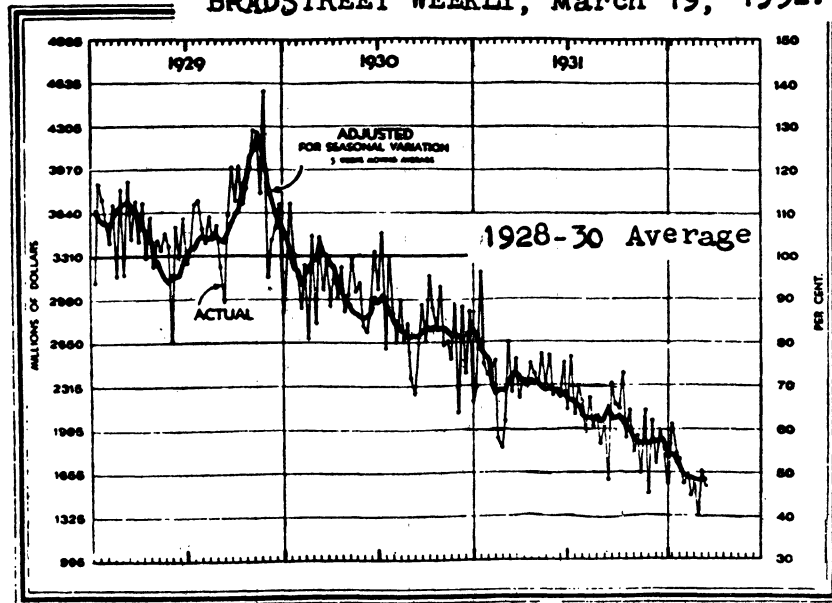


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CHART No. 5

Bank Clearings Index Declines to New Low

BRADSTREET WEEKLY, March 19, 1932.



GROWING DEPRESSION AFTER 9 LEGISLATIVE MEASURES BY THE ADMINISTRATION, ASSISTED BY DEMOCRATS AND PROGRESSIVE REPUBLICANS. BUT DEFEATED BY DEFLATION BY THE GOVERNMENT'S COMMISSION, THE FEDERAL RESERVE BOARD, see chart of FEDERAL RESERVE CREDIT. Date of this chart March 19, 1932.

Research Institute,
George Shibley, Director

STABILIZATION OF COMMODITY PRICES

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CHART No. 6

Steel Production Slightly Lower

BRADSTREET WEEKLY, March 19, 1932.

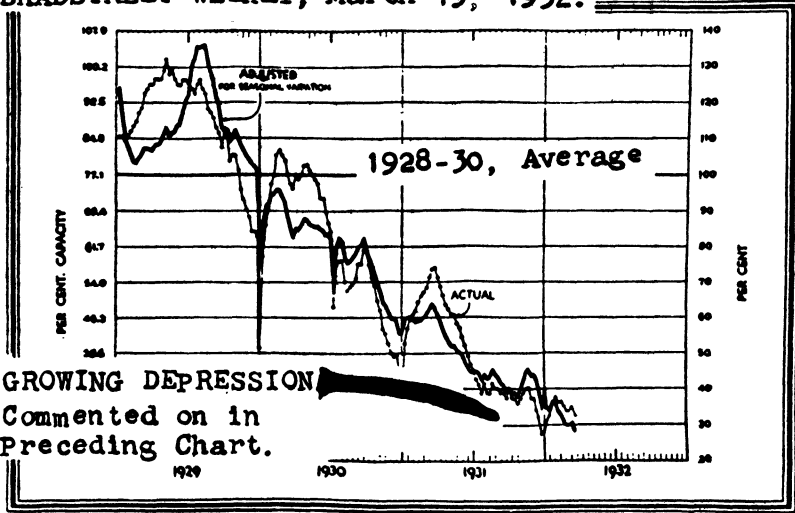
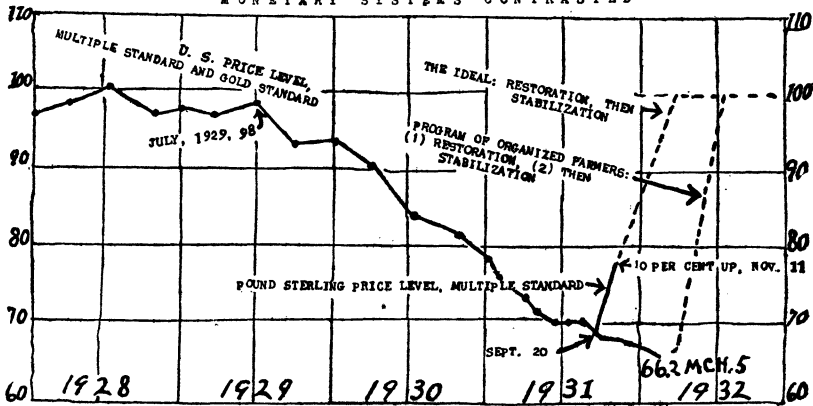


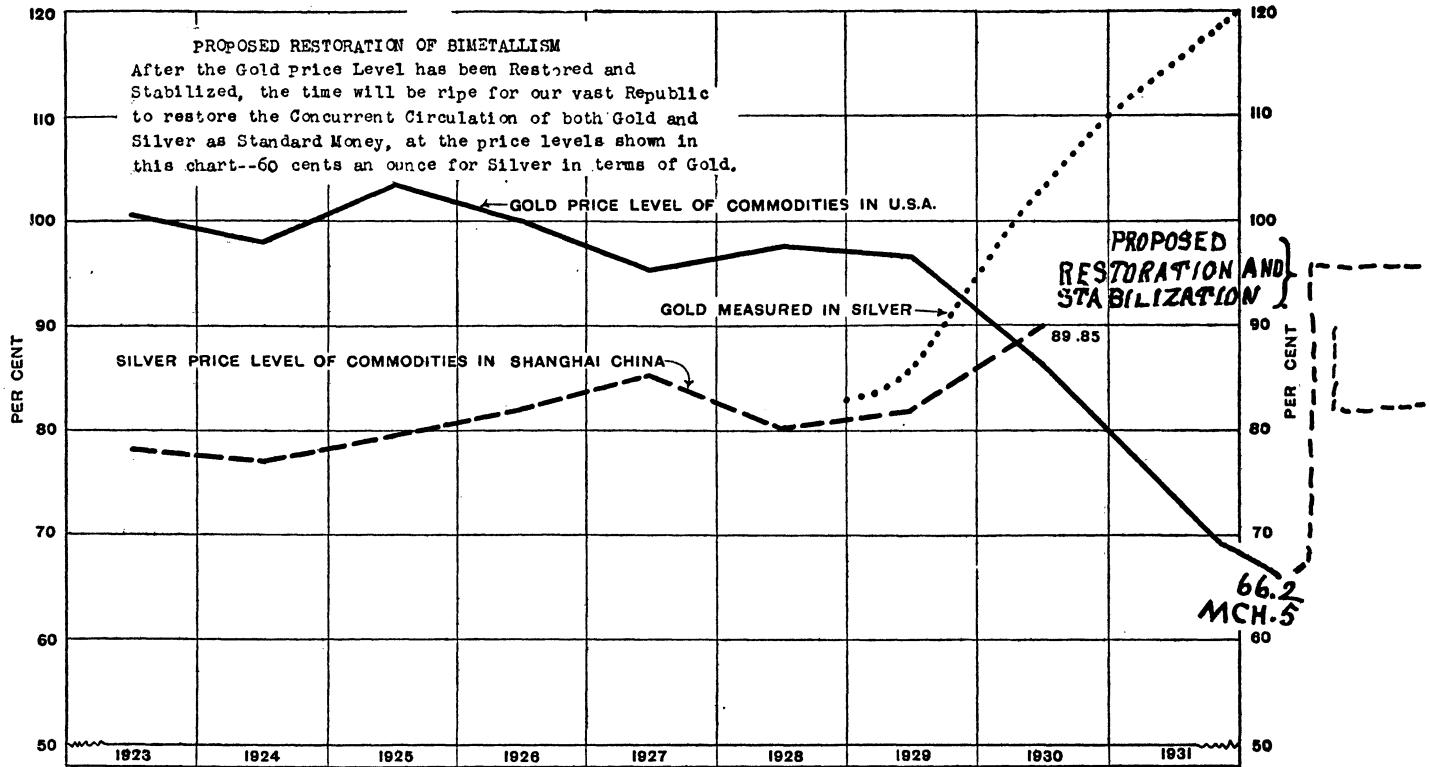
CHART No. 7

MONETARY SYSTEMS CONTRASTED



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CHART No. 8



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STABILIZATION OF COMMODITY PRICES

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CHART No. 9

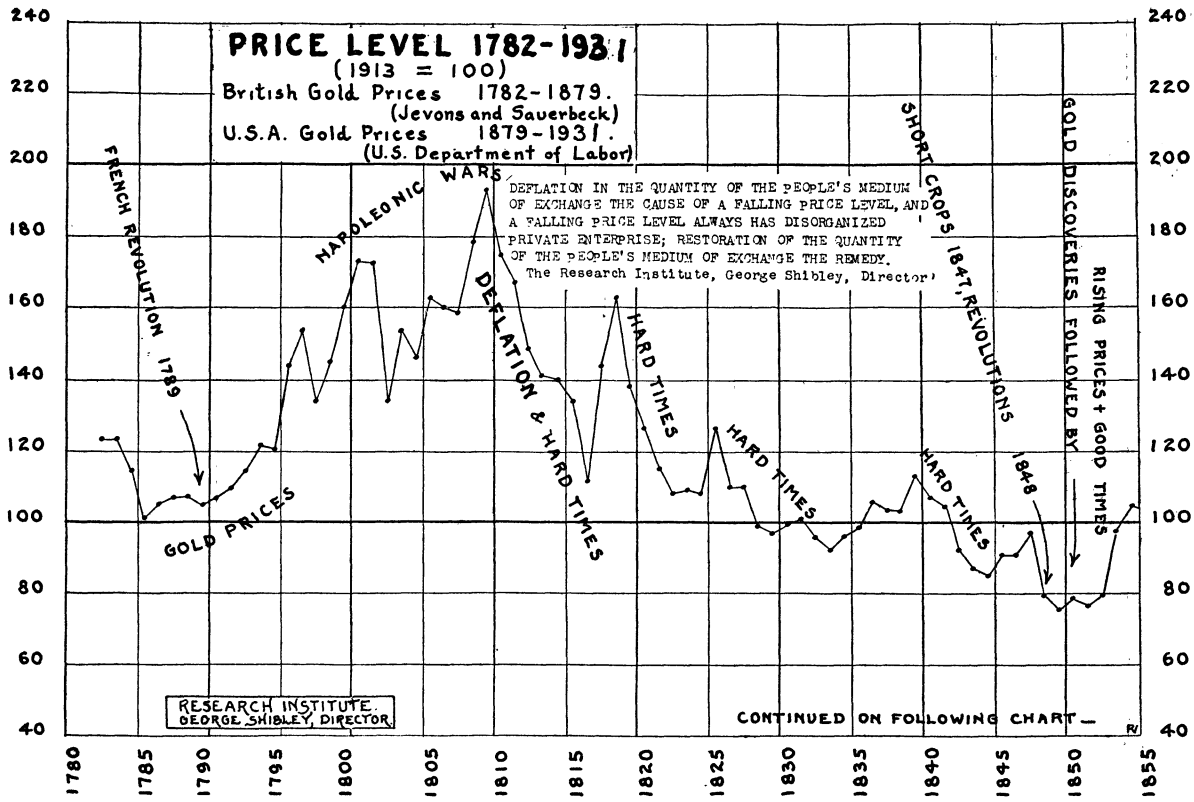
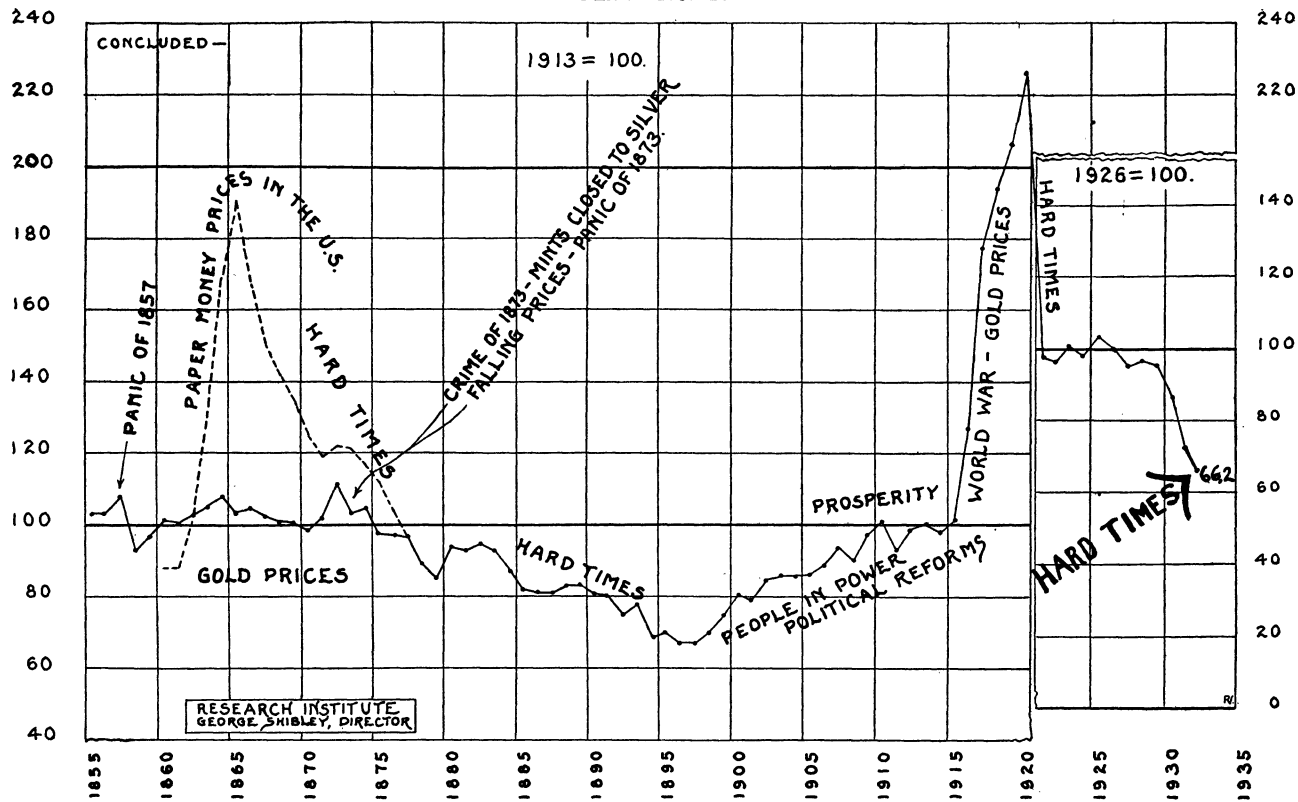


CHART No. 10



STABILIZATION OF COMMODITY PRICES

CHART No. 11

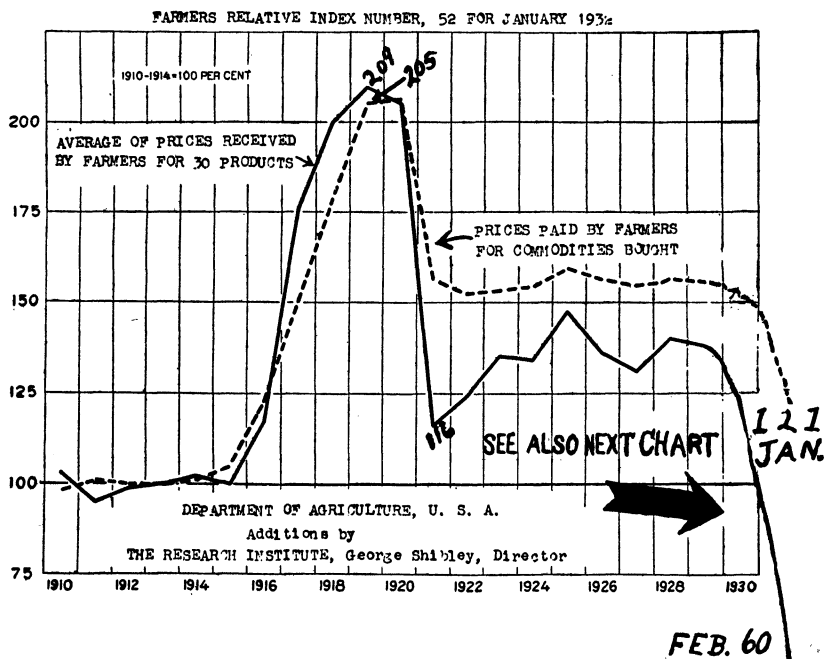
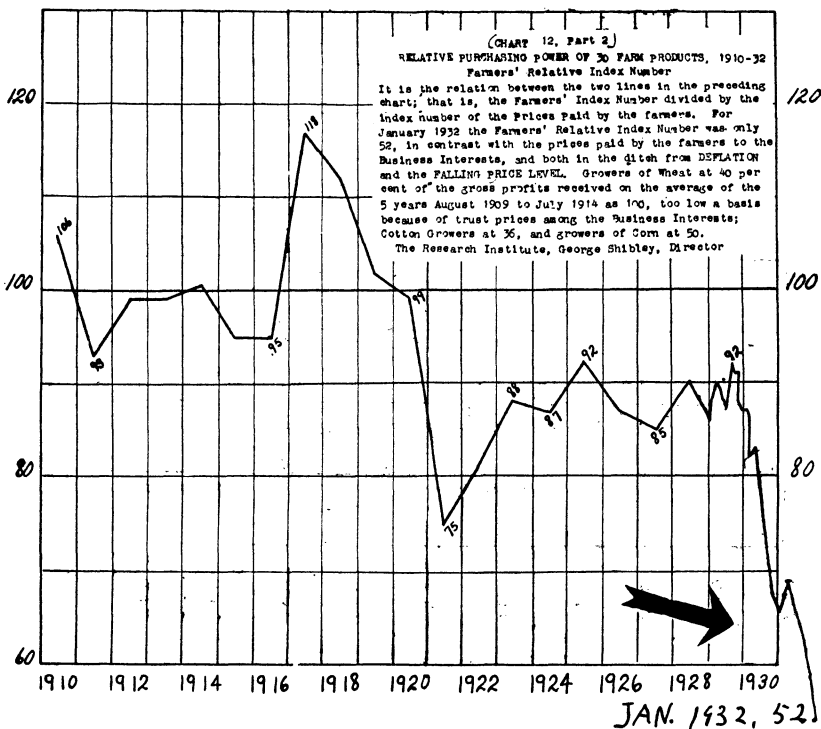


CHART No. 12



two who directly represent him, the Secretary of the Treasury, and also the Comptroller of the Currency, plus the President's constitutional right to dismiss at will each of the other six members of the commission. Such is the decision of the Supreme Court in the Meyers case, decided in 1926 and reported in 272 U. S. Reports, 52.

My further duty is to point out that while continued deflation in the quantity of the people's medium of exchange has been the policy of the Federal Reserve Board and of the President during the period of the growing depression for the producing groups since July, 1929, yet we who have been protesting to the board and to the President have not been able to get much of any newspaper publicity, because of the leading of the Spirit, and mankind have been suffering. In the Congressional Record of February 10, 1931, in the appendix there is published my protest to the Federal Reserve Board and my protest to President Hoover against the continued deflation, and my charts are published; and in October and November, 1930, in the Wall Street Journal there are three lengthy protests against the deflation by a Canadian expert; also the July, 1930, bulletin of the Royal Bank of Canada (head office at Montreal) protested and I quote excerpts as a note.¹

The deflation as a policy was continued by the Federal Reserve Board until so numerous were the closing of the banks in some of the agricultural States that the depositors in the surrounding banks hoarded their funds in such quantities that the Federal Reserve Board expanded the Federal reserve credit 130 per cent in three months—an increase of \$1,200,000,000. That is, the board ordered the open-market committee of the reserve banks to go into the market and buy Government securities and acceptances, along with the discount of acceptances in large quantities from the member banks. This is diagrammed in our chart 3, Federal Reserve Credit.

Then, strange to say, the Federal Reserve Board turned about and again deflated rapidly, resulting in falling prices on the stock market and for commodities at wholesale. In one month from October 21, 1931, the deflation was about a third of the expansion, accompanied by a 25 per cent drop in the average of 30 industrial stocks, and a 25 per cent drop in the price of wheat, which had shot up in price when the Federal Reserve Board had shown a policy of restoration of the price level.

Similarly the Federal Reserve Board's continuing deflation for the month following the enactment of the Glass-Steagall currency law,

¹ "It is clear" says the bank, "that the present world-wide depression was occasioned by credit stringency.

"Between October and June the volume of credit extended by the Federal reserve banks fell from \$1,621,000,000 to \$937,000,000 and the circulation of Federal reserve notes declined from \$1,920,000,000 to \$1,419,000,000. The contraction in the volume of the country's total circulation amounted to more than 11 per cent.

"Whatever may be the direct relationship between quantity of money and prices, there can be no doubt that if the volume of circulation were immediately restored to the level that existed in November, the decline in prices since that date would be quickly counteracted.

Immediate and decisive action on the part of the Federal reserve banks in putting new funds into the market in large volume is what is necessary to arrest the present serious and protracted price decline and to change the present psychology of business.

"The only other means by which the reserve banks can effect the market, would be through the purchase of Government securities. The latest balance sheet shows that they hold \$597,000,000 of such securities.

"If the reserve banks should increase these holdings to \$1,000,000,000, the member banks would find their credit balances with the Federal reserve system increased by substantially a like amount. * * * In its effect on business, surplus funds at the credit of the member banks, have the same influence as a corresponding increase in the note issue.

"If any intelligent attempt is ever to be made to control price levels, there must be some objective, and, undoubtedly, so far as the United States is concerned, it was hoped that the index number of the price level might be maintained at around 100, which represents the average of prices during recent years."

February 27, which aimed to somewhat restore the price level, was accompanied by a 20 per cent decline in the prices of 30 industrial stocks after a 9 per cent rise the first 10 days after the approval of the bill; and stocks are still on the toboggan, April 4, 1932.

Now the only practical way that is open for Congress to end the growing depression for the producing groups, and end the increasing prosperity for the creditor class and the other moneyed interests, is the prompt enactment of the bill before this committee, the Goldsborough bill, for the quick restoration of the quantity of the people's medium of exchange, so that the height of price level shall be restored to normal, and that then the price level shall be stabilized.

Unquestionably Congress can successfully end the present money war by quickly restoring the quantity of the people's medium of exchange, thus to restore a rising price level for commodities at wholesale, thereby to restore profitableness in business, thus to restore full-time employment if Congress will proceed to enact legislation to bring about an equitable distribution between the competing groups in production. This session of Congress is a reform Congress, almost certain to succeed along the lines described in this paragraph. Such is the liberal program, in contrast with the conservative program, also described as the reactionist program.

PRICE LEVEL STABILIZED, 1913-1915

Proof that the price level can be stabilized is the fact that it was stabilized during 1913 to the autumn of 1915 by the Wilson administration. (See chart 1, the Price Level.)

My suggestions as to the details of the Goldsborough bill are in the accompanying draft. Because the administrative body is evidently adverse to the policy to be instructed for by Congress I have inserted two sets of details, either of which will successfully end the present money war.

(The amendments referred to are as follows:)

A BILL To end the injustice and depression for the producing groups, and end the unfair and excessive prosperity for the creditor class

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Federal reserve law be amended as follows:

"SEC. 14A. To end the injustice and depression for the producing groups, and end the unfair and excessive prosperity for the creditor class, the Government's commission, the Federal Reserve Board, is instructed to order the Federal reserve banks to quickly restore the quantity of the people's money and bank credit to where the height of the price level shall be restored from 62.9 on March 4, 1932, (Fisher's all-commodity index), to the height of July, 1929, and two points higher, 100, on the 1926 basis, the normal height; and then the Federal Reserve Board shall so regulate the quantity of the Federal reserve notes and reserve bank credit as to stabilize the price level at 100 as nearly as shall be possible, the variation to not exceed one per centum either way.

"SEC. 14B. To achieve these ends the Federal Reserve Board is instructed:
 "1. To order the Federal reserve banks to purchase securities in the open market and pay for the same by issuing Federal reserve notes and other forms of reserve bank credit until the price level shall be restored to 95, and then to stabilize the price level at 100, by regulating the quantity of the Federal reserve notes and other forms of reserve credit and by a proper adjustment of the height of the rediscount rate. Section 16, paragraph 2, of the Federal reserve law is amended to authorize securities of the Federal Government to become suitable collateral for the issuance of federal reserve notes.

"2. Whenever the price level is below 100 the Reserve banks shall offer federal reserve notes to the banks, corporations, and individuals in exchange for securities of the Federal Government at the market price.

"3. The reserve banks shall at once purchase on the open market \$2,000,000,000 of Government securities and pay by issuing Federal reserve notes, to be equitably distributed to the cities of the Union; and one month later if necessary to the restoration of the price level to 95, to issue enough more money, adjusted equitably among the cities, to quickly attain the desired end.

"4. To retain gold as standard money in connection with a stable price level at 100. Gold is to be driven abroad in vast quantities, to enable the former gold-price countries to resume the use of gold as standard money, thereby to restore a fixed par of exchange for the shipment of gold. The amount of coverage for the federal reserve notes and other forms of treasury notes of the United States shall be 1,000,000,000, and the Federal Reserve Board is instructed that if necessary for the maintenance of said limit to reduce the quantity of gold in the dollar. The gold reserve of the Federal reserve banks and of the Treasury Department shall not be depleted by withdrawals of gold by corporations or individuals except for free export; and the reserve banks shall attract to themselves the gold in private hands. Gold certificates shall be retired, and gold shall not be deposited as collateral for Federal reserve notes. Gold shall not be used as a reserve against deposits in the Federal reserve banks. See Chart 4, Monetary Gold Stock in United States.

"Hereby there are amended the various parts of the law to conform to the preceding details.

"SEC. 14C. The price level index to which the Federal Reserve Board shall conform shall continue to be that of the Department of Labor previous to January 1, 1932, the index with 550 commodities, to be issued once a week. Each month there shall be issued an all-commodity index for each reserve district, the choice of commodities to be equitable as between producers of raw materials and manufactured products, and as between debtors and creditors, and preliminary to the final decision as to the commodities to be included to conduct hearings and publish the same.

"SEC. 14D. The Federal Reserve Board shall consist of three members, who shall be experts in the science of money and the stabilization of the price level, and who for at least three years shall have advocated the stabilization of our American price level. They shall be appointed by the President, with the advice and consent of the Senate, and hold office at the will of the President. The salary shall be \$12,000 a year, payable monthly, plus actual necessary traveling expenses.

"SEC. 14E. The President's instructions to the Federal Reserve Board shall be in writing, and be placed in a book accessible to the public.

"SEC. 14F. The Treasury Department shall conduct its operations in conformity to the policy of the Federal Reserve Board."

SEC. 2. The short title of this act shall be "The stabilization of the price level act."

Mr. SHIBLEY. Mr. Chairman and members of the committee, I thank you.

Mr. GOLDSBOROUGH. We thank you, Mr. Shibley.

The subcommittee will adjourn subject to the call of the chairman.

(Whereupon, the subcommittee adjourned, subject to the call of the chairman.)

APPENDIX

FORMAL STATEMENT OF HON. O. B. BURTNESS, OF NORTH DAKOTA, IN RE H. R. 20 AND H. R. 21

Now let me come specifically to the two bills to stabilize the buying power of money introduced by me on the opening day of this session. I will first refer to my H. R. 20, which is a fourth revision of a bill first presented in 1923. It has been before your committee longer than any other and was, I believe, the only bill for stabilizing the dollar introduced during the sessions of the last Congress.

The principles on which it is based are set forth in my speeches printed in the Congressional Record, June 28, 1926, and March 2, 1931. The plan is further discussed and the bill explained in detail by its author, Dana J. Tinnes, of Grand Forks, N. Dak., in a statement which I will present on his behalf but if not sufficient time to do so will ask to have printed in the hearings following my remarks.

The bill in effect retains the gold dollar as the standard of uniformity, while setting up a composite goods-dollar as the standard of stability. Many confuse these two aspects of standardization and declare themselves for "maintaining the gold standard" when they merely mean maintaining redemption in gold, thus continuing a gold unit as the standard of uniformity, though they fully realize its unfitness to serve as a standard of stability.

We must differentiate these two aspects of standardization. Full standardization implies not only assurance of uniformity, but assurance of stability in its essential quality, and the essential quality of money is its buying power. Every real yardstick is not only of the same length as every other yardstick but it is itself of the same length at all times. Every true pound weight is not only of the same weight as every other, but it is of the same weight at all times.

In the sense of uniformity our dollar is standardized. Every dollar, whether of paper, silver, or gold, is like every other in its essential quality—value. It is made so by its legal exchangeability, direct or indirect, with every other; for value is simply rate of exchangeability, and things readily exchangeable on equal terms, one for another, remain of the same value, which in money is called buying power.

But in the more important matter of stability, our money is unstandardized. The gold dollar, and with it all media of exchange held at par with it by redeemability, changes in its essential quality, buying power, with every change in the buying power of the metal, gold. This is shown by the changes, not in individual prices, but in the average of prices which we call the price level. The only way we have of comparing the buying power of money at different periods is by comparative measurements of the price level. For the price level and the buying power of money are reciprocals; as one rises, the other falls; by regulation of either both may be held stable.

Since it is manifestly impracticable as well as undesirable to price fix all commodities, thus stabilizing buying power indirectly, the dollar must be stabilized directly, by regulation of its gold weight. And this is the natural way, for money should be the tool of commerce. One does not trim the foot to fit the shoe, but fits the shoe to the foot. Believers in sound money agree that the dollar has buying power in proportion to the weight of gold in which it is redeemable; that more gold will buy more goods and less gold less goods. It logically follows that any change in the dollar's buying power due to other causes can be counteracted by prompt corrective regulation of its weight.

Gold coins no longer circulate. International trade balances are settled in gold by weight, and all gold dealt out by the Treasury for use in art and manufacture is in bars marked with their weight. Gold coins are no longer a convenience. There remains no reason for coining them. Redemption in gold, therefore, will mean redemption in the weight of gold shown by the current mint rate. With this in mind it becomes clear that the weight of the dollar, that is, of the uncoined gold bullion dollar, can be regulated and so stabilized by sufficiently prompt adjustments of the mint rate.

Assisting this main stabilization process is a continuous regulation of the supply of currency to the needs of business, additional currency being issued as the need for it increases. These additional issues can not cause currency inflation, for they are put out only at times when the decrease of the mint rate shows a rise in the value of the redemption metal, gold. Since all credit extended is payable in currency, this steadies the use of credit the country over and lessens the need of weight adjustments.

Let me illustrate the operation of this plan: The present depression began in the month of July, 1929. Had this bill gone into effect before the end of that month, the weight of gold to be paid out for a dollar on August 1 would have been reduced slightly to counteract the downward pressure on prices shown during the preceding day. For a dollar calling for less gold would buy less goods, thus tending to sustain the price level. And on every day thereafter there would have been a similar slight raise of the mint rate so long as the downward pressure of the price level continued.

It is not to be expected that each of these infinitesimal daily weight adjustments would be at once fully effective in blocking the decline. But any so-called "lag" there might be would be due to the smallness of the adjustments and would be taken up as soon as by cumulation it became noticeable. Also, no price-level trend is continuous, or unbroken. There are days or weeks when inflation or depression tendencies are temporarily checked. Sometimes, as in August, 1930, the trend is checked and, as in September of the same year, it is reversed. With our daily measurements of price level tendencies, many such checks or reversals will be shown which are now ironed out in the monthly averages. And each of such checks or reversals will absorb whatever lag may then exist.

Could the slump of price level have continued two and a half years while the dollar in which price is measured was growing lighter and while the supply of money in circulation was being prevented from shrinking? This would not be change but prevention of change. The bullion dollar would change frequently in its gold weight to prevent change in its only essential quality—buying power. And blocking change in the value of the gold unit would at the same time stabilize the currency and with it all credit extended and all contracts written in terms of that currency.

I have shown what would have been the effect had this bill been adopted before the present depression began. Should it be passed now, it would prevent price-level disturbance in future and the existing price level would ultimately become the fair and normal level. But prevention of future unfairness would not relieve those who now suffer from a load of debt laid upon them by this depression. To relieve them a debt-adjustment section is suggested by Mr. Tinnes in the statement to which I have referred. Adjustment of debts by such plan would, by reduction of interest charges on public bonds, make possible a great reduction of taxes. Some might question the practicability of such debt-adjustment provision and some its constitutionality. In any event either it or the plan proposed in H. R. 21 seems necessary to take care of the interests of debtors at this time of an abnormally low price level. It simply becomes a question as to which is the more practical way of handling it.

My remarks thus far relate to H. R. 20, the revised form of my original bill. This measure could go into effect without the least disturbance of business and it would cause no additional bookkeeping in any line. The fluctuations in the value of gold which would still occur would then be shown by change in the price of gold instead of, as now, by inverse change in the general price level. The currency and credit in use in trade would become more stable in its buying power than the gold, so the metal no longer would be desirable as a hoard of wealth. There would be an increased use of "lawful money" of the Government in bank reserves. Gold used as collateral against loans would be subject to the same limitations as other collaterals. The "gold clause" in monetary contracts would become obsolete, for the creditors no longer would need protection against inflation nor the debtor against depression. As shown in my speech of March 2, 1932, there would be a great decrease in speculation in gold values. But if passed under present conditions it should, in justice to debtors, include the debt-adjustment feature to which I have referred.

The companion bill, H. R. 21, is an adaptation of H. R. 20, intended to fit the conditions then existing, without the need of the debt-adjustment feature. It aims to deflate the dollar by raising the commodity price level to the stage at which the bulk of existing debts were incurred. It was written just before Congress convened. The buying power of money was already inflated 50 per cent as compared with the beginning of 1926 and more than 43 per cent as compared

with July, 1929, which was the month the present depression started. The average of prices had gone down 31 per cent in 28 months with no prospect of its being checked for months ahead. An avalanche is more easily started than stopped.

The proposed raise of 35 per cent would take up little more than four-fifths of the inflation of the dollar since the present price slump began and less than two-thirds of its inflation since January, 1926. Such a raise seemed fair. Were it not that prices were still falling, more allowance might have been made for debts contracted in the two years past though, from the debtors' viewpoint, most of these were but renewals of former indebtedness. The price slump continued until about the 1st of February. According to the index of the Bureau of Labor Statistics, wholesale prices continued declining throughout December and January. Even during the last week of January the drop was as great as one and one-third per cent. During February there was no decline. Should this let-up prove to be more than temporary, a less price advance might result in the greatest good to the greatest number. For new debts are being incurred and new contracts being entered into daily and older debts liquidated. Possibly the 35 per cent advance proposed should be changed somewhat. This could be effected by a slight verbal change in the bill. However, that is a detail which can be worked out by the committee in a way deemed most fair in the interests of the general good.

The 35 per cent raise proposed is effected mainly by the devaluation of the gold dollar in section 1, reducing its weight to 1 gram 250 milligrams, with a ratcheting proviso in section 6 which prevents any downward adjustments of the gold dollar until after the average of commodity prices shall have been reduced to the desired stage. The bill also increased the volume of Government currency sufficiently to prevent money shortage being caused by the devaluation of the unit. Government money is but a minor part of the supply of trade media. Should its volume at the start be insufficient to carry out the purpose of the bill, more currency will be added and all of it provided with not less than 40 per cent backing.

A bill to amend the Federal reserve act to induce cooperation by the Federal reserve system was written to accompany this bill but the new bills by Congressmen Goldsborough, Strong, and Ramseyer so nearly covered the same ground that it was not at first introduced. I did, however, introduce it on Monday, March 14, as H. R. 10487. Such legislation should grant no new powers to the system but should guide it in the exercise of powers already possessed. Fundamental functions of the Government, such as controlling the weight of the unit of value by regulating the price of gold, should not be surrendered to any private-profit-earning corporation. Neither should wise reserve requirements be virtually nullified by permitting banks to fix their own reserve ratio as proposed by one group. I am not asking you to report H. R. 10487, but I urge you to consider its provisions believing that some of them at least should be included as amendments to the Strong or Ramseyer bill if you report either thereof. The general purpose is similar. It gives a mandate to the Federal Reserve Board to raise the price level to the stage at which the greater part of existing indebtedness was contracted, but not less than 25 per cent.

Silver, in H. R. 21, is given liberal treatment, for the currency is made payable in either gold or silver at the option of the Treasury; and in the redemption fund the proportion of silver carried may be larger than that provided for in H. R. 20. But silver is still dealt out not at a fixed ratio to gold but at its current market price.

A necessary part of the bill is the provision in section 1 making notes, bonds, etc., containing the "gold clause" payable not in a specified weight of gold but in "lawful money of the United States," i. e., in money representing bullion dollars of the gold weight current at the time of payment. In contracts for future delivery of a given weight of the commodity, gold, the amount should be stated in terms of weight.

If written in terms of dollars, with a gold clause added, it becomes a trap for the unwary. This provision in section 1 is needed to protect those who have "gold clause" notes outstanding against them. The deflation of the dollar would not fully protect them as debtors if they were still compelled to pay their dollar obligations in gold at the old weight. We are told by Professor Fisher that he was assured by Chief Justice Taft that Congress has the power to nullify the gold clause in such contracts. This seems startling but I believe it is a correct statement as to the power existing in Congress as distinguished from States.

The first paragraph in section 12 is intended to prevent speculation at the expense of the Treasury; and this is the only feature of the bill which will not do all it is intended to do. For while section 1 nullifies the gold clause in notes and

other monetary contracts, it will still be possible for people holding gold before the bill goes into effect to realize directly or indirectly, more for it than it cost them.

There is a remedy for this which will completely do away with gold profiteering. Had this simple remedy been applied years ago other nations would doubtless have followed suit and the free gold market would have been, in a large degree restored. It would have prevented the vast impoundments of the metal and consequent enhancement of its value which have been one of the main causes of our economic depression. The remedy which I shall propose and which, for convenience, I shall call section 17 of the bill, may be considered radical by many. But it is radical only in the sense that it is fundamental and goes to the root of the evil.

Measures not justifiable in the case of other commodities may properly be used to prevent speculation in the redemption metal. The only way to quickly restore our commodity price level to the debt-incurrence stage is to deflate the dollar by reducing its weight, accompanying this by proper regulation of the currency volume as provided in this bill. If this sharp devaluation makes possible gold profiteering, then obviously the thing to do is to tax away the profit on such operations.

TAXING AWAY PROFITS ON HOARDED GOLD

I therefore submit for your consideration, the addition or insertion at a proper place of the following two paragraphs. The first will prevent speculators profiting by buying gold before the bill goes into effect and selling it thereafter. Both paragraphs will operate against speculating in the metal at any time in the future.

"SEC. 17. Upon the first day of the second month after passage of this act every person and firm in the United States who since its passage shall have sold or traded refined gold in any form or forms to the amount of 1,000 grams or more, shall render to the Monetary Standard Division a true and accurate report showing the entire profit on such sales or trades. And upon the first day of every month thereafter, every person and firm whose sales of refined or assayed gold purchased before or within sixty days after passage of this act and not included in a previous report, shall have aggregated 1,000 grams or more, shall render to the division a similar report of profits derived therefrom. Upon receipt of said reports, the division shall levy against such person or firm a tax equal in amount to the entire profit thus reported. The tax so levied shall be paid in gold at the mint rate in effect on the date of this report, and the gold so paid in shall be added to the redemption fund.

"Upon the first day of every month after passage of this act, every person and firm owning or controlling refined or assayed gold in excess of 1,000 grams shall render to the division a true and accurate report showing in grams the average daily amount of gold so owned or controlled during the month last past. Should the mint rate have shown a rise in the value of gold during said month, the division shall levy against such owner of gold a tax equal in amount to the rise in value of the gold so owned or controlled. The tax so levied shall be paid in gold at the mint rate current on the date of the report; and the gold paid in shall be added to the redemption fund."

The first paragraph of this so-called "Sec. 17" is designed, as stated, to bar speculation due to the devaluation of the dollar. It would leave no incentive to redeem gold certificates while the bill was going through the legislative process of enactment. The second does not hinder trading in gold later, but taxes away profits on gold hoarded during an advance in its value. Hoarding, at best, is an interference with supply demand trade in the metal. The tax would not apply on gold held at times when it is not rising in value. The first paragraph is, in my judgment, essential and the second worthy of serious consideration.

These are the provisions I referred to earlier as a suggestion to perfect section 3 of the Goldsborough bill under consideration.

Opponents of deflation of the unit may suggest the happy thought that enactment of this bill would benefit not only American debtors but also foreigners owing debts due in dollars. That I readily admit and in reply say it is an added argument in its favor. Are not our European debtors entitled to such a benefit? Their debts to us were entered into when the dollar was much cheaper, as measured in goods, than it now is. We oppose cancellation of foreign debts to us but can we, with good face, oppose their payment in dollars of about the same buying power as the dollars they borrowed. In any event any devise or change

in conditions which will increase the price level will to like effect benefit the foreign debtor.

The redeemability of our currency should be maintained, but not on the discredited fixed-weight gold standard. Justice to debtors, taxpayers, and property owners demands that the grossly inflated dollar be deflated. I feel the automatic plan proposed by H. R. 21 is sound in every respect. When some such plan is adopted there will be a demand for suspension of redemption in gold until the price level gets back to normal, but would it end there? Suspension is dangerous, for we have no assurance that redemption would be resumed on a proper weight basis when prices become normal and no safeguard against a recurrence of our present maladjustments.

Most of the countries of Europe are off the gold standard and their price levels have gone up, with considerable temporary advantage to their people. But, of course, redemption must be resumed on some level or their currencies will go the way of the Kaiser's mark. Should they revalue by deflating their gold unit at some fortunate point, as did France, they may become prosperous. Should they do as did England a few years ago, push their price level down and their debts up by greatly overvaluing their units at the time of redemption, they will suffer.

England's suspension later raised her price level, thus enlivening business and relieving debtors of at least a part of the unjust burden laid upon them by the forcing down of prices. Business has picked up despite the raising of the bank rate to 6 per cent and the restriction placed upon foreign trade. An Economic Survey by Handelsbanken, one of the two great banks of Sweden, has the following: "England's suspension of the gold standard gave a certain impetus to the economic life of the country. A similar effect was felt in other countries that released their currency. The contrary was the case in the gold-standard countries."

Suspension is not desirable for us, but unless we enact legislation along the lines I propose we may find it to be the only way to throw off the incubus of a fixed-weight gold standard. The thinking public must learn to distinguish between maintenance of redemption in gold and the maintenance of a fixed weight of an unstable metal as our standard of stability. Should suspension become necessary it might be followed by redemption on a fair level and thus do substantial justice temporarily.

On the other hand the only system that can give us real monetary stability not for a few months, or a few years, but permanently, is the establishment of an all commodity standard that will operate automatically and will leave little or nothing to human discretion but will be administered by the government itself. Only in that way will Congress perform its full duty under the constitution to regulate the value of money.

I confidently submit for your earnest consideration and approval either one of these two bills, H. R. 20 or H. R. 21, as well thought out legislation based upon sound economics to serve as a basis for your work to bring about the reform so sorely needed. Enactment thereof would permit debtors to retire their indebtedness, would safeguard the securities held by creditors, including all financial institutions, would greatly minimize the age-old struggle between capital and labor by doing away with changes in the cost of living, would reduce the hazard of all business enterprises by taking on the gamble involved in fluctuating general price levels (fluctuations in the value of gold), would remove the key log in the jam blocking restoration of prosperity, would end the tremendous losses incurred by creditor and debtor classes in the past whenever the price level has increased or decreased, and would greatly minimize, if not absolutely prevent, recurring depressions in the future.

These and many more will be the good results of any legislation permanently providing a monetary unit constant and stable in buying power. This committee, Congress, and the country are confronted with no task of as transcending importance as that of providing at once and for all time to come an "honest dollar."

STATEMENT BY DANA J. TINNES, OF GRAND FORKS, N. DAK., AUTHOR OF THE BILL TO STABILIZE THE BUYING POWER OF MONEY, H. R. 20, SPONSORED BY CONGRESSMAN BURTNESS

Whatever the chief cause of the present depression, the central banks thus far have failed to stop it. If we are to have price level stability, we must make our currency what it was intended to be, a purely national monetary system. The free gold market is a thing of the past. We must cut our money unit free

from foreign monetary entanglements by making the weight of our gold redemption unit subject to regulation by the guidance of a scientific price index number, paying out at all times a dollars worth of gold for a dollar; more when gold cheapens and less when, for any reason, it becomes dearer.

The money of a country can be stabilized independently—nationally—and in no other way. Cooperation by other countries in a movement for approximate stability of all moneys might be desirable as an aid to real stabilization of national units; but it could not be a close approximation if based on a world index number. For a world index could be but a compromise between the various domestic price levels, and a unit based thereon would be really stable nowhere.

To be desirable, such cooperation must not aim at establishment of a world currency; nor at the pegging of exchange rates on national currencies. Each nation must be left free to stabilize its own money in terms of domestic buying power. No country should be made to suffer for the financial mistakes or misdeeds of others, nor should the domestic price levels of weaker countries be dragged up or down, particularly down, at the "discretion" of the financially and commercially dominant.

Neither should such cooperation involve the valorization of the money metals by any group of financiers or experts, whether Government appointees or self-appointed. For, as clear-headed Elizur Wright wrote long ago: "The creation of the best possible measure of debts * * * is a function of the sovereign power * * * and any such class * * * that should get control of this great function would be in fact the governing power, with the national government as its subaltern." Matchless business foresight could be displayed by those who thus held the power to have their forecasts fulfilled.

MONETARY STABILIZATION MUST BE NATIONAL

Each country must stabilize separately its own unit. A world index could be constructed by which each country's price level could be adjusted to the average of all. But this would make them all unstable in terms of domestic buying power. Neighboring countries with common free markets within the same tariff walls may have a common currency; but between countries not so situated there must always be exchange rates, shifting with the trend of trade, with credit conditions, and with other influences which now affect them. However, with the cheapening and speeding up of means of communication and transportation and the possible lowering of tariffs, the price levels of the various countries will differ less and this will tend somewhat to steady exchange rates.

Should a secondary money, a monetary Esperanto, seem temporarily desirable for use in foreign trade, we have it at hand in the gram of gold, uncoined. Such a unit, under the name "gram-d'or," was proposed by the present writer in the *American Economic Review* in 1918. Three years later, an Englishman put forward as a world unit another weight of gold, one and two-thirds grams, naming it the "pois-d'or," abbreviated "dor."

The gram-d'or, or to adopt the briefer name, the dor, would be worth at the present mint rate about 60 cents. A larger denomination, the "kildor," about \$600, would be useful in large transactions and in statistics. The par of exchange between the stabilized dollar and the gram of gold would be shown each day by the current mint rate. Such a unit, being a fixed weight of gold, would be unsuitable for long-time transactions which should be in terms of a stabilized unit.

For generations the pound sterling has been the international medium of exchange, and this has been a disadvantage to us. To make our dollar the world medium would disadvantage the British, and no other country would be wholly satisfied with either the pound or the dollar. The dor, specially favoring none, should be acceptable to all. Amounts called for in international trade would appear automatically in grams, the weight in use in most of the countries of the civilized world.

Bridging the gaps between the moneys of the various nations, the dor would serve as a medium for simple and uniform exchange quotation. For, unless artificially "pegged," exchange rates will fluctuate as in the past. Should it be found desirable to peg the rates between safely solvent nations, this could be done with the dor without interference with the national units, stabilized or unstabilized. The gram-d'or proposal, though advanced by the same author is not, of course, included in the Burtness bill. It is mentioned here because opponents of real stabilization have used the supposed need of an international money as an argument against passage of the bill named. It meets whatever demand there may be for a world currency without handering the urgently needed stabilization of national units.

DISCRETIONARY VERSUS AUTOMATIC STABILIZATION

Some of the members of an influential financial group agree with us that the price level ought to be stabilized. But they prefer to have it done through discretionary control of gold and credit, with the discretion vested in the central banks. Soon after the debacle of 1920-21, Dr. Carl Snyder, economist of the Federal Reserve Board, proposed a variation of the theretofore unacknowledged discretionary practice, in which he provided a guide to be followed in the form of an index number. This amounted to "abandonment of the gold standard," for it made the price level the ultimate standard. His plan is said to have been followed from 1922 to August, 1929, when the price level fell into another "discretionary" tail spin.

Following the present depression, unless Congress acts, there may be a return to the Snyder plan. For some of the influential supporters of stabilization through gold and credit control do not want real price level stability. They want mere prevention of inflation or depression, particularly of inflation. Just why inflation is more to be feared than depression I leave it to them to explain. Compare business conditions during any price level rise with conditions during a period of price level depression.

A great part of the public has been misled into thinking that if the price level is prevented from rising or falling more than 1, 2, or 3 per cent a month, it is stable enough. But an average decline of $1\frac{1}{4}$ per cent a month for the past $2\frac{1}{2}$ years has brought us to this. The Snyder plan of control permitted changes greater than this, and the high point in the seven years it is said to have been followed was 11 per cent above the low stage. Is this stability? Give an private-profit-earning corporation the power to bring about a price level rise of 1 per cent one month and a price level decline of 1 per cent the next, and it could easily cash in on its "business foresight." Yet most of those who prefer a loose "stability" to real stability would allow a wider margin than 1 per cent a month.

Many of those who declare themselves in favor of "maintaining the gold standard" mean merely that they favor continuance of redemption of our currency in gold. They do not favor allowing an unstable metal to drag our commodity price level down or up with every change in its own market value. (By "value" is meant rate of exchangeability for goods, as distinguished from the many other meanings of the ambiguous word "value"). For the value of gold, like the value of every other commodity, changes with every change in its supply as compared with the demand for it. The Burtness bill hereinafter described, continues redemption in gold but does not retain a fixed weight of an unstable metal as a standard of stability.

With a fixed weight of gold the standard, gold alone is stable in price. Make the commodity price level the ultimate standard, with the composite goods-dollar as its concrete expression, and the price level will remain stable. Being measured in terms of itself it can not change. The gold unit, though subjected to weight regulation, may still be considered a standard of uniformity, since all forms of our media of exchange are redeemable in it, directly or indirectly. But as a standard of stability it is a discredited makeshift.

THE BILL TO STABILIZE A NORMAL PRICE LEVEL

The Burtness bill (H. R. 20) has gone through four revisions since its first introduction, under a different number, in 1923. At the time of its third revision early in 1929 it seemed likely that a bill would be passed commanding the Federal reserve system to "act with a view to promoting stability of the commodity price level," as directed in the original draft of the Federal reserve act. For this reason, certain features which now appear in H. R. 20 were omitted from H. R. 112, Seventy-first Congress.

The bill has never been fully explained to your committee in the years it has been before you, so I take the liberty of sketching its details by sections.

Section 1 makes the weight of the gold dollar subject to regulation to keep its buying power stable. It also recognizes that the "gold clause" in notes and bonds has outlived its usefulness. Put in to protect creditors from loss by threatened suspension of redemption in gold, at a time when gold was commonly thought to be stable in value, it has become a menace to honest debtors. Notes drawn in dollars should be payable in dollars, in lawful money and not in any given weight of metal. For buying power and not weight is the essential quality of money. The thought in the minds of both borrower and lender is of what so many dollars will buy at the time, not of the weight of gold represented. Seldom, in fact, do

both lender and borrower even know how many grains of gold are represented by the dollars named.

Section 2: A new division of the Treasury Department handles the stabilization process under strict rules which leave nothing to official discretion. The data and simple calculations in the weekly bulletin can be checked easily for error by any reader while the week's prices are still fresh in mind.

Section 3: Prices are reported by agents in the proper markets and trade data by wholesalers. Only sales in dollars of each commodity are reported by wholesalers. The term "wholesale" is made to include more than the sales commonly ranked as wholesale. Through an oversight, the words "sales to exporters" were omitted. They should be read into the bill.

Section 4 constructs a scientific gage of price level tendencies to be counteracted before they affect the retail level and the citizen's dollar. Details of its construction are not necessary to a full grasp of the plan if one knows that price level tendencies can be measured. Reports of price level changes are published monthly and the Government now constructs also a weekly index which is but an averaging of data collected daily.

Section 5: Eastern markets close three hours before those in the Pacific time zone, so the reports from the eastern and middle sections can be worked over before those from the far West begin to arrive.

Section 6: Metric weights in our mint rate simplify translation of our money units into the moneys of other countries, most of which are in grams. Our small silver coins are already in grams. The half dollar weighs $12\frac{1}{2}$, the quarter $6\frac{1}{4}$, and the dime $2\frac{1}{2}$ grams.

Par stage of the market gage is unity, 1, so the daily adjustments of the mint rate involve only multiplication of the current mint rate by the new market gage. The gold bullion dollar, adjusted daily, will be the price unit or "provisional standard," and the composite goods-dollar the ultimate value standard to which the bullion dollar is, by weight adjustments, made to conform. The components of the goods-dollar—the small parcels of goods that go to make up the standard of value—are shown in column 3 of the market gage schedule. The price of the composite goods-dollar, as measured in gold at the current mint rate, serves as the daily price index or market gage.

Section 7: The mint rate is computed and announced at night after the markets and the mint close and before they reopen. This bars all risk of speculation on advance information of weight change and makes unnecessary any disturbing seigniorage charge.

Section 8: Gold coins and silver dollars are retired. The greater part of the gold in the Treasury is already in bars, and in settlements of foreign trade balances gold passes by weight. Gold sold for use in manufacture and the arts is also in bars.

Section 9: Federal reserve and national bank notes are not interfered with, but other forms of currency are replaced by Treasury notes.

Section 10: All gold and silver reserves now back of money of Government issue, all silver now in silver dollars, and all gold and silver in the general fund are consolidated into one fund for redemption of the new Treasury notes. This gives at the start nearly 100 per cent metallic backing for the Government money actually in circulation, though the par stage of the consolidated fund is but 40 per cent, four-fifths of it gold and one-fifth silver, the silver being reckoned not at any fixed ratio to gold but at its current price, which makes it exactly equivalent to gold. This surplus can be reduced and the fund brought down to par only by a cheapening of gold, which would call for an increase in the weight of the gold bullion dollar; or by a rise in the value of gold, which would call for an increase in the supply of Treasury notes outstanding.

Section 11 provides that the total stock of Government money shall not decrease nor grow less in relation to the bank currency in circulation. Any decrease is made up promptly by issue of more Treasury notes, put out in such a way as to cause no inflation of the currency.

It provides also that whenever the redemption fund is above the par stage and the lowering of the mint rate shows a downward tendency of the price level, additional notes shall be issued to the amount of double the excess of the fund above par. The excess would supply 40 per cent backing for two and a half times its amount, but only double the amount of the excess is issued.

To prevent a too great issue of additional notes at the start, while the redemption fund is still far above par, the note increase in any one week is limited to 10 per cent. Should the downward tendency of the price level continue, these issues are repeated weekly until the fund is reduced to par stage as compared with the notes outstanding against it. Thereafter, should the lowering of the

mint rate continue, the Treasury notes outstanding are increased only at the rate of 2 per cent a week and put out in such a way as to not disturb the price level; for the issues of notes no more than balance the purchase of gold for the fund.

Should the fund sink below par with the mint rate decreasing, the Treasury buys the bullion needed for backing, issuing Treasury notes against it. All these issues aid the main stabilization process by enlarging the supply of Treasury notes when the mint rate is declining—gold appreciating. They can not cause currency inflation for they are put out only when price level tendencies are downward—when there is a shortage of currency—to help prevent depression. And it must be borne in mind that they increase the supply of Treasury notes only, the issues of Federal reserve notes being controlled by the Federal reserve system. Also that their supply relative to the supply of bank notes will not increase unless the supply of the latter is unduly contracted and fails to meet the needs of business.

Section 12: Purchase of gold is equivalent to free coinage. The gold bought and added to the redemption fund can not cause currency inflation; for the new gold can be used to enlarge the money supply only when the mint rate is decreasing—gold appreciating—in which case it properly aids stabilization. To avoid loss to the Treasury from an overstock of gold when gold is rapidly cheapening, purchases are suspended until the gold fund is reduced to par.

Section 13: Treasury notes are redeemable either in gold or in silver at the option of the applicant. But should the gold in the fund fall much below par, gold withdrawals are limited to give the Treasury time, by purchase, to restore it to par. Meanwhile, redemption in silver at its gold price is unrestricted, and sufficient gold withdrawals allowed to more than supply the needs of manufacture and the arts. These, with the knowledge of the public that the restrictions on gold are but temporary, should fully protect the value of the dollar.

Section 14: The "trial market gage" device prevents any slip at the time of revision of the schedule. Under this plan the commodity price level should remain permanently stable. The commodities listed will change from year to year. New entries will be added and others withdrawn; individual prices will go up and down; but no noticeable change will take place in the average of commodity prices. Why should reconstruction of the schedule, any more than its first construction, disturb the price level?

I have emphasized the fact that the additional Treasury notes put out under the conditions named will not tend to inflate the currency. Inflation would cause undue enlargement of the bullion dollar and tend to cause export of gold. The additional note issues will, however, increase the volume of Treasury notes as compared with bank notes whenever the supply of the latter is insufficient to prevent depression tendencies. The banks of issue can avert this proportional increase of Treasury notes by keeping their own issues adjusted to the needs of business. The amount of Government currency should not be reduced and it would be better if it were increased up to the minimum needs of trade, leaving the banks to supply the flexible part of the currency. Every additional million dollars of these noninterest-bearing notes could be made to replace a million dollars in interest-bearing bonds.

THE MARKET GAGE

Since a gage of the dollar's buying power must be a measure of the prices of goods in actual trade transactions in the quantities actually sold and bought, an index would take its weighting from the day the price-level tendencies of which are to be measured. In the case of a daily index this is impossible. The nearest we can get to it is to use as weighting the relative sales of the various commodities in the 12 months last past, for the sales for a year are but a multiple of the sales for an average day. In order to keep the weightings as nearly up to date as possible, they are revised quarterly. But the average for the past 12 months is taken rather than the average for the preceding quarter, for sales are largely seasonal and relative sales differ more from quarter to quarter than from year to year.

The daily price index, called the market gage, is based on all the commodities on the market, compressed into some 900 entries. For many years the objection was heard that the market gage schedule lists altogether too many price series. One British economist, blind to the fact that the greater the number of price series listed the more nearly correct will be the measurement of price level movements, had told his readers that "a large number of prices is needless and may

even be detrimental." In the same breath they were told that wholly unweighted price index numbers gave practically the same results as the fully weighted.

THE BUREAU OF LABOR STATISTICS INDEX

The present head of the Bureau of Labor Statistics evidently does not subscribe to these views. Referring to the price index published by the bureau up to 1914, based on less than 300 price series and unweighted, he remarks, "The less said about it the better." The number of entries included was raised later to 404 and in 1927 to 550. A recent release by the bureau informs us that the number is now increased to 784 and that the weights are obtained largely from direct reports by manufacturers. By the adoption of improved weights and by increase of the number of series listed, the bureau has brought its index number nearer the market gage in the matter of accuracy, but it is still believed that the latter has the more logical and scientific formula and that its results are more easily checked for errors by the interested public.

Following is a brief sketch of the method employed by the bureau: The "base price" of each commodity is the 1926 "average price," which is the unweighted average of 52 unweighted weekly averages of daily prices. Its "weights" are the estimated quantities produced in the years 1923 and 1925 of each of the commodities listed, expressed not in dollars worths but in their diverse physical units. These weights are multiplied by the unweighted average of unweighted averages of daily prices to find the "estimated value." By estimated value is meant the estimated total sales of each commodity listed. Obviously, the total sales of a commodity during a year can not be found by thus multiplying its production, either estimated or actual, by the unweighted average price for the year. The unweighted average price of wheat, for example, during a year may be \$1, although three-fourths of the crop produced sells during the brief marketing season at less than 70 cents. Surely the best way of arriving at total sales is to get them directly from those who do the selling.

In constructing an index for the following year this whole process is repeated, and the newly computed "estimated value" for that year is divided by the "estimated value" for the base year. The quotient is then (why?) multiplied by 100. (Why is not unity, 1, a more rational par than 100?) The monthly index is similarly constructed. How can the average citizen satisfy himself of the accuracy of these operations? The writer by no means questions the ability and competence of the distinguished head of the bureau but feels that he is hampered by a blind and loose formula. The method now in use and credited to Professor Knibbs, of Australia, is superior to that of the London wool merchant followed up to 1914. But we are convinced that, even with more complete and reliable data, it can not give satisfactory results. And why should the Labor Bureau, even were its method scientific, construct the index for the regulation of our monetary system? Why not the Treasury?

MARKET GAGE SCHEDULE

| Commodities and quotations | (Q) | (W) | (QW) | (P) | (PQW) |
|--|--------|--------|---------|-------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| Cotton, middling, pound, Galveston..... | 5.8823 | 0.0178 | 0.10470 | 0.17 | 0.0178 |
| Hogs, light butchers, pound, Chicago..... | 7.6922 | .0274 | .21077 | .13 | .0274 |
| Milk, fluid, 100 pounds, New York..... | .2793 | .0184 | .00514 | 3.58 | .0184 |
| Wheat, 2 dark spring, bushel, Minneapolis..... | .641 | .0050 | .00321 | 1.56 | .0050 |
| Wheat, 2 hard winter, bushel, Kansas City..... | .6667 | .0056 | .00373 | 1.50 | .0056 |
| List similarly all other commodities..... | ..... | .9258 | ..... | ..... | .9258 |
| Total weighting, column 2 is 100 per cent, i. e., 1..... | ..... | 1.0000 | ..... | ..... | ..... |
| Market gage at the beginning..... | ..... | ..... | ..... | ..... | 1.0000 |
| Mint rate at the beginning (in grams)..... | ..... | ..... | ..... | ..... | 1.6718 |

ADJUSTMENTS MADE DURING THE WEEK

| Goods—dollar | Monday | | Tuesday | | Wednesday | | Thursday | | Friday | | Saturday | | |
|--------------------------|--------|--------|---------|--------|-----------|--------|----------|--------|--------|--------|----------|--------|---|
| | 3 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 |
| 0.1047----- | 0.19 | 0.0199 | 0.19 | 0.0199 | 0.10 | 0.0199 | 0.19 | 0.0199 | 0.17 | 0.0178 | 0.17 | 0.0178 | |
| 0.21077----- | .12 | .0253 | .12 | .0253 | .12 | .0253 | .12 | .0253 | .13 | .0274 | .13 | .0274 | |
| 0.00514----- | 3.60 | .0185 | 3.58 | .0184 | 3.58 | .0184 | 3.58 | .0184 | 3.58 | .0184 | 3.58 | .0184 | |
| 0.00321----- | 1.57 | .0051 | 1.54 | .0049 | 1.55 | .0050 | 1.52 | .0049 | 1.51 | .0048 | 1.49 | .0084 | |
| 0.00373----- | 1.55 | .0057 | 1.48 | .0055 | 1.49 | .0056 | 1.45 | .0054 | 1.45 | .0054 | 1.43 | .0053 | |
| Other entries--- | | .9258 | | .9258 | | .9258 | | .9258 | | .9258 | | .9258 | |
| New Market gauge----- | | 1.0003 | | .9998 | | 1.0000 | | .9997 | | .9996 | | .9995 | |
| New mint rate--- | | 1.6723 | | 1.6720 | | 1.6720 | | 1.6715 | | 1.6708 | | 1.6700 | |

EXPLANATION OF THE TABLES

All goods on the wholesale market are to be listed, major items divided by markets and grades and small items in homogeneous groups. With each entry is shown its market representative and the market from which its prices are quoted.

Column 1 (Q) shows, in decimals of a physical unit, the amount of each market representative that sold for \$1 on the day the schedule was last revised.

Column 2 (W), weighting, the relative trade importance of each entry in decimals of the total wholesale trade.

Column 3 (W times Q), the decimal quantities of the various entries which together make up the goods dollar, which is the ultimate standard of value back of the gold-bullion dollar.

Column 4 (P), the current market price of each market representative.

Column 5 (P times QW), the components of the goods dollar, priced. Their sum is the market gage for the day. Deviations of the market gage from its par stage, 1, show inversely the tendencies toward change in the average buying power of the gold-bullion dollar of current weight. These tendencies are at once counteracted by adjustment of the mint rate. The initial mint rate, 1.6718 grams (25.8 grains), is the present weight of the gold dollar.

Columns 4 and 5 are revised daily; columns 1, 2, and 3, quarterly; and the entire schedule yearly.

Daily adjustments are at 2 a. m., when the then current mint rate is multiplied by the newly calculated market gage to get the new mint rate, to be announced at once.

WILL NOT INVITE SPECULATION IN GOLD

As explained in Congressman Burtness's speech on March 2, 1931, this bill will lessen rather than invite speculation in gold; and if adopted by our country alone will not in the least injure our foreign trade. Speculation in gold is more or less possible under any system employing gold as a money metal and will continue until measures are taken to stop it. Restrictions which might not be justifiable in the case of other commodities may be employed to prevent manipulation of the value of a money metal. For example, it would be possible to tax away all profit derived from hoarding gold during a rise in its value. Gold hoarding, at best, is an interference with the free gold market.

The Burtness bill, H. R. 20, proposes no such tax, but it contains provisions making speculation at the expense of the Treasury more difficult than it is at present. As an illustration, note that a man who deposited a million in gold in exchange for gold certificates in July, 1929, can now withdraw what is virtually one and one-half millions. That is, the million he can now withdraw will buy as much of commodities in general as one and one-half million dollars would have bought in July, 1929. And he has sacrificed no interest to gain this profit. For during those years he has full use of his million in the form of gold certificates. Under this bill he could not at any time withdraw more value in gold than he had deposited.

WILL NOT INJURE OUR FOREIGN TRADE

As to its effect on foreign trade, the slight shifts in exchange rates it will cause will be shifts in mint pars and not deviations from par. The adjustments of the mint rate, infinitesimal because daily, will be reflected in equally small changes in the pars of exchange. The adjustments will be the effect and not the cause of alterations in the world value of gold. Deviations from mint pars due to shifts in the trend of trade, credit conditions, etc., injuriously affect international trade. Readjustments of mint pars do not. Should Britain resume redemption in gold with the gold weight of the pound sterling cut in half, all that would happen to exchange rates would be that it would take but half as much in our money to buy a pound sterling. With us, sterling would be quoted at \$2.43 instead of \$4.86; but this would injure neither exporters nor importers. This fact is brought out more clearly in the speech referred to. Even were it possible that independent

stabilization of the dollar would affect foreign trade, it should not delay passage of this bill. For our export and import transactions are small compared with our enormous domestic trade. But fortunately we do not have to injure the one to benefit the other. Dollar stability will immensely benefit this country without in the least harming our exporters or importers.

DEBT ADJUSTMENT POSSIBLE

Were the price level at or near normal in its relation to debts, nothing need be added to this bill to make it fully adequate either with or without an act directing the Federal reserve system to cooperate. For the bill is so drawn as to induce such cooperation. Were it put into effect now, while the price level is still declining, it would at once stop the decline, and property prices would adjust themselves to the new level. But without annulment of the "gold clause" in monetary obligations previously incurred, the debtor would still be forced to pay his debt in dollars of greater buying power than the dollars borrowed. Put in originally to insure justice to creditors, it has become a source of great injustice to debtors and should be abolished. With the buying power of money made stable, it will be unnecessary. Debts will be paid in money of the same buying power as the money borrowed.

Were the price level to be stabilized on a lower level than that on which existing debts were incurred, the "gold clause" should be annulled in existing contracts as well as in contracts entered into thereafter, and a debt-adjustment section should be inserted. The debt-adjustment feature would somewhat resemble the "multiple standard" proposals much discussed during a former depression. It would also call to mind a feature of the Dawes plan for Germany and the many wage adjustments in our own and other countries by a cost-of-living index. The following would be its main points:

Let the monetary standard division calculate the movements of the price level for, say, 20 years back, employing unity, 1, as the par stage and the date the act passed as the base of reference. Then let a creditor or debtor feeling himself wronged by price-level change during the life of a note, bond, or other monetary obligation, find the amount of his loss by dividing the existing amount of the obligation by the market gage for the date on which it was drawn. Then either by private agreement or before a proper officer, the amount of the correction can be added to or credited on the instrument. To avoid too numerous adjustments, a sentence could be added excluding small obligations and those on which the loss would be below a given percentage.

This would insure payment of debts in a just amount of buying power. The dollar of payment would have the same average buying power as the dollar borrowed. Similar adjustments of Government bonds and of fixed incomes would be an equally simple matter. It must be borne in mind that all these would be adjustments of wrongs begun before the act was passed and that the need of such adjustments would soon disappear.

SUMMARY

It must be remembered that stabilizing money means stabilizing its buying power at home and not mere pegging of foreign exchange rates.

That stabilizing the buying power of money stabilizes the domestic price level without fixing individual prices.

That the only "normal" price level is the level on which existing debts were incurred.

That "maintenance of the gold standard" means maintenance of the outgrown and now dangerous system to which we owe the present disastrous depression.

That "abandonment of the gold standard" does not necessarily involve suspension of redemption in gold, nor suspension of the settlement of foreign trade balances in gold at current exchange rates.

That, while shifts in exchange rates due to their deviation from mint pars are injurious to trade, the readjustments of mint pars made by this bill are not.

That concerted attempts at valorization of the money metals are more markedly against the public interest than are other "restraints of trade."

That a world currency, for the reasons herein given, can not be stabilized in its buying power and is therefore undesirable.

That money must continue to be national and not international, and must be based not on a single commodity but on all commodities, with one of them, preferably gold, as the price unit connecting other commodities with the market.

That, while the buying power of money can be roughly controlled through control of its supply, it can not be stabilized thereby, because changes in supply do not produce the prompt effect needed to counteract the disturbing tendencies developing daily.

That a proposed "stability" which would allow fluctuations of 1 per cent or more a month—double to quadruple the highest bank discount rate—is dangerous instability, particularly if a dividend-earning concern has preknowledge of the "stabilization" moves.

That daily adjustments will prevent change by counteracting disturbing tendencies as they develop and before they affect the retail level.

That such prevention will be aided by the friction of custom, printed price lists and national advertising, which would operate against infrequent adjustments.

That, as we have tried to explain, the dollar can be truly stabilized by daily regulation of its gold weight, accompanied by proper regulation of the currency supply on which credit is based.

It is confidently claimed for this bill that its enactment would,

(a) Free the buying power of money, and so the commodity price level, from danger of manipulation through control of the credit supply;

(b) Make production and trade safer by elimination of an unforeseeable risk;

(c) Make possible fair settlements between creditors and debtors;

(d) Prevent the distortion of wage agreements and other time contracts now caused by change in the buying power of money;

(e) Remove the main camouflage of monopolistic or concerted overcharging;

(f) Steady but not peg the interest rate;

(g) Make all statistics written in dollars more intelligible and reliable;

(h) Free us from entanglement in the monetary troubles of other countries;

(i) Make continuous national prosperity possible by drawing the teeth of the so-called business cycle.