

Of course, this money is placed back again in the banks to be used in some other speculative deal, but the fact remains that hundreds of millions of dollars of banking funds are daily employed by the stock brokers for the facilitation of purely speculative transactions. This system is wholly unnecessary and useless. It should be eliminated. The operator who buys for speculation 1,000 shares of stock never sees the certificates of stock, never wants to see them, and is interested only in the rise and fall of the market. He is playing for a profit. The borrowing of money and the financing of the transaction are entirely with the stock broker who performs the operation, and the customer or speculator never sees or handles the securities in which he is trading. In addition to this misuse of banking funds, that ought to be at the disposal of the industrial and commercial community, the system of actually financing each transaction is a great hardship upon the corporations. Each corporation whose stock is actively dealt in is subjected to enormous expense and inconvenience by being compelled to furnish and issue fresh certificates of stock each day.

The corporations to effectuate these useless transfers are compelled to have engraved and on hand thousands of certificates by which transfers can be quickly made on their books; they are compelled to furnish gratis these engraved certificates which cost very large sums of money and in the course of the day when the operations in a particular stock are very large, and the transfers upon the books continuous, the corporations are compelled to employ clerks to do the work, or trust companies and transfer agents to facilitate deliveries and to attest the regularity of the transfers and the forms of the new certificates. There is no spectacle of Wall Street so ludicrous as to behold the messengers running around with certificates of stock, demanding large checks which are duly certified to close these purely speculative transactions. This ridiculous and unnecessary process goes on day after day and these huge sums of money are drawn out of the banks when the funds should be held to meet the legitimate business transactions. The exchange should be compelled to make bimonthly settlements as is the practice in London and in Paris, and to close the transactions by the payment of differences, or delivery of securities, as the parties require. The New York Stock Exchange is no better than the two bodies just mentioned. If it does not take the initiative in this respect it should be compelled by law to do so. The benefits which would arise from bimonthly settlements are these: First, the funds of the banks would not be used daily for the speculative purposes of the stock exchange; second, high and fluctuating rates of interest would never prevail. Such a situation as interest at the rate of 50 per cent, 100 per cent, or 300 per cent, or 400 per cent is never witnessed in Paris or London, simply because stock exchange transactions are settled by the payment of differences through bimonthly settlements. The transactions of the exchanges are entirely segregated from regular legitimate banking operations. The operations as there conducted are either for the "account" or for "money," which means "cash." One can always buy for cash and have quick delivery of any stock required. But these transactions are rare—the bulk of the business is for the "account" to be settled bimonthly by deliveries or the payment of differences; third, the corporation would be relieved of the enormous burden of labor and expense now involved in the daily transfers of certificates of stock; fourth, the brokers would be relieved from borrowing vast sums of money and of becoming the victim of banks and bankers; besides, their business could be conducted with less capital and in greater dimensions.

It will be said by some brokers who have not studied these questions that they can not adopt the English method in this country because they can not protect themselves against loss. That reply is absolutely unfounded and inadequate. Their business can be carried on precisely as it is in London and it can be arranged by the exaction of margins so that the stockbrokers in making transactions will suffer no further loss or incur greater contingencies than those which are applicable to any speculative business.

In private I have always contended that the money of the country should not be tied up in stock-exchange transactions. Why the stock exchange has not taken the initiative for this reform I can not understand. Fortunately, I am not solitary in these views. One of the most experienced and intelligent financial leaders of this country, Mr. William A. Nash, who is now chairman of the board of the Corn Exchange Bank, in an address before the subcommittee of the Committee on Banking and Currency, in the House of Representatives, January 16, 1913, uses this significant language:

"But financial history shows that panics and crises do arrive, and probably will during all time. That those convulsions are more violent in our own country in contradistinction to other nations may be attributed principally to the cash basis of most of our transactions. Especially on our stock exchanges the demand money feature causes violent fluctuations in rates which the foreign exchanges are free from owing to their plan of semimonthly settlement which places all their loans practically on time,

while with us we have a demand and cash basis; and it is the activity of the demand for money and not the scarcity of money that creates the fluctuations in rates with which we are so familiar."

And now I wish to say a word about the history and progress of this important body. The stock exchange as an institution and its members—the stock brokers—have within the past year been the subject of much criticism. The comments upon Wall Street generally have been conspicuously bitter, and many of these attacks were so besprinkled with ignorance, prejudice, or passion that the real and legitimate purposes of the exchange have been disregarded. All of the evils growing out of the existence of the stock exchange have been most vividly depicted, but the benefits of this great institution have been more or less suppressed or misunderstood. Let us look at both sides of the picture. A stock exchange was coeval with Anglo-Saxon finance. Previous to the creation of the Bank of England in 1694, public stocks and what we now designate under the general name of "securities" were practically unknown in England, but at this epoch that country, having been fully relieved from the fetters of the feudal system, began to blossom out into a new national career of commercial and industrial life—and we have before us the wonderful and successful history which she has since made. Instead of meeting public expenditures for the Army and Navy, for the civil service, or for public works or improvements, by levying and collecting direct assessments, the Nation began to borrow money by means of public stock or State obligations which were issued at a fixed rate of interest and which were to be repaid out of the governmental revenues.

As these and other public loans were subscribed for by a large number of individuals, their ultimate success depended upon the stockbrokers, who began to act as "go-betweens" and who, in due course of time, after many migrations from one quarter to another in London, finally, about 1698, located in Capel Court, which became the central and fixed point of dealing in all kinds of securities, and the brokers became licensed operators. It was necessary that these intermediaries should act in accord as to price and other details in the distribution to the public of these securities, and the London Stock Exchange became the factor in this important work. It is an indisputable fact that all the great public improvements and utilities in this and other countries have been directly or indirectly financed through stock exchanges. Shares of stock, as they are called, in the sense of negotiability, are only one degree removed from bank notes and gold or silver currency, and they must be so handled or manipulated that they can be quickly transferred from hand to hand without the ceremonies and delays incident to other legal instruments, such as deeds and mortgages. An intermediary between the creator of securities and the public has grown to be an absolute necessity, and without it the successful negotiation of securities could not be made. A stock exchange, therefore, is just as much a necessity to the Government as it is to private corporations and individuals, for while in the first instance a Government may sell its issues directly to purchasers when the time comes, as it inevitably does, for the purchasers to dispose of their holdings, they must have some place where they can do so safely and promptly. Few persons buy securities with the fixed purpose of holding them until they mature, and a market in which they can dispose of them is a necessary element of their negotiation. A public, recognized, established mart is a sine qua non to the merchants, as well as to the financiers or brokers; in fact, Government and corporation securities could not be negotiated if there were not a place where they could be speedily converted into cash. A stock exchange, among others, accomplishes two purposes: First, it furnishes the place where continuous buying and selling of securities prevails and where uniform rules of dealing are maintained, and, second, the brokers themselves constitute a large class of temporary purchasers, who are ready to deal in all kinds of State or corporate obligations and who afterwards, so to speak, send them adrift through hundreds of channels and rivulets to professional speculators or investors. It has truthfully been said that the real-estate broker has largely contributed to the building up of New York, but the sphere of his operation has been immeasurably less in scope and importance than that of the stockbroker. The railroad map of this country attests, the large cities illustrate, and the colossal public improvements exhibit his wonderful work. This marvelous record has all been accomplished by the sale of railroad, governmental, municipal, and corporate securities, which have been placed in the hands of hundreds of thousands of investors in this country and all over the world through the agency of the stock exchange. If, instead of one fixed and recognized place for dealing in securities, there were many, acting under different methods of business, the wildest confusion in price and terms would prevail.

In view of the magnitude of public and commercial operations and the stupendous amount of capital required to finance them, a stock exchange is to-day more important than ever it has been in the history of the world. The New York Stock Exchange

has in round numbers 1,100 members. That body can absorb and distribute millions of dollars' worth of securities each day. The brokers act as distributors and they also constitute a financial breakwater, for the predominating speculative element in the exchange renders it always possible to deal in large or small quantities of bonds and stock for cash. It is cause for depreciation therefore, that the stock brokers' side of this great question has heretofore not been more boldly presented and more strongly elaborated, instead of in a sort of apologetic, defensive manner, as if the occupation needed explanation and excuse—as if his business were furtive. No doubt there have been thieves among stock brokers, as there have been thieves in churches, but in balancing the good and evil to the community of this institution, the former preponderates, and while we might wish that the speculative transactions could be curtailed, and that the pure gambling which is often witnessed, with its consequent evils, could be abated, the necessity for the exchange is predominating, and he who would stop its operations, or diminish its efficiency, is either utterly reckless of the future of the country, or ignorant of the greatest factor in its development.

That evils are connected with the operations in the stock exchange is undeniable. The point is whether many of these can not be remedied, and whether the time has not arrived when the method of doing business in the exchange must not be radically changed. The prominent evils are over speculations and reckless trading; frauds perpetrated upon a customer by individual brokers; besides the operations of cliques of wealthy men who control particular corporations and who with the knowledge of their inside working manipulate the securities in such a way that it becomes almost impossible for the average operator in or outside of the exchange to make money by his intelligence or knowledge—or in fact to have a fair deal. All of these evils have become accentuated in the last decade and they ought to be corrected, not by a multitude of penal laws but by the exchange itself. Short sales become so reckless at times that they should be curtailed. They can not entirely be abolished, but when they are openly and brazenly made the stock exchange should instantly reduce their proportions. I have neither time nor space to go into the details of a remedy for this shameful practice, but one can be easily devised. I must, however, suggest that the specialist with his hands full of "stop orders" should be abolished. No one or two men should be allowed, by appointment or custom, to monopolize the dealing in any particular securities. This practice places the orders for purchase and sale in the hands of one individual and enables him consciously or unconsciously to make prices and shape the course of speculation. With half a dozen "stop orders," as they are called, in his hands at one time the specialist becomes the absolute master of the particular stock in which he deals. I make no charge against the specialist either of carelessness or dishonesty. I only assert that the method is a most dangerous one, and I contend that he should be summarily extinguished and with his extirpation the practice of "stop orders" would soon disappear.

The brokers say that "stop orders" are necessary for their protection. My reply is simple and brief: They must find some other way to protect themselves. They enjoy an extraordinary franchise both from the Federal and State Government as brokers without the payment of license fees, and they should not employ business methods which result in such dreadful losses not only to individual customers but to the whole body of speculators and innocent investors. If the brokers should say that the "stop order" is in the interest of the customer, the answer is equally clear that unless the customer can find some better method of limiting his loss in his speculative operations he must desist from them. It is overlooked that the real investor is entitled to protection as well as the stockbroker and speculator. If in giving a "stop order" a stock speculator were injuring himself only then the community might be indifferent to his speculations, but the execution of one stop order for never so small a quantity in the hands of a specialist of shares establishes a price which affects all persons interested in that particular stock. Like a ten-pin ball, it strikes all along the line, and in a feverish market it generally occasions enormous losses to innocent operators and sometimes a panic—and a panic because one individual dealing in 100 shares has chosen to set a price at which he imperatively commands a sale of a particular stock and if not at the price named, at a lower price, and like the cry of fire in a crowded building confusion and panic are instantly created.

Then it is charged, and with more than a modicum of truth, that frauds may be and are committed by brokers as against their customers. But there is full redress for such acts—one in the courts and the other in the exchange itself. I have had an experience covering many years and I am bound to say that in general the redress is equal to the wrong in either tribunal. The courts and juries favor the customer. Besides, one who asserts that he has been wronged may, in general, place his claim before the stock exchange and as a rule he will find quick and proper redress. It is true that there are a few stupid and ignorant men in the governing committee, but in

my humble judgment a more equitable body does not exist. It is, par excellence, the tribunal to which resort should be had when a customer feels he is injured—it is cheap and prompt and the judges are experts.

It has been suggested that the remedy for many evils is in the incorporation of the exchange. In my judgment it is not only unnecessary but it would be detrimental to the interest of the public. The stock exchange should always have the first and final right of saying who should be of its members. The occupation of a stockbroker is one of peculiar delicacy and importance and I am glad to say that the esprit de corps has been well maintained. The exchange should be allowed the unlimited privileges of saying "yes" or "no" to an applicant without public interference. The incorporation of the exchange puts it under the domination of a general statute and it could not make any fundamental alterations in its regulations without special legislation. The necessities of commerce can not wait upon such slow and uncertain methods. Moreover, the exchange would have to be incorporated under a general law, which would invite into this important field classes of adventurers and speculators who would cause the real objects of the exchange to be disregarded, to the immeasurable loss of the public. A multitude of exchanges would at once spring up like mushrooms. Which would be the proper organization? The creation of different exchanges would inevitably work confusion as to price and terms, the uniformity of which is one of the main purposes of its creation. To be efficacious there can be only one great central mart for the sale and purchase of securities—there must be a responsible body creating one standard of values—not only that, but to exercise a controlling voice as to the form, language, and conditions of negotiable instruments. The press is the best censor for this body and although at times the criticisms are harsh and often unjust, the exchange can survive them when it knows that investigation will show that its inward management is correct and fair.

Besides, the courts exercise jurisdiction over the exchange as a body dealing with quasi public interests. To alter fundamentally the present legal status of the exchange would be a pure experiment. It is not true reform—it is a wild dream of a class which believes in breaking up or pulling down without soberly considering results.

NEW YORK, *September, 1913.*

(The following statement of Prof. Sprague was made at different times during the sessions of the committee on September 16 and 17 and is inserted at this point in the record in order that the remarks may be consecutive:)

**FURTHER STATEMENT OF PROF. O. W. M. SPRAGUE, OF
HARVARD UNIVERSITY, CAMBRIDGE, MASS.**

[Proceedings of Sept. 16, 1913.]

The CHAIRMAN. Prof. Sprague, we have had many witnesses who, passing upon this matter, have been suggesting changes in the bill. I do not think we have had a single witness who has pointed out anything in the bill that was of advantage. Would you be kind enough to point out what features of the bill you regard as improving the present system, if you consider that there are any such features?

Prof. SPRAGUE. There surely are many good features in this bill, Mr. Chairman, and I will try to indicate some of them to the committee before I go on to make such suggestions as to changes as I have in mind.

Senator POMERENE. Let me suggest, Mr. Chairman, before Prof. Sprague goes on, that of course the committee understands that he is a professor in the University of Harvard, and so on; but I think it would be well for him to give his residence, his connections, and so on, for the benefit of the record.

The CHAIRMAN. Yes; it would be well for you to put that at the head of your statement, Prof. Sprague.

Senator SHAFROTH. In other words, you can answer the usual interrogatories by lawyers—"What is your name, residence, and occupation," etc.

Prof. SPRAGUE. My name is O. M. W. Sprague, and I am converse professor of banking and finance in Harvard University.

At the hearing on September 5, I indicated the defects in our banking system which this bill is designed to remedy. I believe that the measure, if adopted in its present form without change, would provide the machinery which under competent management would very largely remove these defects. The institutions to be established would have adequate resources to meet seasonal requirements and to enable them to handle emergencies effectively. Their operations would also tend to make commercial paper the most liquid asset for all banks; this because the Federal reserve banks are limited in their rediscounting operations to commercial paper.

At the present time banks employ an undesirably large portion of their funds in stock-exchange loans, not because they have any particular preference for this sort of loan, not because they wish to give special consideration to those engaged in speculative activities, but because most bankers have been of the opinion that it was possible to liquidate stock-exchange loans more quickly than commercial loans.

One result of the adoption of this measure will unquestionably be that a somewhat smaller proportion of bank loans will be available to borrowers engaged in dealings in securities.

This will be due in part to the change in the relative liquidness of commercial paper contrasted with security loans, which I have already mentioned, and will be in part due to the decentralization of reserves, for which provision is made in the bill.

Whether the decentralization of reserves provided in the bill may not cause disturbance during the period of transition is a question which should be given careful consideration. The present arrangement of reserves is, after all, in large part, the result of national legislation which authorizes the counting of balances with city banks as reserve for country banks. This is a feature of the bill to which I shall come a little later.

When I say that the bill, if passed in its present form, would remove the most serious defects in our banking system, I assume two things: First, that the banks generally assent to the arrangement; and, secondly, that the management of the various institutions to be established shall be competent.

Senator SHAFROTH. The management shall be what? I did not understand.

Prof. SPRAGUE. Shall be competent.

The problems which will confront the management of these institutions will be novel and complicated. As I indicated in the previous hearing, these institutions, possessing great powers to extend credit, must also possess some power to restrain the abuse of credit.

The managers of the reserve banks will find, I am convinced, that they will often have to act counter to general public sentiment—both the sentiment of the business community and the sentiment of bankers in general. There are comparatively few people in the community who can ever be convinced, in any circumstances, that it is desirable to lessen the amount of credit available. And yet this will

be at times the duty of the managers of the Federal reserve banks and of the Federal reserve board.

The CHAIRMAN. To limit credits?

Prof. SPRAGUE. To limit credits. I will consider the situation this spring as an illustration.

Suppose these institutions had been established, and that they had available a large amount of lending power. There would have been strong pressure put upon the management of the reserve banks to grant rediscounts liberally last winter and spring and this summer. Very few people in the business community were of the opinion at that time that it was desirable that credits should be in the slightest degree curtailed, but rather they held the opinion that they should be increased.

Senator BRISTOW. Pardon me, Prof. Sprague, but I think it is better to ask these questions when they come to our minds, if it does not disturb you.

Prof. SPRAGUE. No, Senator Bristow; it does not disturb me.

Senator BRISTOW. You say that the people in the business community thought it would have been unwise?

Prof. SPRAGUE. No; that the people in the business community thought it would have been wise.

Senator BRISTOW. Oh, they thought it would have been wise?

Prof. SPRAGUE. Yes; they wanted more credit.

Senator BRISTOW. Well, do I understand you to say that there should not have been more credit?

Prof. SPRAGUE. I say that emphatically. I hold that the moderate amount of liquidation which has taken place during the last six months has been of very great advantage to the business community. It has strengthened the business situation. Large numbers of concerns were borrowing distinctly more than was altogether safe at that time. They were endeavoring to conduct an increasing amount of business upon insufficient working capital provided by themselves. In other words, they were endeavoring to supply increasing working capital requirements by means of short-time loans, and entirely by that means.

Senator BRISTOW. Well, am I to understand that you think it is desirable that some commission, or board, or individual should have the authority to say when this credit shall be extended and when it shall not be extended?

Prof. SPRAGUE. If these Federal reserve banks are to possess special powers to extend credit, they must use great judgment in granting that credit. For nothing is more certain than that indefinitely large additions to the total supply of credit are an unhealthy business influence. The local banker is not in position to take such considerations sufficiently into account. He is lending to his local customer. He is eager to make as large profits as he can; he lends ordinarily all that his reserves will permit him to lend.

Senator BRISTOW. Well, why should not he do that, if it is safe?

Prof. SPRAGUE. But it is not safe.

Senator BRISTOW. Well, who is a better judge than he as to its safety?

Prof. SPRAGUE. He is a fair judge regarding particular loans, but not regarding the general situation.

To take a particular instance of a company which expanded its operations during the last two years by quite 100 per cent: It provided itself with a sufficient amount of capital by means of long-time obligations to enlarge its plant, but it did not provide itself with any additional capital with which to finance its sales. It relied upon banks for these additional requirements, and it succeeded in getting from banks in one way or another the funds for these additional requirements, but its situation was far less satisfactory than before, for any delay in collections became an increasingly serious matter.

Senator BRISTOW. Well, is not that a question for the local banks that lend this concern money to decide? What right has any board or commission to say to that bank that this man or that man is or is not good, or that the bank ought or ought not to make this loan to him? Why should not the head of that bank decide that question for himself?

Prof. SPRAGUE. The local banker should decide that; but when the local banker appears before the Federal reserve bank desiring to rediscount a large amount of paper in order to get the funds with which to make additional loans, then it becomes the duty of the Federal reserve bank to determine whether the situation is becoming overextended; whether it is safe that large additions should at that time be made to the available credits at the disposal of the local banks.

Senator BRISTOW. Well, why should not the same rule apply to this—of course I do not take much stock myself in these regional banks; I think it is a kind of artificial arrangement that is not very desirable. But it may be; I do not know much about it.

Senator SHAFROTH. Do you think that they are less desirable than the central banks, Senator Bristow?

Senator BRISTOW. Well, I do not believe in either.

Senator SHAFROTH. You do not believe in either?

Senator BRISTOW. No; I think we have got along pretty well before this idea was developed; and it seems, because we do need some elasticity—although not nearly so much as speculators think—that they are undertaking to reform the whole world, because there are defects that could be cured without much trouble. But why should not the man who discounts this paper decide whether or not it is a good business proceeding to do so, instead of having that question decided for him by some student of finance? It is his money to invest, why should he not decide for himself whether it is good policy to do so or not?

Prof. SPRAGUE. So far as the banks are using their own resources I quite agree with you, but it becomes a different question when that local banker desires to borrow from the Federal reserve bank, in order that he may lend more to his own customers.

The management of the Federal reserve bank has no voice in the matter until the various local bankers desire to borrow from the Federal reserve bank.

It is proposed here to set up institutions with power to enlarge the total amount of credit to a very great extent. This power to increase credit should be coupled with the power and determination to exercise judgment in granting this credit. It is not a question of reducing the resources of the local banks; it is simply a question as to whether

it is desirable, at any particular time, to increase their resources, and as to how much it is desirable to increase those resources.

Senator SHAFROTH. How, under this bill, Prof. Sprague, will the regional banks contract credit?

Prof. SPRAGUE. They will at times contract the credit which they themselves have created. If, for instance—

Senator SHAFROTH (interposing). Will it be by simply refusing accommodations?

Prof. SPRAGUE. Yes. If, for instance, they opened for business this morning, and during the next two months they did a business of, say, \$200,000,000, that would be the net addition to the amount of credit which would otherwise have been granted the business community. Now, they will have power to contract the credit which they have advanced if it seems wise to do so.

Senator SHAFROTH. Then the paper they have taken as security becomes due, does it not?

Prof. SPRAGUE. Yes; that is the only way they will contract. The resources of the banks, other than the Federal reserve bank, will be just as great in any case as they would have been if these institutions had never been established.

Senator SHAFROTH. Yes. Now, under the provisions of this bill, Prof. Sprague, the currency which is now known as the national-bank note would be substituted by the Treasury note which is prescribed, would it not?

Prof. SPRAGUE. That is a matter which I do not think is satisfactorily handled in this measure; and my first suggestion for a change has to do with the matter of the national-bank note.

Senator SHAFROTH. Well, now, give us your suggestions as to that change in the measure, will you?

Prof. SPRAGUE. The bill provides for the gradual substitution of Federal reserve Treasury notes for the existing circulation of the national banks—seven hundred odd million dollars. This is to be carried through gradually. But, when completed, at the end of 20 years, the Federal reserve bank would presumably have steadily outstanding notes for at least as much as this \$700,000,000 of national-bank notes. In addition, they would, of course, have such further amount as might be deemed advisable. But surely they would have outstanding at all times something like the existing issue of national-bank notes.

As security for any issues of notes these Federal reserve banks must, in addition to a cash reserve of 33½ per cent, deposit as security 100 per cent in commercial paper. It follows, therefore, that if these Federal reserve banks are to issue regularly \$700,000,000 of notes to take the place of the national-bank notes, they must be constantly doing a business in rediscounting commercial paper of at least \$700,000,000.

Now, I think it is wholly undesirable that these institutions should be doing any such amount of business as that merely to maintain the status quo.

Senator SHAFROTH. In other words, these 90-day notes, or discounts, that they have taken in order to maintain the currency after it has once been issued, will have to be discounted continually every 90 days, or at intervals—

Prof. SPRAGUE (interposing). Yes.

Senator BRISTOW. Or there will be a contraction?

Senator SHAFROTH. Yes. In order to keep that paper money in existence, or else contraction must occur?

Prof. SPRAGUE. Yes, sir; the amount of paper money in existence, to say nothing of that amount which, in the course of 20 years, it will be perfectly proper to issue because of the growth in population and business of the country.

I hold that a different form of security should be provided for the amount of circulation issued by these Federal reserve banks, which simply takes the place of the existing issue of the national banks; and I propose as security for this \$700,000,000 or \$750,000,000 the very same security which the national banks now hold; that is to say, United States bonds.

Senator BRISTOW. Well, why not leave the same debt as it is, so far as they are concerned?

Prof. SPRAGUE. There are two reasons for making the change. In the first place, the change would give these regional associations a certain steady income without any additional burden upon the Government.

I would exchange the 2 per cent bonds held now by the national banks for a 3 per cent Government issue when the bonds were taken over by the Federal reserve banks from the national banks. I would then impose a tax of $1\frac{1}{2}$ per cent upon these issues of notes, so that the burden upon the Government would be exactly what it is now, since at present on notes secured by 2 per cent bonds there is a tax of one-half of 1 per cent. Therefore, if a tax of $1\frac{1}{2}$ per cent were imposed and the rate on the bonds raised to 3 per cent, the situation, so far as the Government is concerned, would be exactly as it is at present.

Senator BRISTOW. That would have a tendency to contract the currency, however, would it not?

Prof. SPRAGUE. No; the national banks would surrender \$700,000,000 of bonds to the Federal reserve banks. The Federal reserve banks would then assume the obligation of the \$700,000,000 of outstanding national-bank circulation.

Senator SHAFROTH. Would you do that all at once, Prof. Sprague?

Prof. SPRAGUE. I would do it all at once. The reason for making this change from 2 to 3 per cent bonds, and raising the tax from one-half of 1 per cent to $1\frac{1}{2}$ per cent is this: It is desirable that these Federal reserve banks should have a marketable security. The 3 per cent—

Senator BRISTOW (interposing). Well, why should the security be marketable?

Prof. SPRAGUE. I am going to explain that in just a moment. The 3 per cent bonds, perhaps, would be marketable. But I do not think it is desirable or necessary that the Federal reserve bank should dispose of the 3 per cent bonds to the general public permanently. But if a part of these 3 per cent obligations were put in the form of one-year notes, then the Federal reserve bank could readily market, at any time, its one-year notes at par; at the end of the year the one-year notes would be paid by the Government, but paid through the Federal reserve banks which would take over from the Government another issue of one-year notes.

Let me illustrate it in figures: Suppose that we secured the \$700,000,000 of Federal reserve bank notes which take the place of the national bank notes by \$400,000,000 of 3 per cent bonds, maturing in 20 years, and by \$300,000,000 of one-year notes the Federal reserve banks being under the obligation, at the end of each year, to take another batch of one-year notes, maturing 12 months later, and so on year after year.

The only purpose of putting a part of this Government indebtedness in the form of one-year notes is to give the reserve banks something which they could readily market at any time when it might seem desirable to them to increase their resources or to secure control of the market.

The greatest difficulty which will probably confront the management of these regional banks will be that of making the rate of discount effective. When the other banks have abundant funds, the rate which the regional banks may set up for rediscounting will be wholly ineffective. At times it is exceedingly important that banks such as these shall be able to control the market in a measure to make their rate of discount effective. That could be done easily if among the assets of these Federal reserve banks were one-year notes—Government notes—which the Federal reserve banks could sell in case they desired to make their rate of discount effective.

All of the European central banks have assets of this sort, and it is very largely by the manipulation of these short-term Government obligations that they are enabled to make their rates of discount effective whenever it seems to them desirable.

Senator SHAFROTH. Do not the European banks, in order to make their rates effective, often go upon the market and buy securities for the purpose of taking up the quantity of available paper offered for sale among the other banks?

Prof. SPRAGUE. Oh, no; just the contrary; if they buy then they must pay, and that will provide the market with more funds of these central institutions. The method is to sell; then the market has to pay.

Senator SHAFROTH. Often they sell their paper at a less rate than they have discounted it for?

Prof. SPRAGUE. Commonly they do not sell the paper that they have discounted; they sell these Government obligations. It is contrary to traditions that these central institutions should take commercial paper which they have already discounted and dispose of it to some other institution, but they do take Government securities and sell them, and the payments for these securities reduce the available resources of the market, and consequently market rates move up.

Senator SHAFROTH. What Government securities would these banks have?

Prof. SPRAGUE. Under the plan I have suggested, they would have \$700,000,000 of Government securities which they would have taken over from the national banks, but a part of that would be in the form of one-year notes renewed year after year and a part of them would be in the form of long-time bonds.

Senator SHAFROTH. Bonds of the Government?

Prof. SPRAGUE. Bonds of the Government.

Senator SHAFROTH. That is, United States bonds or bonds which they have hypothesized there?

Prof. SPRAGUE. No; I referred simply to Government bonds which the reserve banks would have taken over from the national banks on assuming the obligation of the national banks to redeem their outstanding circulation. No money would pass.

Senator SHAFROTH. But would not they have to hold those bonds as security for the circulation?

Prof. SPRAGUE. It should also be provided that in lieu of securities the bank might impound gold or lawful money as security. Under the provisions of this bill the Federal reserve banks must hold 33½ per cent in cash and 100 per cent in commercial paper. I should suppose that no one could conceive of any objection to the banks holding, say, 10 per cent more in cash and only 90 per cent in commercial paper. If they held 43½ per cent in cash, why, clearly 90 per cent in commercial paper would be an entirely additional security. So, in the case of these Government obligations to which I referred, as securing the \$700,000,000 of circulation, those notes might very well be secured by gold or lawful money in lieu of the Government obligations, and that would give the reserve banks a free hand in disposing of some of these securities when it might be necessary in order to make discount rates effective.

Senator SHAFROTH. This bill, Professor, provides that the reserve bank shall pay no interest upon deposits except to the Government. Will that not have a tendency to prevent the depositing of moneys of national banks or of other banks with the Federal reserve bank?

Prof. SPRAGUE. Unquestionably so.

Senator SHAFROTH. In other words they would prefer, above the amount which they are required to keep there for their own resources—

Prof. SPRAGUE. Yes.

Senator SHAFROTH (continuing). And the capital which they invest in the matter of the required 20 per cent or 10 per cent—they would, of course, prefer to keep their deposits in New York and get a rate of interest on them?

Prof. SPRAGUE. Surely.

Senator SHAFROTH. Do you think that is a good provision that requires that the Federal reserve banks shall not pay interest on deposits?

Prof. SPRAGUE. I do. These Federal reserve banks should not be placed in a position which will make it difficult for them to earn at least their running expenses and a moderate return on their capital; and yet it is probable that at certain times there will not be enough business for these institutions, if wisely handled, to yield very large earnings. Their earnings will vary with the activity of business, but in periods of business inactivity, in years like 1908 and 1909, I can not see where these institutions will secure any very considerable income. Further, I do not regard it as desirable that all of the banks in the country should deposit temporarily idle funds in these regional institutions. The result would be to overburden these regional institutions with enormous amounts of funds and varying amounts of funds, which they would find it extremely difficult to invest profitably and to the general advantage. I think that these institutions should have resources sufficient to accomplish the particular pur-

poses of meeting seasonal requirements, of keeping the banking machinery going in emergencies, and so on; but I do not think any evils have been shown in our system as the result of the depositing of reserves in city banks, which call at the present time for arrangements which would make it wholly impossible or undesirable for the banks to deposit any funds whatever with each other.

Senator SHAFROTH. Professor, what objection is there for the currency which is to take the place of the national-bank note being made a full legal tender for the payment of all debts and dues to the Government?

Prof. SPRAGUE. I do not feel that there is any danger—

Senator SHAFROTH. Would it not have a tendency to strengthen the currency?

Prof. SPRAGUE. There has been no difficulty whatever regarding the currency since 1897. The currency problem settled itself very largely because of the enormous increase in gold production. The silver certificates and the bank notes and the United States notes were too large a part of our total circulating medium in the early nineties. They are not a dangerously large part of the circulating medium at the present time, because we have, like other countries, much more gold than we had 15 years ago, and it makes no difference whatever whether you make the silver certificates and the United States notes and the national-bank notes legal tender or not. People who worry about that are simply fighting over again the battles of 20 years ago, not realizing that conditions have changed. If you do not increase the amount of silver certificates and national-bank notes that you make legal tender above the existing amount, it does not make the slightest difference whether you make them legal tender or not.

Senator POMERENE. What effect would it have upon the supply of gold?

Prof. SPRAGUE. It would have no effect whatever. All of these kinds of money are in fact in circulation practically as if they were legal tenders now. If they had not been in circulation, if we had not had them, there would, of course, be more gold in the country now than in fact there is; but there is an abundantly sufficient supply of gold in the country, so that all of the various paper issues are entirely safe.

Senator SHAFROTH. Would not the legal-tender quality added to the paper, if there ever comes a time when the quantity of gold may be slight, make such a demand for the legal-tender currency by reason of there being probably 100 billions of debt or 80 billions of debt, as I have seen it stated, that could be paid in the full legal-tender money, and would it not have a tendency to keep its parity with gold bullion if it was legal tender?

Prof. SPRAGUE. It would have a very slight influence in that direction, but the fundamental factor would be its quantity relative to the quantity of gold. If gold production all over the world were suddenly suspended, one can conceive a situation in which a considerable amount of the gold now in circulation in this country might go abroad. I do not say that it certainly would go, but in such an extreme case it might, and in that case the existing amount of paper might be relatively too great, but I do not regard discussions of that sort now as being of any great practical importance,

and for the reasons which I have mentioned. There are a great many persons who would disagree with me about this point, but I believe that they are simply basing their present arguments upon recollections of past conditions.

Senator SHAFROTH. Well, at any rate the legal-tender character of the permanent money could not be of any detriment to the stabilities of that money?

Prof. SPRAGUE. Oh, no.

Senator SHAFROTH. Professor, you mentioned the other day in your testimony—I do not know whether it was in talking to me privately or whether it was in your testimony—that the bill which I introduced concerning the national-bank currency might be made workable by a few changes. Will you point out the changes that you suggest?

Prof. SPRAGUE. It begins to be apparent that I am to go on until after lunch, and I should like to go over the bill once more.

Senator SHAFROTH. All right. Then, we will change that line of questioning.

I want to know, Professor, if you have got a table that would indicate the quantity of gold reserves that are required of the central banks of Europe to back their currency. In England we know that, outside of the \$90,000,000 or £18,000,000, they keep dollar for dollar of gold back of their notes that they issue and which, with the \$90,000,000, makes a gold reserve of practically 66 per cent. Do you know what the Imperial Bank of Germany keeps?

Prof. SPRAGUE. They are required to hold a cash reserve of at least 33½ per cent.

Senator SHAFROTH. You mean a gold reserve?

Prof. SPRAGUE. Not a gold reserve. It includes silver and it includes an issue of Imperial Government notes, a relatively small issue, and only a small part of it is found in the reserve of the Reichsbank; but there is no specific gold requirement of reserve against their notes. As a matter of fact, the gold reserve has varied enormously in its ratio to the notes.

Mr. CHARLES A. CONANT. I think the German law of 1911 required gold to be held in lieu of lawful money previously required. You know they revise the law every 10 years. Is not that your recollection?

Prof. SPRAGUE. Very likely you are right.

Senator SHAFROTH. What percentage?

Mr. CONANT. Thirty-three and one-third per cent is legal, but actual holdings are enormously above that.

Senator SHAFROTH. Is that gold or gold and silver?

Mr. CONANT. Gold since 1911; previously lawful money, but always mainly gold.

Senator SHAFROTH. I notice by Mr. Conant's work that in Canada a gold reserve is required of 25 per cent upon the issue of Dominion notes up to \$30,000,000, and that thereafter they have a provision something like our gold certificates by which any person can get a certificate or a note upon depositing a dollar in gold. Has there been any change in that law within recent years that you know of?

Prof. SPRAGUE. No; there was a change in the conditions of note issue of the Canadian banks, but my recollection is that no change was made as regards the conditions of issue of the Canadian note,

but the issue is somewhat analogous to the arrangement which you propose in your bill.

Senator SHAFROTH. Something like the requirement as to the greenbacks?

Prof. SPRAGUE. Yes. Suppose, for instance, that we fused the \$150,000,000 gold reserve and all the gold held against the gold certificates and issued a uniform note, with that gold as reserve, and provided that additional notes would be issued if gold were brought to the Treasury. Thus any increase in the issue would involve an equivalent deposit of gold, but the total deposit of gold would be less by the difference between \$150,000,000 and \$346,000,000 than the gold held. That is virtually the Canadian note.

Senator SHAFROTH. Professor, will you explain to us the process that would take place under this system of making the rate of discount effective?

Prof. SPRAGUE. The rate of discount of institutions such as are proposed will be effective without any difficulty if the other banks are quite generally borrowers by means of rediscounts.

Senator SHAFROTH. From these banks?

Prof. SPRAGUE. From these banks. For then it will be only necessary for the Federal reserve bank to raise the rates, and the other banks, finding that they must pay higher rates for rediscounts, will naturally exact higher rates from their own customers. It happens, however, at times that it is thought desirable to make the rate of discount of such institutions effective, when the other banks are not borrowing to any appreciable extent, when the other banks' own resources are quite sufficient to enable them to meet all demands for accommodation at lower rates than the reserve banks deem advisable. It is then that the reserve banks would find it necessary to curtail the resources of the market, and they could accomplish that if they had this succession of one-year Government 3 per cent notes that I have spoken about. Otherwise I do not see how these institutions could secure effective control, unless they themselves were doing a large amount of business with the general public. The Bank of England does a considerable amount of business with individual customers.

Senator SHAFROTH. Professor, when the Bank of England has a discount rate—that is, a rate of interest at 4 per cent—you will often find the loans are made by outside banks as low as 3 per cent?

Prof. SPRAGUE. Yes.

Senator SHAFROTH. Do you call that rate effective under that condition of affairs?

Prof. SPRAGUE. No.

Senator SHAFROTH. It is not?

Prof. SPRAGUE. The rate then is not effective.

Senator SHAFROTH. It is only effective when it raises the rate of discount by the general banks equal to the Bank of England?

Prof. SPRAGUE. Or very close to it.

Senator SHAFROTH. And that is presumed to invite foreign capital to buy securities here, and thereby an influx of gold comes in?

Prof. SPRAGUE. That would be more true of a market in the position of the German market. In London a large part of the foreign trade of all the world is financed. When, therefore, rates go up in London, there is a tendency upon the part of foreigners to finance their own trade a little more at home than they formerly were doing,

and it is by that means that the advance in the rate of discount in London tends to relieve the demands for accommodation in the London market.

Now, the problems which will confront our Federal reserve banks will be very different and in some respects less easy to handle than in London. We shall not be financing the foreign trade of other countries, and it is somewhat uncertain whether we shall finance the bulk of our own foreign trade. When we liquidate, therefore, the pressure comes upon people within the country doing business in this country; when London liquidates the liquidation is spread over pretty much the entire commercial world, and it is carried through more easily and is less disturbing to the domestic borrower in Great Britain. Our regional bank managers will find that the foreign exchanges are a very much less important factor in determining their policy than they are in the case of the Bank of England. The situation of the foreign exchanges has never, I should say, in the past been a fundamental cause of financial disturbance in this country. Even in 1893 it was not a fundamental cause, and in so far as it was a cause it was due to the redundancy of the currency and excessive silver issues; and in 1907 the commotion of that year was not due to the unsatisfactory situation regarding foreign exchanges, but it was due to unsatisfactory conditions in the country itself, and that will probably continue to be the situation for many years to come.

Our regional reserve banks therefore will have to direct their policy to conserving and strengthening the situation at home, since when they come to liquidate, if they do, it will be liquidation of accommodation to our own people and not, as is largely the case in London, the liquidation of loans made to people in all of the different commercial countries.

Senator SHAFROTH. Do you contemplate that under the workings of this bill that we will have one rate of discount in one regional district and another rate of discount in another regional district?

Prof. SPRAGUE. I do; and I regard that as one of the great excellencies in this bill. I covered that point at some length the other day when I appeared before the committee.

Senator SHAFROTH. I remember something of it, but I do not remember all. I do not think I was there all the time. I do not care, however, for you to go through it again, if it is in the record. I expect to read the record fully anyway.

Senator BRISTOW. I asked the Professor something about this restraining of credits. I wanted to get his ideas as nearly as I could. The plan that he suggested, as I understood it, was that when the local bank comes to the regional bank desiring currency——

Prof. SPRAGUE. Or credit?

Senator BRISTOW. Yes. That this bank shall determine whether or not it shall have it. Suppose that a member bank that needs more money or could use more money to make loans that were good loans brought a portfolio of notes to be discounted, in order to get the currency to use. Your idea is that that regional bank shall accept these notes or not as it sees fit?

Prof. SPRAGUE. Not quite that. Of course it would exercise that right if it thought the security presented by the borrowing bank was unsatisfactory.

Senator BRISTOW. Yes.

Prof. SPRAGUE. But, assuming that the security itself were satisfactory, then the reserve bank would in no case positively refuse to rediscount; but if in the judgment of the board the situation was one in which it was desirable to restrain credit a little or keep it from expanding quite so rapidly as it seemed likely to expand—to put up its rate of discount, to charge, for instance, 6 per cent instead of 5—these general considerations which I have talked about with reference to the danger of overexpansion and that sort of thing would be taken into account by the managers of the reserve banks in determining the rate at which they would rediscount. They would not be a ground for wholly refusing to lend.

Senator BRISTOW. In other words, that puts in the control of the regional banks the power to expand or contract the currency?

Prof. SPRAGUE. It does.

Senator BRISTOW. Do you think that is desirable?

Prof. SPRAGUE. That power must be somewhere, if we are to have a currency that will be adjusted to varying requirements for currency.

Senator POMERENE. Where would you lodge it, Senator?

Senator SHAFROTH. Have a permanent currency like the greenbacks now, and then—

Senator BRISTOW. I would not give it to two men, I am sure.

Senator SHAFROTH. And then let it be operated in this way—

Senator BRISTOW. It seems to me, of course, that is placing in the hands of these 12 banks the power to expand or contract, and it is a question of judgment—

Prof. SPRAGUE. It is.

Senator BRISTOW (continuing). With them.

Prof. SPRAGUE. The situation is this at the present time: We have another kind of currency which is wholly controlled by banks—that is, deposit currency; 90 to 95 per cent of the business of the country is done with checks drawn against deposit accounts, and the banks by making loans increase the amount of those deposit accounts, and consequently the amount of checks that are drawn, and very largely those checks never involve any use of money or currency whatever.

Senator BRISTOW. But there is this radical difference, as I see it, in operation. There are 25,000 banks. They do this in the normal operation of their business, and this other system gives 12 banks the power to do it irrespective of what the other 25,000 banks might wish.

Prof. SPRAGUE. It leaves the 25,000 banks the powers which they now have over this deposit currency, but it adds a group of institutions with some power also to increase and decrease deposit currency and a considerable power to increase and decrease note currency, because we have found in the past that the 25,000 banks working separately land us in chaos every 15 years.

Senator BRISTOW. I hear a lot about this "chaos." I would like to know what chaos it is.

Prof. SPRAGUE. We are in chaos when it becomes impossible for the time being to make payments by the ordinary banking machinery. When a man who has purchased cotton in Memphis and has in turn sold it to Liverpool is unable to get back to Memphis the proceeds of that sale from New York so that he may continue to buy more cotton and to ship more cotton; that is the situation which

occurred in 1907, and it was reflected in a contraction and a decrease in the amount of goods between different parts of the country.

Senator BRISTOW. That was because New York refused to send the currency, was it not?

Prof. SPRAGUE. But we are trying to develop a system under which New York will not refuse to send currency.

Senator BRISTOW. Now why is not this present law, the Vreeland bill, if made a little more flexible, just as good as all this machinery that you are trying to create here?

Prof. SPRAGUE. Because it leaves the situation as regards the use of the liquid funds of banks just what it is at the present time. It does not lessen the concentration of the money in idle bonds in New York, and it leaves the stock exchange loan apparently, if not in fact, the most liquid asset which banks can hold.

Senator BRISTOW. The concentration of funds in New York is largely because the New York banks pay interest on these reserves?

Prof. SPRAGUE. Oh, no, no. You could abolish the interest upon reserves and yet New York would continue to be the center where the strain would be concentrated in emergencies, for outside banks would then lend direct in the New York Stock Exchange, as many of them do now, whenever the call rate is at all above 2 per cent, and it is always much above that in any period prior to an emergency.

Senator BRISTOW. As I understand, the only difficulty is in getting the money from New York when it is needed in these commercial transactions, and New York needs it and does not want to send it to New Orleans. This Vreeland bill proposes that under conditions of that kind that the bank can take certain securities and get the money direct from the Government, and an interest rate is imposed so that when the stress is over that that retires itself. Why would not that be effective?

Prof. SPRAGUE. If the machinery were somewhat improved, I will admit that it would make the situation somewhat more workable than it is at present, but it would not lessen the tendency to invest temporarily idle funds on the stock exchange, would not make commercial loans the most liquid assets banks can hold, and therefore give such borrowers the lowest going rate. The situation in this country is this—

Senator BRISTOW. I do not believe in that, you see. I do not think a man who gives a note for 90 days is entitled to any lower rate than a man who gives it for a year, unless the security is better.

Prof. SPRAGUE. It is so here, but in England a man who is in business and who buys some wool for the purpose of making it up into cloth will get a lower rate ordinarily than the man who buys 100 shares of steel stock and uses that as a basis for a three-months' loan. The secured-security loan has to pay a higher rate in London than the mercantile loan, and that is distinctly a desirable situation.

Senator REED. Why?

Prof. SPRAGUE. I would not say that the secured-security loans—

Senator REED. Why is that desirable?

Prof. SPRAGUE. Because upon the whole the proceeds of mercantile loans are being used in connection with current industrial processes, whereas the proceeds of secured-security loans may be used for that purpose; they may be used also in connection with the marketing of new issues of securities, and then they serve a

highly useful purpose, but they very largely are used for the purpose of simply holding securities for a rise, and that is not serving a particularly important economic purpose. If I buy 100 shares of steel stock, hoping that it will go to 80, I do not see why I should be able to get a three-months' loan at 4 per cent while you, who are engaged in making cloth, are obliged, we will say, to pay 6.

Senator REED. I did not mean to interrupt the progress of your examination, Senator. I will take this up later.

Senator BRISTOW. Just a moment. There is another point. I understood you to say, Professor, that one of the desirable features of this bill was that it would decrease security loans?

Prof. SPRAGUE. The tendency would be to decrease the security loan.

Senator BRISTOW. And increase these commercial loans?

Prof. SPRAGUE. Yes.

Senator BRISTOW. Do you think these commercial loans ought to be given greater consideration than the permanent and stable investments of the country?

Prof. SPRAGUE. Well, that is quite a different proposition. The security loans to which I refer are like the commercial loans as regards maturity. They mature at various dates, commonly within six months. We are considering here short-time loans of various kinds. The question of rate upon long-term obligations—bonds and mortgages—is wholly a different matter.

Senator BRISTOW. But in this banking system that we are undertaking to create here, the only kind of paper that can be made a basis of currency—that is to be the currency of the country, substituted for the national-bank currency we now have—is this commercial paper?

Prof. SPRAGUE. That is not my proposition. My proposition is that of the comparatively small fluctuating part of the currency, the \$100,000,000 or \$200,000,000 or \$300,000,000 by which it is desirable if the total amount of currency in a given year should expand and contract, should be related in some way to those commercial operations which occasion these changes in requirements for currency. I do not believe that these Federal reserve banks, if properly handled, will, aside from the present outstanding circulation of national-bank notes, issue in any ordinary year more than \$100,000,000 or \$200,000,000 of currency.

Senator BRISTOW. You have used the expression several times "if properly handled"—that qualification. Suppose it is improperly handled, then what?

Prof. SPRAGUE. Then it were better we had none of this legislation. But we never have feared to set up desirable arrangements because of the fear that they might be abused, and I suppose that we would all agree that if they are abused that we shall learn in the course of time how to use these arrangements, if they themselves are of a desirable kind.

Senator BRISTOW. Ah, but, Professor, here we are placing in the hands of these 12 banks the authority to contract or expand the currency.

Prof. SPRAGUE. Not the authority to reduce it below its present amount; simply the authority to contract that amount which they have previously expanded.

Senator BRISTOW. But this bill gives them the power to contract the currency by law—that which we now have—does it not?

Prof. SPRAGUE. I am not quite certain, for, as I said at the outset, I find the note-issue section of the bill unsatisfactory, and I find it a little difficult to make clear to my mind just how it would work, but I can say, regarding the suggestion that I make, that it would not give these Federal reserve banks—

Senator BRISTOW. Your suggestion is entirely different from this bill?

Prof. SPRAGUE. It is.

Senator BRISTOW. Oh, yes; very different. You propose a currency quite similar to the national-bank currency we have now—somewhat different—I do not think as good, to be frank with you.

Prof. SPRAGUE. Yes.

Senator BRISTOW. Because I do not believe in giving these banks these short-time notes in order to let them put pressure on the public and discourage business and business activity, but the same principle would underlie your system that we now have?

Prof. SPRAGUE. Yes.

Senator BRISTOW. If that is the system which is to be abolished and this other substituted for it—

Prof. SPRAGUE. I do not propose to change materially the conditions under which the existing volume of currency is issued. I would confine the control of these institutions almost wholly to that part of the supply of credit which they themselves create, leaving to the banks the control over the supplies of credit which they now control, and leaving the outstanding currency in volume where it is, so far as its amount goes.

Senator BRISTOW. Leaving the national-bank notes as they are, will you state—if you are not prepared to do it now, this afternoon sometime—just what changes ought to be made in the present Vreeland bill in order to give desirable flexibility to the currency?

Prof. SPRAGUE. That would be on the assumption that no bill of this kind is to pass, and to indicate how the Vreeland bill might be changed in details, not in essentials, to make it at least helpful. I will attempt to do that, but I think I would prefer to take that up after I have finished with this bill.

Senator BRISTOW. All right.

Prof. SPRAGUE. And I can give it a little more thought.

Senator BRISTOW. You can do that in writing, if you will. I would like to have it, Mr. Chairman. As I understand, there are two weaknesses in our present currency system, concerning which complaint is made, and that is that it is not flexible, and that the rates are not mobile; that a large amount of the money is locked up in individual banks as reserves.

Prof. SPRAGUE. I should add to that a third defect, which I regard as even more serious, that our check machinery breaks down in every emergency.

Senator BRISTOW. The "check machinery"?

Prof. SPRAGUE. Yes. In 1907, for instance—

Senator BRISTOW. That was by the violation of the law by a bank refusing to pay out money upon check when it ought to have done it, because it said it could not?

Prof. SPRAGUE. Yes.

Senator BRISTOW. If that bank could take its securities and get the money, then there would be no reason for it refusing that payment, would there?

Prof. SPRAGUE. That is right.

Senator BRISTOW. Could not the Vreeland bill be made so as to meet that emergency?

Prof. SPRAGUE. I will either make a statement at the end of my discussion of the bill or put it in writing.

Senator BRISTOW. This breaking down of the checking system is due to the inflexibility of the currency, is it not?

Prof. SPRAGUE. It is due to the failure of the banks to make remittances to each other between different parts of the country, whether because they refuse to use the reserves which they have or whether because the reserves which they have are not large enough, or whether because the currency is inflexible is—

Senator BRISTOW. Is it sometimes because they do not want to do it?

Prof. SPRAGUE. It is because we have in this country made a fetish of the required reserve. The bankers and the public have the idea that a bank must maintain its legal ratio of reserve to deposit liabilities, though the heavens fall. They do not take the view that the reserve is something to be used.

Senator BRISTOW. That is the fault of the reserves; that is the immobility of the reserve and the inflexibility of the currency. Do not all these complaints that you make come right back to these two things?

Prof. SPRAGUE. Yes, sir; one can put it that way.

Senator REED. May I ask a question?

Senator BRISTOW. Yes; certainly.

Senator REED. Just abandoning all circumlocution, you get back to this, do you not, that the bank takes over its counter a given sum of money, say, \$1,000,000, all of which may be demanded in a moment?

Prof. SPRAGUE. Yes.

Senator REED. And it loans it out—about 80 per cent of it—which it can not get back under 30, 60 or 90 days?

Prof. SPRAGUE. Yes.

Senator REED. That is just where we come to; that is what you mean, is it not?

Prof. SPRAGUE. That is the whole theory of credit banking.

Senator REED. That is the whole difficulty. If the banks could go and get the cash any time they wanted to, they would not have to stop their checks and they would not have any trouble?

Prof. SPRAGUE. That is true.

Senator REED. That is all.

Senator BRISTOW. As I said awhile ago, I do not think, Professor—it may be because I do not comprehend it properly—that you presented any other weaknesses that do grow out of these two alleged defects.

Prof. SPRAGUE. How about the better rates for security as contrasted with commercial loans?

Senator BRISTOW. Well, I do not think law ought to control that.

Prof. SPRAGUE. But it is law very largely which has given security loans the present prestige.

Senator BRISTOW. Ought they not to have that?

Prof. SPRAGUE. They ought not to have it, because the uses to which the proceeds of such loans are put, taking them as a whole, are not so important in the development of the agricultural and manufacturing interests, and the commerce of the country—

Senator BRISTOW. There is simply a difference of opinion about that, and of course it is presumptuous to put mine against yours, but I think that investment loans are just as important or more important than any other loans we have.

Prof. SPRAGUE. But the abundance of money available for short-time security loans puts the whole security market upon a very unsound foundation. If I have saved a certain amount of money and buy some steel stock—

Senator REED. Suppose instead of buying stock you buy a mortgage?

Prof. SPRAGUE. If I buy a mortgage, then I pay for it?

Senator BRISTOW. Yes.

Prof. SPRAGUE. That is one thing; but suppose instead of that I buy my mortgage and at the same time I buy an automobile. I must pay for my automobile, but I use my mortgage as a basis for a loan at a bank, for three months or six months. If a very large number of people are doing this, if a considerable part of the long-time obligations of the country, whether mortgages or stocks or bonds, is made the basis for short-time loans, these securities are not strongly held; they are largely held speculatively, and if it becomes necessary for the banks to liquidate, the price of these securities drops suddenly and the banks find it is impossible to liquidate.

Senator BRISTOW. If those securities are good—of course, that is to be presumed?

Prof. SPRAGUE. Yes; I understood that.

Senator BRISTOW. And this pressure comes for funds, why should not the banks take those securities to the Government and get the money to meet the emergency, as this Vreeland bill provides; and when the emergency is over why can they not get the securities back?

Prof. SPRAGUE. Securities have an almost indefinite capacity for rising in price in case you can secure banking accommodations. Take the case of loans made on good mixed stock exchange collateral, and assume that the average price of the securities is at par—a hundred—and that the banks have plenty of funds. The banks are making loans freely, let us say, at 3 per cent. They make loans to the amount of \$80 upon these securities. The securities begin to advance in price because we can get loans upon them so readily. They go to \$120. The banks now loan 80 per cent of 120, say, \$96. They keep on moving up, and they go to \$140 or \$160, reaching a price wholly out of relation to the earning power of the properties represented which put out those securities.

Senator BRISTOW. If that is the great favor which commercial paper will receive from the enactment of this legislation, why should commercial paper be selected out to be favored in that way as against substantial investment secured by a mortgage? Why should not the mortgage on a man's farm or building, if it is properly made, have just as much consideration in legislation at this time?

Prof. SPRAGUE. I have answered that question before; I think the fluctuating part of the currency ought to be related to the business operations which occasion the fluctuation in demand. But another

reason is this, we should develop arrangements in this country by which the borrower on the mortgage can reach effectively distant investors. Such persons are not to be reached by means of credit banks, the business of which is primarily to make short-time loans. They can be reached in the case of agricultural mortgages, I believe, by a system of debenture banks of some sort, under which you will bunch together a great many mortgages or a great many farms and use them as the security for issues of debentures in sufficient amounts, say, that it is worth while to incur the expense of reaching the distant investor, of putting this very satisfactory sort of security before him. You can not expect to reach an investor in eastern Massachusetts with a \$1,000 mortgage on a Kansas farm, but if you can bunch together 1,000 of such mortgages and use them as a basis for putting out \$500,000 or \$1,000,000 of debentures then you can reach the most distant investor; that is the proper method.

Senator BRISTOW. I think that is very desirable. And I agree with you as to that. But I can not see why you should, in fact, penalize investments of that kind, as this proposition does.

Prof. SPRAGUE. This bill will not penalize any investment except the security investments in the large cities, and it will not penalize them to any greater extent than they are penalized in all the European countries; it will simply put the boot a little upon the other leg.

The CHAIRMAN. If I understand it, Professor, you mean that when money can be readily available upon stocks and bonds it would permit a ready basis for a bull market that would have practically no limit if that should continue.

Prof. SPRAGUE. It would; that is the danger, and it has happened in the past. And one consequence is that the fluctuations in our stock market are far wider than they are in any of the European markets, and is wholly out of relation to the fluctuations in the earning power of the various corporations.

Senator BRISTOW. I have not any defense of the stock-market gambling by the banks that encourage it.

Senator REED. May I ask a question here that will save me asking a number later on? If I understand you, Professor, you hold that sound banking demands that banks do not loan my money upon ordinary industrial stocks, because the stocks are not stable and are liable to either go up or down to a very considerable extent?

Prof. SPRAGUE. Partly occasioned by the abundance of bank credit available for such loans.

Senator REED. Regardless of the reason, you hold that is not sound banking?

Prof. SPRAGUE. I would not wish to put it in that way exactly. I think a moderate amount of loans may with entire propriety be made upon such security. What I object to is that our present banking system tends to put an unduly large proportion of the available amount of bank credits—

Senator REED. Is that due to any law, or is that due to any practice of banking?

Prof. SPRAGUE. It is largely due to the law.

Senator REED. What phase of the law gives that advantage?

Prof. SPRAGUE. It is due to the tendency—

Senator REED. I am speaking of law and not tendency.

Prof. SPRAGUE. To the concentration of funds in New York City to an extent vastly beyond the commercial requirements of borrowers in New York City plus the nonspeculative security requirements of borrowers in New York City.

Senator REED. What feature of law operates to put the money there? Do you refer to the fact that New York City, St. Louis, and Chicago are the three general reserve cities of the country? Is that the phase of the law that you refer to?

Prof. SPRAGUE. Yes.

Senator REED. In other words now—so that I may clearly understand you—the ordinary bank of the country has to keep 6 per cent on reserve in its own vaults, and the bank in an ordinary city has to keep 12½ per cent of its own bonds. Over 12½ per cent it may send to New York, St. Louis, or Chicago?

Prof. SPRAGUE. Yes.

Senator REED. And when you get to New York or Chicago or St. Louis they keep 25 per cent in reserve; but they also have the reserves of these other banks—a portion of their reserves—deposited with them. Is that what you refer to under the law?

Prof. SPRAGUE. Yes; I would not wish to say, however, that that is the only factor.

Senator REED. We will say that the law permits that. The law does require the deposit of these reserves to be held by a bank in its own vaults; the law does not require the deposit of that in a reserve city. So that if it is sent to the reserve city it is sent not as a matter of law but as a matter of volition—

Prof. SPRAGUE. Under the law.

Senator REED. The banks do it because they are permitted to do it?

Prof. SPRAGUE. Yes.

Senator REED. Not because they are permitted to do it; they do it because they want to do it and are permitted to do it.

Prof. SPRAGUE. Yes; under the law.

Senator REED. The law does not prohibit it. Would you suggest that these deposits of surplus should not in the future be permitted to be sent to other banks?

Prof. SPRAGUE. No; because I believe there is a more effective means to accomplish the same result.

Senator REED. Now, regardless of the means; would you suggest that?

Prof. SPRAGUE. Not by prohibition.

Senator REED. Not by prohibition?

Prof. SPRAGUE. No; not by prohibition, which would be putting nothing in its place.

Senator REED. Let us not discuss the question of what you are going to put in its place. If it is a bad system and it has grown up because it is not prohibited then ought it not to be prohibited?

Prof. SPRAGUE. It is not so bad a system that it is desirable to root it up and put no system in its place.

Senator REED. Very well. The first step in the process would be to stop it. Now, then, we agree on that; that it ought to be stopped?

Prof. SPRAGUE. Yes.

Senator REED. Now, then, you propose to put something in lieu of it?

Prof. SPRAGUE. Yes.

Senator REED. I would like to ask you what that is.

Prof. SPRAGUE. I would set up an arrangement which would make something other than stock exchange loans the most liquid asset which banks can hold. The reason why commercial loans get a better rate in Europe than stock exchange loans is because banks like the Bank of England rediscount commercial paper at a lower rate than they rediscount the stock exchange security loans.

Senator REED. Of course, that involves a whole system. Going back to the question of prohibition, would this be of any benefit: To provide that no bank should loan money above a certain per cent of the then cash value of stocks and nothing above a certain per cent of the face value?

Prof. SPRAGUE. I am rather distrustful of such rigid restrictions. Offhand, I would not wish to express an opinion as to just how they would work, but it seems to me that it is ordinarily desirable to make it worth while, and desirable for people to do what is the most advantageous to the community, if that is possible, rather than to attempt to secure the same result by means of positive prohibitions.

Senator REED. If it is wrong, why not prohibit it and be done with it?

Prof. SPRAGUE. It is only wrong because of its excess.

Senator REED. I understand; but it is unsafe.

Prof. SPRAGUE. In excess it is unsafe.

Senator REED. Suppose we would say they should not loan more than a certain per cent of their money upon stocks?

Prof. SPRAGUE. You can not put it upon that basis, either. There are at times comparatively small commercial requirements, whereas there may be large issues of new securities being marketed by investment houses. It is very difficult to distinguish between the stock-exchange loan for speculative purposes and the loan which is made in connection with, say, marketing a new issue of telephone securities.

Senator REED. Is not that answer just equivalent to saying that, after all, you have to leave this to the banks? What you would like to do is to hold up some other system that would be so attractive that the attraction of that system would overcome the tendency of banks to go into improper speculation. Is not that about where we end on that proposition, and do we not end there without any real remedy?

Prof. SPRAGUE. I think it is a remedy. The banks in New York do not lend to the extent that they do lend on securities because they wish to foster speculation. They lend in that way partly because it is the easiest way to lend. It is much more easy to lend \$1,000,000 on good stock-exchange collateral than it is to lend it to Smith and Jones and Robinson, one of whom is in the woolen business, another in boots and shoes, and the third in the flour business.

Senator REED. But they will just keep that up unless we prohibit it?

Prof. SPRAGUE. No. They will lessen stock-exchange loans if they find that the loans made to Jones and Smith can be converted quickly into cash—more quickly than the stock-exchange loan.

Senator REED. In other words, you say to a bank: ' Now if you loan money to A, a merchant, you can go and have money issued by the Government on it, if you desire t; but if you loan it to B upon stock you can not use that stock for that purpose.'

Prof. SPRAGUE. Exactly.

Senator REED. In other words, you would give a death blow to the value of stocks to that extent, just in proportion—that is a mixed metaphor. You can not speak of it as a proportion—just as your system approached the utter destruction of the value of stocks as securities it would be effective, and just in proportion as it did not approach it it would be noneffective?

Prof. SPRAGUE. No.

Senator REED. If the desire is to destroy these stock-exchange loans as a security, why not do it by direct means?

Prof. SPRAGUE. That is not the desire, to my mind.

Senator REED. If the object to be attained is to make it so that a bank will not borrow or loan on stock securities, why not do it by direction?

Prof. SPRAGUE. That is not the object at all.

Senator REED. But I understood you to say so. Let me understand your process of reasoning. Your first proposition is that it is dangerous for banks to loan their money upon industrial stocks?

Prof. SPRAGUE. No.

Senator REED (continuing). Unless they do it to a very limited extent.

Prof. SPRAGUE. And unless they do not regard these loans as their most liquid assets. If the banks will regard their stock exchange loans as a mode of tying up funds which they can not for the moment employ in other directions—

Senator REED. That is the reason you give, of course, but the amount of it is that you want to discourage the banks from loaning upon industrial stocks. That is what you want to accomplish.

Prof. SPRAGUE. To a moderate extent, yes; and to encourage commercial loans to a moderate extent.

Senator REED. But the object is to discourage the loans upon industrial stocks. That can be done of course by a prohibition, can it not?

Prof. SPRAGUE. That is entirely annihilating it, though.

Senator REED. That discourages it completely.

Prof. SPRAGUE. But I said to discourage moderately.

Senator REED. I know you said that you wished to discourage it moderately. Your method of discouraging that practice moderately is to give the note of the merchant a utility in the hands of a bank that is not given to the stock put up with that banker as collateral?

Prof. SPRAGUE. Exactly.

Senator REED. Now, just in proportion as you increase the advantages of the ordinary note of the merchant you discourage the loans upon stocks?

Prof. SPRAGUE. Yes.

Senator REED. If you desire to discourage loans upon stocks and do discourage loans upon stocks, you destroy one of the elements of value of the stock, do you not; and you force the price of the stock down. Is not that inevitable?

Prof. SPRAGUE. It depends a good deal upon the extent of the discouragement.

Senator REED. But I said to that extent. If you will notice my question I said to that extent.

Prof. SPRAGUE. Not necessarily.

Senator REED. For instance, I can go and buy 1,000 shares of steel stock, if I have the money, which no Senator is presumed to have. I put my money into that, first, because it pays an interest, and I regard it as a safe investment. I put it into it further for the reason that I can take that stock and go to a bank and borrow money upon it when I need it. Now, you take away my ability to borrow the money, and I will at once hesitate about buying the stock.

Prof. SPRAGUE. I do not take it away; I lessen it a little.

Senator REED. You lessen it?

Prof. SPRAGUE. Yes.

Senator REED. To the extent you lessen it, you impair to that same extent the value of the stock?

Prof. SPRAGUE. That is particularly true of speculative securities.

Senator REED. Without regard to whether they are speculative securities or not, it will inevitably beat down the value of anything, will it not?

Prof. SPRAGUE. I do not like to answer these questions without a little explanation upon my own part.

Senator REED. The trouble is that the explanation generally leads us away and we do not get anywhere if everything is qualified. We have to do something positive in this bill if we do anything. We have either got to stand still and do nothing or we have to enact a law that will do something. You can not give to a law all the fine and delicate shades of distinction that a skilled logician may make when he is talking across a table.

We have to do something. If you are going to make your law so that the banks will quit loaning their money on these stocks or so that they will only loan a quarter as much as they do now on that paper or half as much or three-quarters as much, we have to do something either to compel the banks to do that or to induce them to do it. The point I am dwelling on at this moment, and I dwell on nothing else, is whether that necessarily does not impair the value of all that kind of stock.

Prof. SPRAGUE. It is pretty certain to do so at the outset.

Senator REED. Will it not inevitably do so?

Prof. SPRAGUE. No; and for this reason: That in this country an inordinately large amount of stocks are held by weak holders on the basis of bank loans. With a system which tends in a moderate measure to discourage that kind of operation the tendency will be to lessen such speculative holding of securities; to lessen the fluctuations in securities on our markets; to make them more highly regarded by permanent investors both here and abroad.

It will, in other words, clean up the market rather better than is ordinarily the case in this country.

I believe that these consequences will offset some average decrease in the amount of security loans. Another thing that will probably happen is this: The stock exchange in this country is run in a way peculiar to itself, with daily settlements. The dealings are concluded day by day; the stock sold to-day is delivered to-morrow. Stock dealings in all other parts of the world are conducted on the basis of fortnightly settlements, a method which ties up very much

less bank credit than our method. I am of the opinion that if legislation such as is before us is passed the stock exchange will find that it will be obliged to adopt the European practice of fortnightly settlements, a change which will economize credits and which will perhaps lessen somewhat speculation.

Senator REED. Well, now, that is introducing an entirely different element.

Prof. SPRAGUE. It is impossible to answer questions such as you are asking without qualifying them somewhat. There are a great variety of ramifications in bills of this sort.

Senator REED. The trouble I find with your answers—I am speaking with great respect; I am not critical—is this—and I think I speak for most of us here—that you introduce every time some new element in the equation. The point we were considering was whether or not denying to the banks the right to loan money upon industrial securities, or creating a system that would make it undesirable for the banks to loan money upon industrial stocks, would not impair the utility of the stock and consequently its value?

You say that it would except for the fact that a stability would come to the stock market. In other words, if I understand you, as you limit the uses to which a thing can be put you increase its stability and thereby increase its value. Is not that the hole we come out of?

Prof. SPRAGUE. As you limit the fluctuating supply of credit for stock-exchange dealings you will tend to make the prices more stable. It is largely because at one time in the year you may have \$200,000,000 or \$300,000,000 more available for stock-exchange operations than at another time of the year.

Senator REED. Would not it be a pretty good idea to wipe out the stock exchange and all speculation?

Prof. SPRAGUE. No.

Senator REED. Why not? We would stop the speculation entirely and then you would have nothing but stability.

Prof. SPRAGUE. A certain amount of speculation is desirable.

Senator REED. That is, a little gambling is a stimulus to enterprise.

Prof. SPRAGUE. Enterprise is tinctured with gambling.

Senator REED. Well, I will not follow the subject further.

The CHAIRMAN. I would like to have appear in the record at this point this suggestion: That the 25,000 banks in the country are naturally and necessarily apportioning their assets in the form of cash, which is entirely and immediately liquid; in open accounts with reserve agents, which except in times of panic is immediately liquid; in short time, quickly maturing commercial paper against actual commercial transactions, which is supposed to be collectible out of the pockets of the people promptly and therefore will serve as a liquid asset from the reservoir of money in the pockets of the people; and, finally, in the longer-time loans sometimes based upon investment securities which in normal times are not difficult of conversion; sometimes in investment loans to clients which are intended to be carried along from season to season as a loan expected to be worked out after several years. Many banks carry loans of this character and in that way convert their securities into substantial investments. These reserve banks are intended to make immediately mobile the commercial paper against actual commercial transactions.

Senator BRISTOW. I want to ask one more question, if I may, and it is in line with the inquiries by Senator Reed. What effect would it have on this undue accumulation of funds in New York if we reduced the reserve required of country banks to 6 per cent? Will they loan their additional money at home instead of sending it to New York?

Prof. SPRAGUE. We find that in fact country banks do not, throughout the country, lend at home all that they might be permitted to lend and still keep within reserve requirements. Many of them lend outside their own localities by purchases of commercial paper, or by direct loans in New York, or by surplus balances with reserve agents. I should expect, however, that after the reduction in reserve requirements they would lend a little more at home than they now do; but I should expect that they would continue to deposit very largely with city banks.

Senator BRISTOW. They do that because they fear that in an emergency they might need those funds and they place the funds on deposit there in order to have the money if needed?

Prof. SPRAGUE. A bank can seldom insist upon payment of loans made to its own solvent depositors merely because it would like to gather in some funds. Its own clientele expects to be taken care of right along. Largely the amount of loans made to its clientele is by arrangement at the beginning of the year under lines of credit. A bank needs to have some resources which it can call in without disturbing any of its regular patrons, and it regards balances with outside banks or purchases of commercial paper of firms at a distance as resources which it can call in if it needs additional funds. A well-conducted bank, therefore, in the country would not in any circumstances lend all but 6 per cent of its resources to people in the immediate vicinity.

Senator REED. So that it will still continue, notwithstanding the change we might make with reference to the amount of reserves, to deposit a considerable portion of its cash in other banks, and for the reason you have just stated?

Prof. SPRAGUE. Yes; but with these Federal reserve banks established and in good working order I should expect that the local bank would feel that it could then loan a rather large percentage of its funds right at home. This it would prefer to do, because anything that develops its own locality is a direct advantage to its own business, and if it can take this paper to the Federal reserve bank and get it rediscounted, that is all it wants.

Senator BRISTOW. Suppose that it could take good securities to the Government—to a subtreasury somewhere—and get the cash from the Government that it needed, would not the disposition then be to loan the money at home instead of to keep a reservoir somewhere else?

Prof. SPRAGUE. The disposition then would probably be to do that and to invest in local securities such as county bonds; but it seems to me that from the local point of view that is rather undesirable, for county bonds now find a market with distant investors. You have tapped the sources of cheap money for that kind of security, but you have not and you are not able under our system to tap outside sources for loans—short-time loans to the local merchant and the farmer and the manufacturer,

Senator BRISTOW. But suppose a mortgage was available as well as bonds?

Prof. SPRAGUE. I think you can reach that result very much better through the debenture banking method that I spoke of a moment ago.

Senator BRISTOW. But we have not that proposition before us.

Prof. SPRAGUE. I thought it possibly would come before you in the future. If there was no better means of getting capital for mortgages it would be distinctly unfair to the farmer to exclude the mortgage; but even this bill contains arrangements for savings departments, which will probably increase somewhat the demand for mortgages.

Senator BRISTOW. It will never be used in any of the small towns, of course.

Prof. SPRAGUE. I think that the only feasible means is some arrangement for debentures which would I believe tend to reduce the mortgage rate in many parts of this country by 1 or 2 per cent at least.

Senator BRISTOW. Of course, you will understand that I am an amateur in any discussion of this kind; but I can not understand why mortgages on property conservatively made are not as good a basis upon which to establish a temporary currency as a man's note without the mortgage, but who owns the property.

Prof. SPRAGUE. The reason is not one of safety. It is partly because there is so much in the way of lands and of mortgages, and the amounts loaned on mortgages have no connection with changes in the requirements for the use of currency. There are good safe mortgages—enough to furnish security for billions of additional currency, but it would not be desirable to have those billions of additional currency issued. It would simply inflate prices and cause most undesirable results.

This other kind of security is rather more limited in amount—

Senator REED. You use the phrase "rather more." How much of it is outstanding?

Prof. SPRAGUE. Oh, it is impossible to say. I used that expression advisedly, "rather more." There is a danger.

Senator REED. If we issued currency on all the commercial paper—if we issued a dollar of currency for every dollar of commercial paper there is in this country—we would have an inflation such as has never been dreamed of in any country in the world.

Prof. SPRAGUE. I heartily concur with what you say there, and it suggests to me that this is a good place to enter a criticism of the opinion which has been expressed here by bankers, that there is some automatic means of keeping the currency within safe limits if you tie it up with commercial paper. There is no such automatic safety valve as that.

Senator REED. I am glad to hear somebody say some thing that has been perfectly patent on the face of these hearings from the beginning. If that is true, Professor, it is perfectly manifest that the safety limit—the point of safety—has got to be fixed by something other than the volume of commercial paper. It has got to be fixed by a law, or by a board, or by some governing power. Is not that true?

Prof. SPRAGUE. Yes. That is one of my reasons for having said at the very beginning this morning that the problems which will

confront the management of these Federal banks are novel and exceedingly complicated. To know whether the amount of credits granted by rediscount is getting beyond safe bounds will require very great judgment, indeed, and they will not be able to determine the matter in any automatic way whatever.

ADDITIONAL STATEMENT OF PROF. O. M. W. SPRAGUE.

[Proceedings of Sept. 17, 1913.]

Senator SHAFROTH. Would you prefer, Prof. Sprague, to go now?
Prof. SPRAGUE. I would.

The CHAIRMAN. He has been very patient about waiting here, and I do think we should give him an opportunity to conclude.

Senator SHAFROTH. Mr. Berry is here, and he is compelled to leave to-night.

Mr. WILLIAM H. BERRY. Yes, I have to leave to-night, but I am in no hurry to leave.

The CHAIRMAN. Prof. Sprague would like to have the opportunity of making his statement without interruption.

Senator POMERENE. I think he should have that privilege.

The CHAIRMAN. And then he will be willing to answer any questions. He has been interrupted so much that he has been unable to make any coherent suggestions in regard to the bill.

Senator POMERENE. That is the purpose I had in mind in making the motion I did when our hearings commenced. Let him make his statement, and after he is through we can ask him questions based upon memoranda we have made as he proceeds with his consecutive statement and it will be of greater advantage to the committee when they take this up in executive session.

Senator REED. Mr. Chairman, while you are making these precautionary suggestions, I venture to remark that Senator Bristow is out of the room.

The CHAIRMAN. Senator Bristow is to be invited back when Prof. Sprague resumes his statement, and I will now send word to him.

(At this point Senator Bristow returned to the hearing room.)

Prof. SPRAGUE. My statement regarding the sections in the bill having to do with the issue of notes appears in such scrappy form in the hearings of yesterday, being interrupted by questions, that I should like to first summarize my opinion on that part of the bill.

I think it undesirable that the outstanding circulation of the national banks should be transferred to Federal reserve banks unless some change is made regarding the requirements for security of the notes issued by those banks. The national-bank notes might be left where they are. The issue might be continued by the individual banks, and that would not seriously affect the workability of this measure. They might conceivably be transferred to the Government—issued by the Government and redeemed by the Government—and under proper safeguards that would be entirely feasible and would not affect one way or another the effectiveness of this measure.

If, however, it is decided that the Federal reserve banks should issue the outstanding national-bank circulation, then some other form of security should be devised for at least that amount of notes, and I suggested yesterday that the same security be held for that

amount of issue as is now held by the national banks, namely, Government bonds, but that the rate of interest on the bonds be raised to 3 per cent, the notes to be taxed $1\frac{1}{2}$ per cent, and that a portion of the bonds be changed into one-year notes to give the Federal banks a readily marketable security, as a means of securing control of the market. That would be my suggestion regarding this matter, in case the Federal reserve banks are to issue the outstanding circulation of the national banks now or later.

The present provisions of the bill in this respect are unsatisfactory, also, because they increase the interest burden upon the Government, and because they are not entirely fair to the banks. There would probably, under the arrangements for transferring the note issue and for refunding the bonds, be some fall in the price of the bonds which the banks now hold as security. I do not think that the banks should be required to suffer any loss on account of the 2 per cent bonds which they have purchased in order to take out circulation. If it is deemed advisable not to turn the issue of the national banks over to the Federal reserve banks, then some other arrangement can doubtless be devised which will be entirely fair to the banks and which will place the \$700,000,000 of notes upon a sound foundation; but as I am confining myself to the provisions of this bill I will not at this moment enter upon a discussion of any arrangements which do not presuppose taking over the notes by the Federal reserve banks.

I now turn to a second proposal, designed to make this measure on the purely banking side somewhat more workable. It has to do with the provisions in the bill regarding the rearrangement of reserves. I think that the principle embodied in this bill of transferring a considerable portion of the deposited reserves of the banks from reserve and central reserve city banks to these Federal reserve banks is entirely sound. But I am inclined to think that the bill goes somewhat too far in this respect. It transfers all of the reserve balances of reserve city banks deposited in central reserve city banks to the Federal reserve banks, and that seems to me entirely wise.

It also does the same with the balances of country banks; and here in my opinion the bill goes too far. My reason is not because I think it particularly necessary to give reserve agent banks these country bank balances. It is rather from the point of view of the country banker that I am looking at this problem. The country bank does not ordinarily have a very large volume of assets of the kind that will meet the rediscount provisions in this bill. Properly, those rediscounting provisions are drawn with care to limit the operations of the Federal reserve banks to paper maturing within short periods of time, and which can ordinarily be liquidated readily.

Reserve agent banks can lend with much more freedom to country banks than can these Federal reserve banks. Doubtless relationships will continue between city and country banks, even if this bill is passed in its present form. But I am convinced that the accommodation which the country banker can secure from city banks will be somewhat greater if the city banks hold a moderate portion of the reserves of the country banks. I am in favor, therefore, of leaving it optional with the country banker to hold the last 4 per cent of his requirements either in vault in a Federal reserve bank or with properly qualified reserve agents in the reserve cities. An arrangement of this sort will be apt to lessen materially the

number of applications made for accommodation from the Federal reserve banks, and will be helpful to the management of those institutions for that reason. But, primarily, my ground for taking this position is that it will give the country banker two strings to his bow, put him in better condition to meet all requirements that come upon him from his local clientele. It may be added that this change would doubtless make the bill a bit more attractive to the banks in general, but that is not the fundamental reason for advocacy of this change in the bill.

I now turn to changes designed to secure more satisfactory management and greater publicity. Bankers have appeared before this committee desiring representation upon the Federal reserve board. I am not going to waste time urging a modification of that sort. I do think, however, that it is most undesirable that a majority of the board should be reconstituted at the very beginning of a presidential term or, indeed, at any one time. By making the end of the term of Comptroller of the Currency come in the second year of a presidential term this difficulty would be met. I think, moreover, that the bill should be modified in another direction with results which should be all that the banking fraternity can reasonably demand, and with results which will be to my mind helpful in securing efficient management for the proposed institution.

The bill provides for an advisory council, which shall meet four times a year, but it does not provide any means for giving members of the advisory council regular, continuous information regarding the policy of action of the Federal reserve board. I would urge that the chairman of the advisory council, or, in his absence, its vice chairman, be given a seat on the Federal reserve board, without a vote. This would put him in a position to know what is being done on the board. It would enable him to know at any time whether it was desirable to call his advisory council together to offer advice or to formulate criticism of the management of the policy of the Federal reserve board. A change of this sort in the measure would simply give effective publicity, and that is about all that the bankers would secure through minority representation on the board itself.

I turn now to the management of the separate reserve banks. It is only the management of the Federal reserve banks that will make loans—the Federal reserve board is authorized to make no loans. Whatever its policies, however ill-advised it might conceivably be, the Federal reserve board could not dissipate the resources intrusted by the Government and by the banks to the Federal reserve banks. If losses are incurred it will be entirely owing to faulty management of the reserve banks.

I do not think in the public discussions of this bill that this point has been given proper emphasis. Many have criticized the proposal, apparently on the assumption that the Federal reserve board itself might dissipate the assets intrusted by the banks to these institutions. I attach very great importance—indeed, fundamental importance, I may say—to the character of the management of the Federal reserve banks distinguished from the Federal reserve board. The provisions in the bill regarding the selection of the directorates of the Federal reserve banks seem to me entirely satisfactory, with one exception. I refer to the class B directors, who are to fairly represent agricultural, commercial, and manufacturing interests. The

bill provides that the Federal reserve board may at any time remove this class of directors if they do not seem to fairly represent these interests. In other words, there is a string attached to this group of directors throughout their incumbency of the office. The Federal reserve board should, in my opinion, be empowered to approve or disapprove of the men selected to fill these positions, but after they have been approved that should be the end of it so far as their term of office is concerned, just as is the case with Government officials whose appointment involves the advice and consent of the Senate.

The bill is also slightly obscure regarding the functions of the chairmen of the boards of the Federal reserve banks. Whether they are to be the chief executive officers of these regional banks or not is not clear. Apparently the chairman is simply to be a presiding officer, and the chief executive officer is to be selected by the board of directors. That, in my opinion, is the proper arrangement, but whatever the arrangement is to be, it should be more clearly indicated in the bill than is the case at the present time.

I am now going to turn to the question of the proper number of reserve associations, and I would relate the discussion of this subject to what I have said at various times during these hearings regarding the novel and complicated problems which will have to be solved largely by the managers of the various reserve banks and of course also by the Federal reserve board. It is a matter which should be given careful consideration, whether it is entirely feasible to secure a satisfactory management at the outset for as many as 12 of these regional associations. I am inclined to think that a satisfactory management would be a little more certain in case the number of regional banks were somewhat less. This is a matter which can be in part determined by the organizing committee. It is one reason for giving the organizing committee a little latitude in the number of regional banks which should be established; and then there is another reason of a practical sort: It is not certain that all of the banks will come in. I believe that most of them will come in, but the whole scheme could be more easily upset by recalcitrant bankers if the organizing board must set up 12 reserve banks than would be the case if this organizing board has some latitude in the matter. Give the organizing board, for example, the power to establish not less than whatever number you think must be made—say 7, if you like, or 8, and not more than 12—and you have one of the impediments removed to setting up this machinery.

It is quite conceivable, for instance, that in order to make 12 regional banks it might be necessary to split up New York City into two in order to meet the absolute requirements of the bill.

Assuming that a satisfactory management can be secured for the various regional banks, I do not regard it as absolutely essential that their number shall be 5, 8, or even 12. In some respects doubtless the machinery could be handled more easily with 5 than with 12, but I see no compelling reason for holding that if 5 institutions of this kind will serve a useful purpose that 12 can also serve a useful purpose. It is largely, to my mind, a question of the kind of management you can get, and whether the choice of the directors for the regional reserve banks will be as satisfactory if each institution covers a comparatively small area as it would be if it covered a somewhat wider area.

Some of the modifications which I have so far touched upon would doubtless make the measure a little more attractive to the banks, and that the measure should be made as attractive to the banks so far as is consistent with securing the purposes in view seems to me to go without saying. An added reason for taking this position is the coercive feature of the bill. I consider that it is entirely proper that this bill should contain provisions which put a little compulsion upon the banks to come into the system. This is because the success of the system requires or presupposes that at least a very considerable number of the national banks come in. Bankers are properly a rather cautious body of men. We would not wish to have our banks conducted by the most speculatively inclined portion of the community. Many bankers in the absence of any slight compulsory feature in the bill, however satisfactory the bill may be, will be apt to delay coming in, would be apt to allow the machinery to be established by others, waiting themselves to see how it would work. A moderate measure of compulsion, therefore, seems to me to be entirely proper, in the interest of securing any sort of legislation of this kind. But, that being the case, the system into which the banks are to be gently forced should be quite fair to the banks, at least so far as is consistent with the purposes in view. It does not seem to me that this bill should contain provisions which would in fact or even apparently lessen the earning power of the banks, unless those provisions are essential to the working of the proposed scheme. I therefore venture to suggest a few additional modifications, which would, so far as I can see, have no appreciable effect upon the character of the management or upon the working of the machinery to be established.

The first of these proposals is a reduction in the subscription to the capital from 20 to 10 per cent of the capital of subscribing banks. The capital of an ordinary bank serves two purposes. It gives confidence in the institution; it makes certain that those conducting it have something at stake, and, in the second place, it is a margin of safety against loss. These proposed Federal reserve banks, however, are only to do business with the banks; they are only to do business with the institutions who are to provide the capital, and who are also to provide a large portion of its other funds. If these people who are to do business with the reserve banks are entirely satisfied with 10 per cent rather than the 20 per cent capital, the ground for a large capitalization, as a means of inspiring confidence disappears.

Second, as regards the margin of safety, the reserve banks are so tied up as regards the character of the loans which they may make that there is exceedingly little danger of any appreciable loss being made; that in any year the losses incurred would approach current income seems to me to be wholly unlikely. None of the grounds therefore for large capital which are present in the case of ordinary banks appear when we consider this special class of institutions.

The European central banks, with hardly an exception, conduct none of their banking operations with funds secured from their shareholders. In all instances, so far as I recall, these various European banks in securing their charters or renewals of charters, have been obliged to invest in the securities of their Governments, or to make special loans to their Governments, which have absorbed their entire capital and often more than their entire capital. They conduct their banking business with the funds which they have cur-

rently secured from depositors, chiefly banking depositors. Similarly these Federal reserve institutions would have ample funds from the Government deposits and the balances placed with them by the other banks.

It may further be noted that as the Government is very largely the residuary of profits, that the smaller the capital the larger the return which will come to the Government from the operations of these institutions. I think that if the banks are required to put in an amount equal to 5 per cent of their own capital and another 5 per cent remains on call as an obligation, these banks will have quite sufficient capital for any conceivable purpose. After all, \$10,000,000 secured by bank subscriptions to capital is no more a basis for the operations of these institutions than an equal amount secured either from the Government as deposits or from the banks as balances. After a bank gets its funds, there they are, and the extent of its operations is determined by the amount of the funds and the source of the funds is a negligible factor.

In most parts of the country 6 per cent is a very common rate for bank loans. The country banker, in particular, feels disinclined to invest his capital in this institution on a 5 per cent basis. As a means of meeting this objection, the bill was modified after its first introduction, and provision was made for giving the shareholders 40 per cent of the surplus earnings, 60 per cent going to the Government, the distribution being made on the basis of the balances carried by the various banks with their Federal reserve bank.

I dislike this method of giving the banks a somewhat larger share in the earnings of these institutions, for the reason that it may tempt the management of the reserve banks to handle them so as to earn a large income. Now, these institutions should not be handled primarily or even appreciably for the purpose of making profits. If they are so handled, they will not serve some of the purposes for which they are to be set up.

Take, for example, a case like that of the Bank of England at the present time, with a reserve approaching 60 per cent, brought up to that level because the situation in the immediate future is somewhat confused and because there may be very heavy demands upon that institution. Clearly if the Bank of England were run very largely for the purpose of getting the largest possible profit it would make a considerable amount of loans now and would not maintain these high reserves. I think that a definite dividend to the shareholders is a very much better arrangement than anything which gives them a right to a share in surplus earnings. I think that it would be far better to raise the rate of the return to 6 per cent and drop out this provision that 40 per cent should go to the banks. Then all over and above 6 per cent on the shares would go to the Government, and I am firmly of the opinion that in the long run the Government would get vastly more out of these institutions than it will if the measure is passed containing its present provisions regarding the disposition of earnings.

One more change I will venture to outline regarding capital, although it is a suggestion which I make with some little hesitation. It would probably be regarded as more satisfactory by the banks if, in subscribing to the capital stock of these Federal reserve banks, they became subscribers to the capital stock of the entire group of

Federal reserve banks. If this were to be done, it need not change and should not change in the slightest degree the method of selecting the directors of Federal reserve banks. The Boston bank, for instance, subscribing, would have a vote only in choosing the directors of the Federal reserve bank of Boston, and similarly with a bank in New York or San Francisco or elsewhere. The dividend would be then somewhat more secure, for the dividends would be on a sort of cooperative basis. It might very well happen that the regional bank in New England would not earn enough to pay its dividend in a given year; while the regional bank in Chicago might in the same year be earning much more than enough to pay 6 per cent upon its shares.

Under the plan that I have been outlining, the total profits of all the reserve banks would be available for paying the limited dividend upon the shares owned by all of the banks. It would simply be a change which would make a little more certain that in all years 6 or 5 per cent would be paid to the shareholders.

I have now finished the suggestions for changes that I wished to bring before the committee. It will be observed that they do not cover very many points in this bill. The larger portion of the bill seems to me to be entirely satisfactory, and in many respects superior to other measures which have been brought forward during the last three or four years.

The rediscounting features seem to me to be entirely satisfactory, calculated to give commercial loans a better rate than security loans, because commercial loans will become more liquid. The bill is entirely satisfactory, to my way of thinking, in confining the use of acceptances to foreign dealings. It is in the foreign trade that the acceptance is generally in use. It is an unfamiliar method of granting credit in this country, and to grant the right to accept to banks in connection with purely domestic transactions would not, to my mind, serve any good purpose, and it might very well result in serious abuse.

The provisions in this bill regarding the making of short-time loans to farmers on lands, as security, would seem to me to go about as far as it is wise to go in facilitating increased accommodation to farmers through credit banks.

It is impossible to go further, not because mortgages, taken as a class, are a less safe form of security than commercial paper, and not because mortgage loans are less liquid than commercial paper in emergencies. In emergencies nothing is liquid, and extensive liquidation should not be attempted. The purpose of this bill is to set up institutions which will make it unnecessary at any time in the future to resort to drastic, wholesale liquidation, which always fails and which cannot be carried through. But there is a reason why mortgaged loans in large quantities are not satisfactory security for credit banks and the reason has to do with the situation of the individual bank in ordinary times. In ordinary times any one or small number of banks that for any reason get into trouble can quickly liquidate commercial loans. They mature soon, and they are an asset which other banks may be willing to take, so as to give the few banks that are in trouble the necessary funds.

Mortgages can not be quickly converted, and the individual bank which gets into trouble finds it ordinarily exceedingly difficult to raise

money quickly from other lenders on the basis of its mortgages; and of course its mortgages do not mature within a short period. It can not get any funds by simply doing no more new business.

Senator BRISTOW. Professor, I should like to ask you a question right there.

The CHAIRMAN. Well, Senator, we agreed to let the Professor finish and then cross-question him at length.

Senator BRISTOW. I thought he was through.

Prof. SPRAGUE. That would be my reason for differentiating between the mortgage loan and the commercial paper; not because, taken as a whole, mortgages are less liquid than the commercial paper.

Another entirely satisfactory feature of this bill, to my way of thinking, is the provision for savings-bank departments. Over a large part of this country there are no mutual savings banks and it does not seem likely that they will be developed in the near future. Indeed, in sparsely settled or purely agricultural sections of the country there is not room for the two classes of banks. The business is, in fact, combined with ordinary banking, but it is desirable that the funds of small savers should incur the same risk of loss to which deposits of the ordinary business man are subject. The business man is in better position to choose a bank and to withdraw his account in case he thinks that anything is unsatisfactory. The savings depositor should be given especial protection. His funds should be more carefully safeguarded than those of the ordinary checking depositor. I believe that the demand for the guarantee of deposits which sprang up in the West a few years ago was largely due to the fact that in that part of the country savings deposits and other deposits are indiscriminately mixed together and invested in one mass of assets.

The provision regarding the foreign banking in this bill seems to be entirely adequate.

Finally, I mention as further excellencies in the bill the simplicity of its organization. Contrasted, for example, with the bill of the National Monetary Commission, this bill in its method of choosing the management is vastly superior. It is, furthermore, superior to the bill of the National Monetary Commission in that it does not in any case impose upon banks the burden of guaranteeing loans made by other banks with these institutions to be established.

Much criticism is made of this bill because of an excess of Government influence in its management. Without characterizing the bill of the National Monetary Commission, it does seem to me that from the point of view of the banks it should be a very large offset that this bill does not obligate them in any case to guarantee the loans which other banks are to secure from the Federal reserve institutions.

The banks can not lose any of the funds which they intrust to these institutions unless they themselves choose incompetent persons to make up the majority of the boards of the Federal reserve banks. And if the banks can not lose any money from the working of these institutions, the question of Government against banking control of the central board narrows itself down to this: Will the general policy adopted be wiser if there is a Government board than if it is a board largely selected by bankers?

But even if the central board is unwise and incompetent it can not involve the disposition of the assets intrusted to these Federal reserve banks by the Government and by the banks.

Senator REED. Why not?

Prof. SPRAGUE. Because the central board can not lend any money. It can simply say that the rate of discount shall be 12 per cent instead of 7.

Senator REED. You are speaking of the central board, are you not?

Prof. SPRAGUE. Yes; I am speaking of the central board. The six out of the nine members of each Federal reserve bank board are chosen by bankers, and if they choose incompetent persons and the assets are dissipated they will then only have themselves to thank.

Senator REED. I understand; I thought your last remark amounted to a statement that even if you had this management of regional reserve banks the assets would not be dissipated. I understand your proposition now. I thought you spoke of the other banks.

Senator BRISTOW. I understood you to say that the reason it was not desirable to have farm loans—real estate mortgages—as the basis for this currency was that they could not be realized upon so rapidly.

Prof. SPRAGUE. I referred rather to the provision in the bill permitting individual banks to make a moderate amount of 12-month loans on the basis of mortgage security. I was not referring at all to the Federal reserve banks or to the issuing of currency. I was trying to indicate why, to my way of thinking, considerable long-time investments for banks whose obligations are payable on demand are undesirable.

Senator BRISTOW. Do you see any objection to making mortgages the basis for the issuing of currency to these banks?

Prof. SPRAGUE. Yes. At the present time there is no satisfactory machinery in this country for marketing mortgages or securities based upon mortgages. If, for example, the States would establish debenture institutions—rural banks with a State bank at the head—which could put out debentures against mortgage loans and get in touch with the financial markets, then I should say that these State institutions would become satisfactory borrowers at these Federal reserve banks.

Senator BRISTOW. It is contemplated that the Government will have to collect this money—realize on these securities. Do you contemplate that?

Prof. SPRAGUE. Referring to this debenture arrangement?

Senator BRISTOW. No. That is a thing that we can not consider here at all. It is an impossibility to imagine anything like that. We have no control over the States.

The purpose of this legislation mainly is to insure a more elastic currency, so we have been told, and to do that an emergency currency is provided for, so that when the banks need it they can get it, and they get it by putting up this security, and it is limited to commercial paper that matures in a certain time. Why does the Government want paper that matures within 45 and 60 days as a security for this currency?

Prof. SPRAGUE. The reasons are involved. An adequate answer involving the whole range of banking operations must be taken into consideration. Perhaps I can put it shortly in this way: The restriction of the security to commercial paper is not because commer-

cial paper is a safer asset than some other kinds of security. It is not a safer asset than the best of farm loans or the best of real-estate loans in cities, nor the best of bonds issued by certain corporations. It is not, therefore, on the ground of safety that there is any reason for picking out commercial paper rather than something else.

Commercial paper, is, however, preferable, because, so far as the individual bank is concerned, it will be able, in ordinary times, to liquidate its commercial paper to meet its obligations with the Federal reserve banks more readily than would ordinarily be the case with other kinds of security.

Suppose that our Federal reserve bank rediscounts for a member bank notes which are good but slow. Suppose, for example, it rediscounts a note based upon the security of some New York City block. The proceeds of the loan have not presumably been put into any transaction which will be completed during the life of the loan. If it is commercial paper in the true sense and you have borrowed, say, for four months' time presumably you are employing the proceeds of that loan in a transaction which will be completed within the four months, so that in a sense the loan will pay for itself.

The transaction in connection with which you used the proceeds of the loan will pay for it. In this case the bank that used this commercial paper will be paid, and it can meet its rediscount obligations. If, however, you open the door to rediscounts based upon bonds and other things, individual banks will have their funds tied up in long-time operations and consequently will require continuous rediscounts with the Federal reserve banks.

Senator BRISTOW. Well, the objection, as I understand it, that you offer is that the farm mortgage runs for a long time—it does not become due—and that you expect the notes that are put up as security to be paid within a short time. Is not that a thing for the bank to take into consideration in making its loans?

If that bank has mortgages that are better as a rule than ordinary notes of hand, why should not that be made the basis for the currency? The note that is put up as security for the currency does not necessarily have to be paid in order to enable the bank to meet the bill. Let it keep its 90 day paper or 30-day paper in its vaults, in the regular way as it does, and retire the currency. The only thing that will retire this emergency currency is the tax on it anyway. It will not be retired at all unless it is taxed.

Prof. SPRAGUE. It will be retired if we have a competent management for these institutions. If, as was assumed yesterday, these institutions are so managed that they get down to a 33½ basis just as far as they possibly can these institutions will not do us any good at all.

Senator BRISTOW. You can not get any Government board to contract a currency. It will not do it, because it would be a very unpopular thing, and it will never be done, in my judgment. You may theorize all you please, but as a practical matter it will not be done. You can expand, of course, but you will never contract.

Prof. SPRAGUE. That is the danger of this institution, whether it is handled by a group of people appointed by Government authority or appointed by the banks.

Senator BRISTOW. The only thing that will retire these notes is a tax that will make it unprofitable to keep them out to the bankers who are using them.

Prof. SPRAGUE. But that will not necessarily prevent overexpansion on the part of these institutions, because after these institutions are set up you will find that the demand for notes will be vastly lessened. You will find that the banks will make settlements between each other on the books of these Federal reserve banks, and that what they will chiefly want will be additional deposit accounts against which they can check. When the Bank of England makes additional loans and the banks need additional funds what they want is almost never currency; what they want is additional deposits at the Bank of England; and the same will be largely the case in this country in the operations of these institutions, and if they get down to anything approaching the minimum of their reserve in ordinary times they will be able to help us but slightly in an emergency.

I have repeated this warning over and over again in these hearings, because I have observed that very few people in the discussion of this subject during the last three or four years have dwelt upon it at all. Most persons in urging some such measure as this have dwelt almost exclusively upon its power to expand credits when there was a need, and have said almost nothing about the necessity of such an institution if it is to expand when there is need also of being in position to contract a little or to restrain long before emergencies come upon us. We should have, according to the theory of some people who have discussed this measure, something almost similar to a United States Treasury with an indefinite amount of funds ready to pay them out to the banks whenever the banks ask for them. That would be a most unhealthful condition of affairs. We have had something approaching it during certain administrations of the Treasury Department when there has been a large surplus, with the result that the bankers have felt no appreciable responsibility for maintaining the credit structure and have expanded credit to a dangerously rapid extent. If the managers of these institutions, including the Federal reserve board, are not conservative men, the results of setting these institutions at work will be disastrous.

Senator BRISTOW. If any of you financiers and experts think any administration will set about deliberately to contract the currency for the purpose of giving business more stability, you are pursuing a dream. It will not be done; there would be a protest made here from which they would all shrink.

Prof. SPRAGUE. I think you will find that the responsibilities which will rest upon the Federal reserve board will be very obvious and so heavy that they will almost in spite of themselves take the conservative point of view. At any rate I feel certain that after one experience with the consequences of over liberal granting of credits in periods of active business, we shall settle down to a proper understanding of the proper functions of such institutions as is proposed by this measure. That was the case in the history of the Bank of England. For years there was no proper conception on the part of the directors of that institution of its duties, and it took a succession of crises to make clear both to the officials of the bank and to the general public the proper functions of that great institution.

Senator BRISTOW. We have a pretty good system here now, except that it is not flexible enough. Why should we change it?

Prof. SPRAGUE. That is not the trouble with it—that it is not flexible. Consider the situation from 1897 to 1907. The total amount of currency in this country increased by about 40 per cent during that period of time.

Senator BRISTOW. Well, that did not hurt anybody; that was a very prosperous and desirable period.

Prof. SPRAGUE. But at the end of it we landed in the panic of 1907.

Senator BRISTOW. The panic of 1907 would have been avoided if these New York banks had not loaned on securities that were not good; if they had not loaned money for speculative purposes. When the water was squeezed they had to liquidate; they had to foreclose and they could not get their money and the country people who had their money there in New York could not get their money. If these banks could have gone to the Government and got relief, temporary relief, the panic of 1907 never would have come.

Prof. SPRAGUE. Yes; it would. It might have come in 1908. The situation would have become very much worse if they could have got additional credit at that time.

I have two more matters which I will put into the record if the committee desires. Senator Shafroth asked me to go over his bill and give him an opinion on it. I was also asked by Senator Bristow to express an opinion about the possibilities of the Aldrich-Vreeland bill.

The CHAIRMAN. We will be glad to have you do so.

I would like to ask the consent of the committee just here to put into the record the interest tables of the five reserve banks of Europe. The matter is explained in great detail and is a very valuable compilation which I think ought to be before the committee.

(The tables mentioned by the chairman are as follows:)

Bank of England.

ISSUE DEPARTMENT.

LIABILITIES.		ASSETS.	
Notes issued.....	£51,241,210	Government debt.....	£11,015,100
		Other securities.....	7,434,900
		Gold coin and bullion.....	32,791,210
	<hr/>		<hr/>
	51,241,210		51,241,210

BANKING DEPARTMENT.

Proprietors' capital.....	£14,553,000	Government securities.....	£17,507,945
Reserve.....	3,360,154	Other securities.....	36,211,089
Public deposits (including exchequer, savings banks, commissioners of national debt, and dividend accounts).....	9,936,777	Notes.....	22,375,490
Other deposits.....	49,139,180	Gold and silver coin.....	912,633
7-day and other bills.....	18,046		
	<hr/>		<hr/>
	77,007,157		77,007,157

J. C. NAIRNE. *Chief Cashier.*

Dated January 6, 1910.

The above is the statement as it appears in the weekly returns.

BALANCE SHEET, JAN. 6, 1910.

[Arranged so that it corresponds in form with the balance sheets of the other banks given here.]

LIABILITIES.		ASSETS.	
Capital and rest.....	£17,913,154	Cold coin and bullion and silver coin..	£33,703,843
Notes in circulation.....	28,865,720	Government securities in both departments.....	28,523,045
7-day and other bills.....	18,046	Other securities.....	43,654,989
Public deposits.....	9,936,777		
Other deposits.....	49,139,180		
	<hr/>		<hr/>
	105,872,877		105,872,877

[NOTE.—All per contra entries, as those of the notes of the banks held by themselves, etc., are omitted so as to show the real position of the accounts.]

It will thus be observed that the note issues are covered by 62.7 per cent gold. That the public and private deposits are covered in the banking department by 38.3 per cent of notes and coin, nearly all such reserve being in notes, which, measured by actual gold, would make a gold reserve of only about 25 per cent against the deposits.

It will be observed under the tables of interest rates that this narrow margin has been supplemented by frequent changes of the rate of interest to attract gold from other countries when English commerce requires gold, and it would also appear that in 1847, 1857, and 1867 the Bank of England was permitted to issue legal-tender notes against commercial paper in times of panic in order to extend needed loans, restore confidence, and safeguard the commerce and industry of England.

Imperial Bank of Germany.

BALANCE SHEET, DEC. 31, 1908.

[Marks converted as 20=£1.]

LIABILITIES.		ASSETS.	
Capital and reserve.....	£12,458,581	Gold in bars.....	£16,792,075
Notes in circulation.....	98,771,474	German gold coin.....	21,620,898
Amount due on clearing and current accounts.....	33,244,291		£38,412,973
Deposits (not bearing interest).....	25,167	Divisional money.....	10,594,046
Sundry liabilities and reserve for doubtful debts.....	720,072		49,007,019
Net profits for 1907.....	1,537,287	Notes of imperial treasury (Reichskassenscheinen).....	2,876,243
		Notes of other banks.....	505,105
			505,105
		Bills held:	
		Due within 15 days.....	22,660,590
		Due at later dates.....	28,939,529
			51,600,119
		Bills on foreign places.....	6,457,493
			58,057,612
		Loans.....	8,796,468
		Securities.....	19,724,627
		Value of real property belonging to the bank.....	2,849,450
		Sundry assets.....	4,940,348
			146,756,872
	146,756,872		

[NOTE.—All per contra entries, as those of the notes of the banks held by themselves, etc., are omitted so as to show the real position of the accounts.]

It will be observed that the Bank of Germany carries 50 per cent of gold against its notes and 37.1 per cent of gold against its notes and deposits, but the Bank of Germany can also issue legal-tender notes against commercial paper of a qualified class.

It will be observed that the Bank of Germany also carries a large volume of quick assets. Thus the Bank of Germany, like the Bank of England and the Bank of France, holds its reserves liquid and always available for loaning for commercial and industrial needs.

Bank of France.

BALANCE SHEET, DEC. 31, 1908.

[Francs converted as 25=£1.]

LIABILITIES.		ASSETS.	
Capital of the bank.....	£7,300,000	Coin and bullion at Paris and at the branches.....	£175,401,607
Reserve and profits in addition to capital.....	1,700,774	Bills due yesterday to be received this day.....	1,757
Notes payable to bearer in circulation (head office and branches).....	197,972,403	Amount of bills:	
Drafts.....	914,397	Paris.....	£9,920,192
Current account with the treasury.....	7,199,491	Branches.....	18,896,626
Current accounts and deposit accounts:			28,806,818
Paris.....	£22,780,727	Advances on securities:	
Branches.....	2,721,524	Paris.....	6,332,341
	25,502,251	Branches.....	14,478,603
Dividends unpaid, etc.....	1,876,386		20,810,944
		Advances to Government (laws of June 9, 1857; June 13, 1878; Nov. 17, 1897).....	7,200,000
		Government stock reserve fund.....	519,230
		Disposable funds, Government stock.....	3,985,234
		Immovable funds, Government stock (law of June 9, 1857).....	4,000,000
		Amount appropriated to special reserve.....	336,298
		Office and furniture of the bank and buildings at the branches, etc.....	1,403,814
	242,465,702		242,465,702

[NOTE.—All per contra entries, as those of the notes of the banks held by themselves, etc., are omitted so as to show the real position of the accounts.]

This table shows that the Bank of France carries 88 per cent in coin against notes, the coin including both gold and silver, however, and carries 75 per cent of coin against notes and deposits. Its authorized issue of notes is 5,800,000,000 francs, or £232,000,000, which leaves a margin of over £35,000,000 sterling, or \$175,000,000 margin of notes, besides the quick assets which it constantly carries, just as the Bank of England does.

The need for large cash reserves in France is due to the fact that the check system (currency) against deposits is not developed in France as in England and in the United States.

Bank of the Netherlands.

BALANCE SHEET, MAR. 31, 1909.

[Guilders converted as 12=£1.]

LIABILITIES.		ASSETS.	
Capital.....	£1,666,667	Coin, bullion, etc.....	£13,665,502
Reserve.....	435,955	Inland bills.....	3,514,247
Notes in circulation.....	22,798,206	Foreign bills.....	1,550,309
Transfers.....	173,200	Loan accounts.....	4,144,246
Current accounts.....	539,849	Advances on current accounts.....	1,882,021
Discount on—		Investments:	
Inland bills.....	10,521	Capital.....	332,662
Foreign bills.....	3,060	Reserve.....	432,708
Sundry liabilities.....	59,598	Sundry assets, buildings.....	255,721
Net profit for distribution.....	90,360		
	25,777,416		25,777,416

[NOTE.—All per contra entries, as those of the notes of the banks held by themselves etc., are omitted so as to show the real position of the accounts.]

This bank carries gold against its notes of 58 per cent and gold against notes and deposits of 57 per cent, its deposits being very small.

National Bank of Belgium.

BALANCE SHEET, DEC. 31, 1908.

[Francs converted as 25=£1.]

LIABILITIES.		ASSETS.	
Capital paid up.....	£2,000,000	Specie and bullion.....	£6,326,529
Reserve fund.....	1,444,899	Bills discounted (bills in Belgium,	
Notes in circulation.....	32,275,122	£19,738,332; foreign bills, £7,421,639;	
Current accounts.....	4,028,662	total, £27,159,971).....	27,159,971
Stamp duty, share of profits due to the		Securities due for collection.....	193,849
Government, employees' superannua-		Advances on Government securities...	2,056,765
tion, provident funds, dividends due,		Government and reserve fund securities	3,418,343
etc.....	1,029,776	Securities for current accounts, etc.....	1,623,002
	40,778,459		40,778,459

[NOTE.—All per contra entries, as those of the notes of the banks held by themselves, etc., are omitted so as to show the real position of the accounts.]

The Bank of the Netherlands carries 58 per cent of gold against its notes and 57 per cent of gold against its notes and deposits. This bank only carries a very small line of deposits.

The National Bank of Belgium carries 19 per cent of gold against its notes and 17 per cent of gold against its notes and deposits.

The three great banks of England, France, and Germany, as above mentioned, practically provide the gold accommodation needed by western European commerce, the two latter banks, however, serving a useful local purpose.

TABLE I.—Rate of discount—Number of changes in each year at the Banks of England, France, Germany, Holland (1844-1909), and Belgium (1851-1909.)

Year	Bank of England.			Bank of France.			Bank of Germany.			Bank of Holland.			Bank of Belgium.		
	Rise.	Fall.	Total.	Rise.	Fall.	Total.	Rise.	Fall.	Total.	Rise.	Fall.	Total.	Rise.	Fall.	Total.
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
1844.		1	1	(1)	(1)	(1)	1		1	(1)	(1)	(1)	(2)	(2)	(2)
1845.	2		2	(1)	(1)	(1)	1	1	2	5		5	(2)	(2)	(2)
1846.		1	1	(1)	(1)	(1)	1	1	2		2	(2)	(2)	(2)	(2)
1847.	6	3	9	1	1	2		1	1	1	1	(2)	(2)	(2)	(2)
1848.		3	3	(1)	(1)	(1)	1	1	2	1	3	(2)	(2)	(2)	(2)
1849.	1		1	(1)	(1)	(1)		1	1	1	1	(2)	(2)	(2)	(2)
1850.	1		1	(1)	(1)	(1)		1	1	1	1	(2)	(2)	(2)	(2)
1851.	(1)		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)
1852.		2	2	(1)	1	1	(1)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)
1853.	6		6	1		1	1	1	1	2	2	(1)	1		1
1854.	1	1	2	1	1	2		1	1	(1)	(1)	(2)	(2)	(2)	(2)
1855.	4	4	8	2		2	1		1	1	2	(1)	(1)	(1)	(1)
1856.	2	5	7	1	4	5	3	1	4	2	3	(1)	(1)	(1)	(1)
1857.	6	3	9	4	4	8	4	2	6	5	3	3		1	1
1858.		6	6	4	4	8	1	1	2	6	6	3	3	4	4
1859.	2	3	5	1	1	2	1	4	5	6	6	1	4	4	4
1860.	8	3	11	1		1	1	1	2	(1)	(1)	1	1	1	1
1861.	3	8	11	1		1	(1)	(1)	(1)	2	2	2	3	2	2
1862.	2	5	7	4	3	7	3	(1)	4	2	3	3	1	2	2
1863.	8	4	12	5	3	8	1		1	2	2	4	3	3	3
1864.	7	8	15	4	3	7	3	3	6	4	4	6	2	2	2
1865.	8	8	16	2	4	6	3	1	4	5	4	9	3	3	3
1866.	5	9	14	2	5	7	1	7	5	6	5	11	3	3	3
1867.		3	3		2	2	(1)	(1)	3	4	4	11	2	1	1
1868.	2		2	(1)	(1)	(1)	(1)	(1)	(1)	2	2	6	(1)	(1)	(1)
1869.	3	4	7	(1)	(1)	(1)	1		1	5	5	2	2	3	3
1870.	4	10	14	4		4	2	2	5	4	2	5	2	6	6
1871.	4	6	10	1	1	2		2	2	4	4	12	2	2	2
1872.	9	5	14		1	1	1	1	2	5	5	2	2	3	3
1873.	11	13	24	2	2	4	3	4	7	4	1	9	3	3	3
1874.	6	7	13		2	2	2	2	4	3	3	3	3	3	3
1875.	5	7	12	(1)	(1)	(1)	2	3	5	1	1	3	3	3	3
1876.	1	4	5		1	1	1	3	3	(1)	(1)	3	3	3	3
1877.	4	3	7		1	1	1	3	4	(1)	(1)	3	3	3	3
1878.	6	4	10	1		1	1	1	2	2	2	2	2	2	2
1879.		5	5	1	1	2	2	2	3	2	2	1	1	1	1
1880.	1	1	2	1	1	2	2	2	3	(1)	(1)	1	1	1	1
1881.	4	2	6	2		2	2	1	3	3	3	4	4	3	3

9328°—S. Doc. 232, 63-1—Vol 1—35

1882	3	3	6	3	2	1	4	5	3	8	4	6	10		
1883	1	5	6	6	1	1	1	4	4	4	4	1	1		
1884	4	3	7	7	1	1	1	1	1	1	1	2	2		
1885	2	5	7	7	(1)	(1)	3	3	3	1	1	6	6		
1886	4	3	7	7	(1)	(1)	5	5	(1)	(1)	2	4	4		
1887	2	4	6	6	(1)	(1)	2	2	(1)	(1)	2	2	2		
1888	4	4	7	7	2	2	2	2	(1)	(1)	4	6	6		
1889	4	4	9	9	2	2	4	4	(1)	(1)	1	4	4		
1890	4	7	8	8	2	2	2	2	(1)	(1)	3	2	2		
1891	5	7	11	11	2	2	3	3	3	4	2	(1)	(1)		
1892	1	7	12	12	1	1	1	1	2	3	(1)	1	1		
1893	1	3	4	4	1	1	2	2	3	1	1	1	1		
1894	6	6	12	12	1	1	1	1	4	6	1	(1)	(1)		
1895	(1)	2	2	2	1	1	2	2	(1)	2	(1)	(1)	(1)		
1896	3	3	3	3	1	1	1	1	2	(1)	1	1	1		
1897	2	4	6	6	(1)	(1)	2	2	3	1	(1)	(1)	(1)		
1898	3	3	6	6	1	1	4	4	6	1	1	1	1		
1899	4	2	6	6	2	2	4	4	7	4	4	2	6		
1900	1	5	6	6	1	1	3	3	3	3	2	2	2		
1901	2	4	6	6	3	3	4	4	1	1	2	2	2		
1902	1	2	3	3	1	1	1	1	3	(1)	(1)	(1)	3		
1903	1	2	3	3	1	1	1	1	2	1	1	2	3		
1904	2	2	2	2	1	1	1	1	7	1	(1)	(1)	1		
1905	2	1	3	3	4	4	3	3	1	2	1	1	3		
1906	4	2	6	6	(1)	(1)	2	2	5	3	2	2	3		
1907	4	3	7	7	2	2	2	2	4	1	3	3	3		
1908	6	6	6	6	2	2	6	6	3	3	5	5	5		
1909	4	2	6	6	(1)	(1)	2	2	3	1	1	1	1		
	202	241	443	50	65	115	91	105	196	94	94	188	86	106	192

¹ No change.

² Operations commenced in 1851.

TABLE II.—Lowest and highest rates charged and extent of fluctuation during each year, Banks of England, France, Germany, Holland (1844-1909), and Belgium (1851-1909).

Year.	Bank of England.			Bank of France.			Bank of Germany.			Bank of Holland.			Bank of Belgium.		
	Lowest rate.	Highest rate.	Fluctuation.	Lowest rate.	Highest rate.	Fluctuation.	Lowest rate.	Highest rate.	Fluctuation.	Lowest rate.	Highest rate.	Fluctuation.	Lowest rate.	Highest rate.	Fluctuation.
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
1844	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1845	2½	3½	1	(1)	(1)	(1)	4	4½	1	2½	5½	3	(3)	(3)	(3)
1846	3	3½	½	(1)	(1)	(1)	4	5	1	4	5½	1½	(3)	(3)	(3)
1847	3	8	5	(1)	5	1	4½	5	1	4	5	1	(3)	(3)	(3)
1848	3	5	2	(1)	(1)	(1)	4½	5	1	3	5	2	(3)	(3)	(3)
1849	2½	3	½	(1)	(1)	(1)	4	4½	1	2½	3	½	(3)	(3)	(3)
1850	2½	3	½	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(3)	(3)	(3)
1851	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(3)	(3)	(3)
1852	2	2½	½	3	4	1	(1)	(1)	(1)	(1)	(1)	(1)	(3)	(3)	(3)
1853	2	5	3	3	4	1	4	5	1	2	3	1	(1)	(1)	(1)
1854	5	5½	½	4	5	1	4	5	1	(1)	(1)	(1)	(1)	(1)	(1)
1855	3½	7	3½	4	6	2	4	4½	½	3	4	1	(1)	(1)	(1)
1856	4½	7	2½	5	6	1	4	6	2	4	5½	1½	(3)	(3)	(3)
1857	5½	10	4½	5	9	4	5	7½	2½	4	7	3	3½	5½	2
1858	2½	8	5½	3	5	2	4	6½	2½	3	7	4	3½	5	2
1859	2½	4½	2	3	4	1	4	5	1	(1)	(1)	(1)	3	4	1
1860	2½	3½	3½	3½	4½	1	(1)	(1)	(1)	(1)	(1)	(1)	3	4	1
1861	3	8	5	4½	7	2½	(1)	(1)	(1)	3	4	1	3	5	2
1862	2	3	1	3½	5	1½	(1)	(1)	(1)	3½	3	½	3	4	1
1863	3	8	5	3½	7	3½	4	4½	½	3	5	2	4	5½	2
1864	6	9	3	4½	8	3½	4½	3½	½	4½	7	3	4	6	2
1865	3	7	4	3	5	2	4	7	3	3	6	3	3	6	3
1866	3½	10	6½	3	5	2	4	9	5	4½	7	3	3	6	3
1867	2	3½	1½	2½	3	½	(1)	(1)	(1)	2½	4½	2	2½	3	½
1868	2	3	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1869	2½	4½	2	(1)	(1)	(1)	4	5	1	2½	5	2½	(1)	(1)	(1)
1870	2½	6	3½	2½	6	3½	4	8	4	3	6	3	2	6	3½
1871	2	5	3	5	6	1	4	5	1	3	4	1	2	5½	3
1872	4	7	4	5	6	1	4	5	1	2½	5	2½	2	5½	3
1873	3	9	6	5	7	2	4	6	2	4	6½	2½	3½	7	3
1874	2½	6	3½	4	5	1	4	6	2	3½	5	1½	3	6	2½
1875	2	6	4	(1)	(1)	(1)	4	6	2	3	3½	½	3	4½	1
1876	2	5	3	3	4	1	3½	6	2	(1)	(1)	(1)	3	3½	1
1877	2	5	3	2	3	1	4	5	1	(1)	(1)	(1)	2	3	1
1878	2	6	4	2	3	1	4	5½	1½	3	4	1	2	4½	2
1879	2	5	3	2	3	1	3	4½	1½	3	4	1	2	4	1
1880	2½	3	½	2½	3½	1	4	5½	1½	(1)	(1)	(1)	3	3½	½

1881.....	2½	5	2½	3½	5	1½	4	5½	1½	3½	4½	1	3½	5½	1½	2	3½	5½	2
1882.....	3	6	3	(1)	(1)	(1)	(1)	6	2	3½	5	2	3½	5	1	2	3	6	2½
1883.....	3	5	3	(1)	(1)	(1)	(1)	5	1	3	5	2	3	5	1	2	3	4	1
1884.....	2	5	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	4	1½
1885.....	2	5	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	4	1
1886.....	2	5	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	4	1
1887.....	2	5	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	4	1
1888.....	2	5	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	4	1
1889.....	2½	6	3½	(1)	(1)	(1)	(1)	5½	2½	3½	5½	2½	3½	5½	1½	2½	3½	6	2
1890.....	3	6	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1891.....	2½	5	2½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1892.....	2	5	1½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1893.....	2½	5	2½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1894.....	2	3	1	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1895.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1896.....	2	4	2	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1897.....	2	4	2	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1898.....	2½	4	1½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1899.....	3	6	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1900.....	3	6	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1901.....	3	5	2	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1902.....	3	4	1	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1903.....	3	4	1	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1904.....	3	3½	1½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1905.....	2½	4	1½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1906.....	3	4	2	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1907.....	4	7	3	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1908.....	2½	6	3½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2
1909.....	2½	5	2½	(1)	(1)	(1)	(1)	5	2	3	5	2	3	5	1	2	3	6	2

1 No change.

2 Operations commenced in 1851.

TABLE III.—Rate of discount, 1844-1909—The number of days at each rate arranged from the lowest rate to the highest.

Rate.	Bank of England. ¹		Bank of France. ²		Imperial Bank of Germany. ³		Bank of the Netherlands. ⁴		National Bank of Belgium. ⁵	
	Number of days.	Number of days per cent of total (total=1,000).	Number of days.	Number of days per cent of total (total=1,000).	Number of days.	Number of days per cent of total (total=1,000).	Number of days.	Number of days per cent of total (total=1,000).	Number of days.	Number of days per cent of total (total=1,000).
2 per cent.	3,409	143	2,735	115	.....	.....	1,328	56	.....	.....
2½ per cent.	28	1	.....	.....	.....	.....	.....	.....	.....	.....
2½ per cent.	3,599	151	2,579	108	.....	.....	5,058	212	3,169	147
3 per cent.	5,859	246	7,828	329	3,073	129	8,013	336	9,412	437
3½ per cent.	1,921	80	2,060	86	644	27	3,737	157	2,965	138
4 per cent.	3,772	158	4,579	192	12,192	511	2,167	91	3,416	159
4½ per cent.	608	26	353	15	1,626	68	811	34	698	32
5 per cent.	2,195	92	2,061	86	4,094	172	1,823	76	944	44
5½ per cent.	263	11	120	5	707	30	375	16	378	18
6 per cent.	975	41	1,170	49	970	41	260	11	540	25
6½ per cent.	91	4	8	.....	72	3	150	6	.....	.....
7 per cent.	633	26	286	12	269	11	135	5	27	.....
7½ per cent. ....	.....	.....	21	1	110	5	.....	.....	.....	.....
8 per cent.	268	11	41	2	37	1	.....	.....	.....	.....
9 per cent.	95	4	16	.....	63	2	.....	.....	.....	.....
10 per cent.	141	6	.....	.....	.....	.....	.....	.....	.....	.....
Total.	23,857	1,000	23,857	1,000	23,857	1,000	23,857	1,000	21,549	1,000

¹ Lowest rate 2 per cent; highest rate 10 per cent.
² Lowest rate 2 per cent; highest rate 9 per cent.
³ Lowest rate 3 per cent; highest rate 9 per cent.
⁴ Lowest rate 2 per cent; highest rate 7 per cent.
⁵ Lowest rate 2½ per cent; highest rate 7 per cent.

TABLE IV.—Rate of discount, 1844-1909—The number of days at each rate, arranged from the highest number of days to the lowest.

Bank of England.			Bank of France.			Imperial Bank of Germany.			Bank of the Netherlands.			Bank of Belgium.		
Days.	Rate per cent.	Number of days per cent of total (total=1,000).	Days.	Rate per cent.	Number of days per cent of total (total=1,000).	Days.	Rate per cent.	Number of days per cent of total (total=1,000).	Days.	Rate per cent.	Number of days per cent of total (total=1,000).	Days.	Rate per cent.	Number of days per cent of total (total=1,000).
5,859	3	246	7,828	3	329	12,192	4	511	8,013	3	336	9,412	3	437
3,772	4	158	4,579	4	192	4,094	5	172	5,058	2½	212	3,416	4	159
3,599	2½	151	2,735	2	115	3,073	3	129	3,737	3½	157	3,169	2½	147
3,409	2	143	2,579	2½	108	1,626	4½	68	2,167	4	91	2,965	3½	138
2,195	5	92	2,061	5	86	970	6	41	1,823	5	76	944	5	44
1,921	3½	80	2,060	3½	86	707	5½	30	1,328	2	56	698	4½	32
975	6	41	1,170	6	49	644	3½	27	811	4½	34	540	6	25
633	7	26	353	4½	15	269	7	11	375	5½	16	378	5½	18
608	4½	26	286	7	12	110	7½	5	260	6	11	27	7	.....
268	8	11	120	5½	5	72	6½	3	150	6½	6	.....	.....	.....
263	5½	11	41	8	2	63	9	2	135	7	5	.....	.....	.....
141	10	6	21	7½	1	37	8	1	.....	.....	.....	.....	.....	.....
95	9	4	16	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
91	6½	4	8	6½	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	2½	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
23,857	.....	1,000	23,857	.....	1,000	23,857	.....	1,000	23,857	.....	1,000	21,549	.....	1,000

It will thus be seen that these great banks holding the national reserves have been able to furnish commerce with a very low rate of discount for nearly all the time and only occasionally have been compelled to raise the rate to a high point.

These low rates illustrate the enormous value of these great banks to European commerce and the urgent necessity for action by the United States along similar lines.

(Thereupon at 12.55 o'clock p. m. the committee took a recess until 2.30 o'clock p. m.)

AFTER RECESS.

The CHAIRMAN. Prof. Sprague, the committee wanted to give 30 minutes to Mr. Claflin, if that will be agreeable to you. He has to go away this evening.

Prof. SPRAGUE. That will be entirely agreeable to me, Mr. Chairman.

STATEMENT OF JOHN CLAFLIN, OF H. B. CLAFLIN CO.,
NEW YORK CITY.

Mr. CLAFLIN. In the first place, I would like to say that I agree with the recommendations of Prof. Sprague, especially with regard to the question of removal of the class B directors and the expediency of having the chairman of the advisory committee sit with the Federal council.

The CHAIRMAN. Or the reserve board, as they call it?

Mr. CLAFLIN. Yes. Personally I should very much like to have the Federal board composed of three members to be appointed by banks, leaving three to be appointed by the President, and the Secretary of the Treasury having practically the casting vote. I think such men as Mr. Marshall, to whom we listened this morning, and Mr. Wade, whose name was mentioned this morning, and any of the notable bankers of the country, even if we did not go so far as New York and took a man like Mr. Hepburn, whom you have seen here and who is as clear-headed and as fair-minded a man as I know. It seems to me that their expert knowledge would be of great value to the Government appointees and would probably enable the Government appointees to solve some questions that might be difficult for them to solve without a pretty extensive knowledge of banking. If they, however, should not be obtainable, I should be very glad to have the chairman of the advisory council sit with the other members. I think that would effect a very large part of what I would like to see; that is, the discussion of these current topics by some one who would have really expert knowledge of the matter.

Prof. Sprague's suggestion that 4 per cent of the reserves of the country banks should be left continuously with the city banks rather than to be put finally apart in their own vaults and apart with the Federal reserve banks, seems to me a wise suggestion.

I was thinking on that line myself, and I had in mind suggesting 2 per cent; but I feel that it is very desirable to make the country banks feel that as far as possible the facilities which they now have are not withdrawn from them. Of course it is going to be a pretty serious matter for all these country banks to determine what to do. If a large part of them should determine that they would rather make a sacrifice on their bonds than go into this proposed Federal issue, it would mean that the issue would be very much crippled and could hardly expect to do the great work which I think it will do if there should be a hearty cooperation of the banks.

And in that line, too, it must be borne in mind that if a large part of the banks would not come in, then there would be a contraction of the circulation which would be a very serious problem, indeed. I can see no way in which that could be met, because if a half of the

750 millions were to be liquidated—that is, if those notes were to be withdrawn from circulation within a year—the question would be a very serious one, indeed; and while in a way it is a fact that the banks are not suffering very much by selling their Government bonds, and that is to a certain extent an inducement, a very great inducement, for them to come in, yet, on the other hand, if a great many of them should see that this association could hardly be formed without their cooperation, and they should stay out for this year, the situation might be serious, and I would suggest from that point of view that it would be better that the banks, though they would have to forego the other privileges of the national bank within a year, should be allowed for as long as three years—two years more—to keep their circulation. That would mean a slower liquidation of the Government bonds.

The CHAIRMAN. You understand this reduction is a maximum of 35 millions per annum?

Mr. CLAFLIN. No; I did not understand that. I am very glad to know that.

The CHAIRMAN. It is a maximum possibility of 35 millions per annum.

Senator BRISTOW. Suppose they cease to be United States banks?

Mr. CLAFLIN. That is the point. Suppose they cease to be United States banks. Then they are compelled to give up the circulation at once.

The CHAIRMAN. Yes; they would do that. They would give up the circulation if they did not come in.

Mr. CLAFLIN. That is what I am afraid of, not from their standpoint; but if they can not afford to make the losses, it is their question and not mine. But as a merchant, as a member of the general community, I should suffer very much if those banks, or half of them, should elect not to come in and should be compelled by the terms of this law to give up their circulation within a year. It seems to me that would be nothing less than a calamity; and as I look at it I do not for the moment see any reason why that one year for them to give up their circulation should not be extended to three years. The banks would suffer the loss of going out, and the privileges that the national banks have otherwise would be denied them. But I think for the benefit of the community they should be allowed to continue the circulation for three years. That would make a slower liquidation of the Government bonds, and, meantime, probably under this bill a considerable part of the 375 millions could be put out in some other form.

I look at it, of course, in a different way from the bankers. I am looking at it entirely in its effect on the whole community, the mercantile community especially.

The CHAIRMAN. That is the point of view we especially want to get from you, Mr. Claflin.

Mr. CLAFLIN. And so it has seemed to me that there is a serious danger, and it seems to me, too, that perhaps in the shifting of the reserve accounts it might be better to make the changes a little more slowly. For instance, of course the country banks are the most important of all. The present requirement is that within 60 days and up to 14 months, 3 per cent of their reserves—

Senator POMERENE. What page are you reading from, please?

Mr. CLAFLIN. I am reading, now, from page 61. My suggestion would be that instead of 3 per cent, only 2 per cent should be required at first, and that that should be increased at the end of 36 months to 4 per cent instead of to 5 per cent, as is proposed here. And after 36 months it should be, as is suggested here, 5 per cent. It would simply make it slower, but arrive at the same conclusion.

And then on deposit in the reserve or central reserve city banks it is now permitted that 4 per cent should remain up to 14 months. I would increase that to 5 per cent, taking the gold out of the Federal banks and putting it back into the city banks, and within from 14 to 36 months I would have a gradual reduction. That is, in one year it would be up to 4 per cent, the next year to 3 per cent, and the next year to 2 per cent. There I should like to leave it, although if it were thought better not to do so, I would have it go from two to one and then from one to nothing, taking two additional years.

My whole thought is that it is most important from every standpoint that this new act should be put into operation in such a way that there will be no violent suffering, there will be no great loss over it. There is a very interesting compilation here in regard to the results at the end of 36 months. That is on page 65. I think that compilation would be correct if it were not for the question of the timidity of very many people, especially, we will say, bankers, when the future is uncertain. This computation is made on the general theory that there would be a pretty even division of the reserves among the banks; that the banks, in other words, would have it divided so that no one bank would hold very much more than it was compelled to hold.

In point of fact, whenever the bankers feel somewhat uneasy, some of the bankers, instead of trying to help a community, go to work to strengthen themselves.

Senator POMERENE. That is pretty general, is it not?

Mr. CLAFLIN. It is pretty general; yes. I knew several country banks, after 1907, who boasted that they had at the end of the panic a reserve of 50 per cent. They had broken a good many of their customers in doing that, but it was a question of self-preservation. Happily, under this act, when it is thoroughly in operation, there should be no such necessity. I believe they will all feel easy, and in the beginning, as it is going into operation, while there may be some uneasiness, because they are somewhat uncertain as to what will happen, I think we will have to count that some of them are going to be abnormally desirous of keeping stronger than the others, keeping stronger than is necessary, and I think we must take that human element into consideration and provide, as I have suggested, for the first 60 days and perhaps for the first year; and then I would make a gradual taking away of the reserves from the city banks and depositing them in the Federal banks in such a way and at such times that it would look perfectly clear to everybody who studied it that it could be done and there could not be any difference of opinion about it.

I do not know, gentlemen, that there is anything else that I want to say to you. I do want to express to you my approval of the general principles of the bill, and I think that I have indicated to you the things that I should like to see changed. I myself would

very much rather have these notes issued by the banks than by the Government. I feel that there is a sentimental as well as a practical reason why that would be better, because in times of stress if there is any doubt about the Government itself, it has a very much more harmful effect than a doubt about the bankers. But I do not think the workings of the bill will be materially affected by what may be done in that regard.

Senator POMERENE. In other words, your criticisms go to the transition from one system to the other, rather than to the ultimate effect of the system proposed?

Mr. CLAFLIN. Yes; that is what I am commenting on now. I made, in the first place, some suggestions following Prof. Sprague's remarks of this morning which seem to me to be thoroughly sound.

Senator BRISTOW. Mr. Claffin, what defects do you think our present currency system has?

Mr. CLAFLIN. The great defect is the lack of flexibility.

And, by the way, right in that line, I think that if we had a Federal board partly consisting of bankers they would be very much more certain to contract the currency when it ought to be contracted than if they were appointed mainly not from bankers. Bankers appreciate, perhaps, more than anybody else how important it is to contract when things are easy, so they may be prepared for expansion when there is stress.

Senator BRISTOW. Lack of flexibility. The chief purpose of this legislation is to provide, then, means by which credit can be extended; currency provided when there is stress?

Mr. CLAFLIN. Yes, sir.

Senator BRISTOW. Why could not that be done without breaking up this present currency system which we have and taking the chances on disturbance?

Mr. CLAFLIN. It could be, perfectly well.

Senator BRISTOW. How would you suggest that we go about it if we undertook to do that?

Mr. CLAFLIN. I think it would be a simple matter. I should leave the present currency undisturbed, just as it is, and I should authorize an association, various associations of banks, if you please. I should personally like better one great association, but if there is any objection to that, then a series of associations, probably the fewer the better, and give them certain rights under Government supervision to rediscount for all the national banks of the country. I am throwing this out just as a thought, as it comes to me on this question, but I have no doubt in my own mind that if, for instance, there were three or five or seven or whatever the number, the fewer the better, I think, and these associations were made up from the banks of the country, and if those banks had the right, subject to strict Government supervision, to discount—that is, to rediscount—for the member banks a limited amount, I think there would be afforded then an additional currency that would have all those elements of flexibility, because this must always be borne in mind, that you never want the whole currency flexible. That is not important. It is only the superficies of it, the outside, a certain rim, that is to be flexible, and that is all we want.

Senator BRISTOW. If I understand it, these associations would perform the functions, to a certain extent, that the clearing house does

now, and that you would rather legalize a clearing house certificate, or something after that order, in times when it was necessary to resort to that?

Mr. CLAFLIN. My idea would be that this should always be in operation. These associations might be called clearing houses, for they would be very much of that kind. They would be associations of banks, and these banks would have the right to rediscount for their member banks. They would have the right any time, and it would be used not always in times of stress. I should think it ought to be used every autumn to an extent, and it ought to go out every February or March. Every year it should be used instead of having to draw from New York and Chicago, as they have now, some 75 millions or possibly 100 millions of legal money and cause in that way a very great contraction of credits in all the cities, indeed everywhere, because all the smaller cities depend more or less on the larger cities to cause a contraction right in the fall of the year when the merchants want the money most, and at the same time crops have to be moved.

If we had such associations as I suggest, and they had the right to rediscount under Government supervision, they could rediscount at that time for the farmers and people who have the crops to move, and there would be no better security than that.

Senator POMERENE. How would you capitalize this association?

Mr. CLAFLIN. It really does not make very much difference. They would be perfectly good, being made up of these associated banks. I would capitalize them for a moderate amount.

Senator POMERENE. How would you organize them?

Mr. CLAFLIN. Allow the banks to come in; allow them only to come in ratably, you know.

Senator POMERENE. Wherein does that differ from the regional system here?

Mr. CLAFLIN. It does not differ from it, practically. The only thing is this is supplemental and this does not consider the doing away with the present bond-secured currency. I should simply leave that and make this a very much less important association. You see now it is proposing a very extensive reform in the currency. There would be a very much slower effect, but it would be on top; it would be a very much smaller association.

Senator BRISTOW. That would be dealing with the flexible part of it. It would be providing a flexibility which it does not now have by supplementing the present system.

Mr. CLAFLIN. The present change is basic, and that would be simply supplemental. They would be very much less important institutions, but they would perform a certain function, which would be additional to what is now performed.

Senator BRISTOW. As to the additional currency that might be issued, would you have that currency issued by the Government and furnished these associations?

Mr. CLAFLIN. No; I would have that issued by the banks entirely on their responsibility.

Senator POMERENE. The banks, or associations?

Mr. CLAFLIN. These new associations.

Senator POMERENE. Pardon my interruption, Senator.

Senator BRISTOW. That is all right. What would be the nature of this currency, then, that would be issued?

Mr. CLAFLIN. Bank notes.

Senator BRISTOW. By the associations, or by the banks?

Mr. CLAFLIN. By the association.

Senator BRISTOW. And that would be of temporary use and then automatically retired?

Mr. CLAFLIN. Yes; we would make very strict requirements that no bank should pay out any other bank's notes, and that in itself would compel the retirement. The banks would not hold the notes. They would be no good to them excepting to pay debts with. They could not be held as reserve; they would go back to the bank that issued them and have to be paid. I should have strict requirements of redemption at all these various centers.

I really ought, perhaps, not to take up the time of the committee with simply throwing out these answers that are made on the spur of the moment and without very much thought.

Senator BRISTOW. I understand you do not take very kindly to the Government issuing this money?

Mr. CLAFLIN. No; I very much prefer the banks to issue it.

Senator POMERENE. Will you allow me to ask a question there, Senator?

Senator BRISTOW. Yes.

Senator POMERENE. You say you much prefer the banks to issue it?

Mr. CLAFLIN. Yes.

Senator POMERENE. Is not that really a matter of sentiment rather than anything else?

Mr. CLAFLIN. I think to some extent it is, because in the last analysis really the Government does stand behind it; but I think there is this great difference, that in the case of stress and there comes to be any question of the Government defaulting, we get such a condition as we had in 1893 when the fears that the Government would cease paying gold on greenbacks caused alarm that has hardly ever been equaled in this country. If it was simply a question of the banks ceasing to pay, the alarm would be very much less.

Senator SHAFROTH. But the reserve was only 100 millions for the 346 millions of greenbacks, was it not? And that was afterwards increased. There has not been a single flurry since that time. There has not been any redemptions at all, they tell me.

Mr. CLAFLIN. That is perfectly true, and it is perfectly true that if the Government issues any money, if it has a sufficient redemption fund, there can be no question about it.

The CHAIRMAN. And we have really now 1,100 millions of gold warehoused against it, and if anybody wanted gold, that would be available before they needed to call upon the Government reserve fund against the greenbacks.

Mr. CLAFLIN. Of course, the difficulty about that, as I understand it, is this, that those warehouse receipts are already in the hands of various people who may not want to part with them. The Government can not use that gold.

The CHAIRMAN. Oh, no; I was only speaking of the public being already supplied with these certificates upon which they could get coin or bullion gold if they really desired it for shipment.

Mr. CLAFLIN. Oh, perfectly for shipment.

Senator SHAFROTH. They are in circulation pretty generally now, are they not, among the people?

Mr. CLAFLIN. To some extent.

Senator SHAFROTH. I drew out some money the other day, and I do not know but what it is all gold certificates. There is a gold note [indicating], there is a gold note, and there is one. All of them are gold notes.

Mr. CLAFLIN. But I think the difficulty in 1893 was not that the people needed gold, but that they were afraid they could not get it. As soon as they found out they could get it, it was all right. The most astonishing thing occurred in 1893. Within two days after Congress had passed the silver purchasing repeal bill there was plenty of money everywhere. The day before there was no money to be had at any price. Twenty-four per cent was freely paid for money, per annum, and that in a mercantile way, too—mercantile paper; choice paper was offered at 24 per cent per annum. It was not a stock-exchange proposition at all. And two days after that same money was freely offered at 8 or 9 per cent, and in another week it was offered at 6 per cent—any amount of it. And within a month after it was down to 3 per cent, or a month and a half after.

The CHAIRMAN. The Chair must remind the committee that Mr. Clafin's time has expired.

Senator BRISTOW. Can not we ask more questions if he has time?

The CHAIRMAN. The committee itself limited the time.

Senator BRISTOW. But I do not understand that we are limited here to the number of questions we can ask.

Senator SHAFROTH. The only thing is, Senator, we have got some people here who are waiting to be heard.

Mr. CLAFLIN. I do not want to impose on the other gentlemen.

Senator BRISTOW. I must say that I object to not being permitted to interrogate the witnesses.

The CHAIRMAN. The committee is in control of its own time, and the committee assigned 30 minutes for hearing Mr. Clafin.

Senator BRISTOW. I did not hear anything about the committee doing that.

The CHAIRMAN. You were here; I do not know why you did not hear it. The committee can easily adjust that. But Prof. Sprague and Mr. Berry are both here and they expect to be heard this afternoon.

Mr. CLAFLIN. I feel that I am really imposing on these gentlemen.

Senator BRISTOW. No. If anybody is imposing on them, it is myself. Have we not plenty of time?

The CHAIRMAN. We have, but Mr. Clafin wanted to leave this evening, and we had Prof. Sprague yield to him in order to give him that opportunity.

Mr. CLAFLIN. Thank you very much, gentlemen. I appreciate your courtesy.

The CHAIRMAN. We are very much obliged to you, Mr. Clafin.

Now, let us come to some understanding.

Senator BRISTOW. I think we had better. There is no use in my wasting my time here undertaking to acquire information in regard to this bill, when we have a witness of this kind who understands the business feelings and needs of the country, and then not have an opportunity to ask him questions. That is the objection I make.

The CHAIRMAN. The rights of the witnesses themselves should be taken into consideration. Prof. Sprague, of Harvard, has been here

for 10 days. He went home and came back, and he has been interfered with three or four times. Mr. Claffin having only a limited number of minutes that he could give us, we persuaded Prof. Sprague to wait. It was not with any view to cutting you off, Senator. The matter was submitted to the committee, and the question was asked should we give this time to Mr. Claffin, and it was agreed that we should, and having done that it is the duty of the chair to remind the committee when the time arrives. The committee has the right then to proceed with another witness, if they want to. The matter is entirely at the will of the committee. I am not disposed to make any arbitrary suggestions or rules about it. I only want to be fair to the men who have been good enough to come here to give us all the information they can.

Senator SHAFROTH. Whom shall we call now?

The CHAIRMAN. We ought to say what we are going to do. I am perfectly willing to leave it to the committee.

Senator BRISTOW. I am perfectly willing that the committee adjust itself to the convenience of the gentlemen, provided that if we do not get through they will come back and let us finish up at some other time. I think it would be very much better to get through with one witness before we take up another, and try to arrange so that the gentlemen who come can remain until we get to them, and not have so many of them at one time.

Senator SHAFROTH. But Mr. Claffin was not really entitled to go on the stand at all at this time. He was put on the stand on the plea that he could get through in 10 minutes. We gave him 30 minutes.

Senator BRISTOW. I think it is a good deal of a farce to call a man of Mr. Claffin's importance and with his relations to the business interests of this country, and then give him only 10 or 30 minutes.

Senator SHAFROTH. That is all he asked.

Senator BRISTOW. That is not all I ask.

Senator SHAFROTH. I am perfectly willing that you should have him back here.

The CHAIRMAN. We could ask him to come back here with perfect ease and with perfect propriety.

Senator BRISTOW. That is the objection I make, and I think it is a most important thing. I do not look upon this as lightly as some gentlemen seem to. I think it is the most important piece of legislation, by all odds, that this Congress will undertake, and I do not believe you can take too much care.

The CHAIRMAN. We are all agreed on that, Senator.

Senator BRISTOW. And when we have men who have valuable information which we need in legislating upon this question I think we ought to exhaust every means that we have to get such information.

The CHAIRMAN. We have pursued that course with the exception of this one witness, and this witness had to go, he said.

Senator SHAFROTH. Let us take up some one else, then.

The CHAIRMAN. Take Prof. Sprague and ask him any questions you wish to, and then we will take up Mr. Berry.

Senator BRISTOW. Anything the committee desires, just so we have full opportunity to bring out the information.

STATEMENT OF PROF. SPRAGUE—Continued.

Prof. SPRAGUE. I have prepared a short statement regarding Senator Shafroth's bill and a statement regarding the Aldrich-Vreeland Act, in response to a request from Senator Bristow.

If Senator Shafroth's bill were passed in its present form it would not add a single dollar to the existing amount of paper money in circulation or reduce the amount of gold in the country. It would provide in the course of time for a single issue of notes to take the place of gold certificates, the national-bank notes, and the United States notes. The total of these issues is something like two billions of dollars. But it would require the conversion of only about 700 millions of the gold certificates to put back of all of the new issue, the 50 per cent gold reserve provided in the bill.

When the process of converting the national-bank notes had been completed we should have about 1,700 millions of notes protected by a gold reserve of 850 millions of dollars. There would be no more difficulty in continuing the redemption of these notes than there is about continuing the redemption of the notes which they are to replace; and that is no difficulty at all.

Presumably, in the course of the next 10 years, as during the last 10 years, we shall add considerably to the stock of gold money in this country, because of the large current gold production of which we, like other countries, will naturally acquire some share. I can conceive, therefore, of no circumstances in which the issue of these 1,700 millions under the proposed arrangement would occasion any serious difficulty. I think, however, the measure might be improved in one respect if provision were made for a gold reserve of 55 per cent, with the further provision that in case the reserve should fall to 45 per cent the Government should then replenish the reserve by the sale of its obligations, either long-term bonds or short-term notes. It is wholly unlikely that in any circumstances this reserve would drop from 55 to 45 per cent, for it would mean that something like 150 millions or more of these notes would be redeemed; and it is wholly unlikely that any such amount of gold would in any single period be required for export purposes or otherwise.

If the reserve were placed, however, exactly at 50 per cent, it might be frequently necessary for the Government to secure gold elsewhere on account of a very slight amount of redemption.

There is a provision in this bill which I regard as wholly unnecessary and also as calculated to discredit the notes, since it somehow assumes that the notes to be issued are not an entirely satisfactory circulating medium. I refer to the provision of the bill empowering the Secretary of the Treasury to require banks to hold such proportion of these notes as a constituent part of their reserve as may be deemed advisable. If this issue of notes needs any such administrative protection as that, it is not a thoroughly sound, well-butressed issue. I think it quite undesirable to give the Secretary of the Treasury such authority. If this bill were passed—

The CHAIRMAN. After mentioning the bill you had better state the number, otherwise it will be confused with the measure we have been considering.

Prof. SPRAGUE. Senate No. 3041. If this bill were passed, and the conversion of various kinds of notes into a single issue were

completed, our banking situation would be practically what it is at the present time except that the national banks would no longer be issuing the national-bank notes, but the difficulties which we have experienced in the working of our banking machinery would remain, neither affected for the worse nor for the better. This bill is a purely monetary bill concerned with that part of the circulating medium which there is every reason to suppose will be constantly required for monetary purposes by the people. If attached to a banking bill, it would be an obstacle to the passage of any measure whatever, because there are a large number of people in this country in whose minds are ever present the experiences of the country in the seventies and the eighties, when our currency was redundant. It is a measure which to my mind, if presented to Congress, should be presented on its own merits, by itself. There would then be a far better chance to convince the public of its merits than would be the case if it is a portion of a measure which is already so complicated that it is impossible in any short period of time to set forth its merits.

That is all on Senator Shafroth's bill.

Senator SHAFROTH. That is very satisfactory.

The CHAIRMAN. Now you have another one which Senator Bristow asked you about—the Vreeland bill.

Prof. SPRAGUE. I have reexamined the Aldrich-Vreeland bill and am of the opinion that the obstacles which prevent its being a very serviceable measure are largely sentimental, but they are none the less real on that account.

This measure when passed purported to be an emergency measure. Bankers and the public generally look upon the resort to the powers granted in the bill as an indication of a serious situation of something bordering upon a panic. The notes authorized by the bill perhaps could be put out without loss by the banks at the present time, but they will not be put out because of this feeling not only among bankers, but among the people generally. This suggests to my mind the defect of purely emergency measures as contrasted with measures along the lines of the Glass bill, which we have been considering.

The machinery set up by the Glass bill will be in operation constantly. There will not be so much business for the Federal reserve banks in ordinary times as in times of moderate or great strain, but the increase in business by the Federal reserve banks will not be apparent to the general public. On the other hand, there is a certain machinery provided in the Aldrich-Vreeland bill which will only be set up on special occasions. It is therefore a little analogous to clearing-house loan certificates in its sentimental effect, because clearing-house loan certificates have only been issued on occasions of serious crisis. The good effect of their issue is largely nullified by the alarm which their very issue creates. And so with this bill.

I do not think that slight changes in the conditions under which these notes could be issued, such as changes in the constitution of the associations or changes in the character of the security to be deposited or modifications in the taxation of these notes, would make any appreciable difference.

Senator BRISTOW. What changes? What I asked was that you suggest the changes to be made in it that would make it adaptable.

Prof. SPRAGUE. That is what I expected to do, but after looking over the bill I came to the conclusion that the powers in the bill were sufficient; that it is not through modification in the terms of the bill that would make it appreciably more helpful than it has been in the past. You can not overcome by slight modifications in its provisions the sort of sentiment which I believe is the explanation of the failure to use the bill, and the unwillingness of the bankers to use the bill. I may be wrong in this opinion, but that is the conclusion at which I have arrived. I think that probably any purely emergency measure, however agreeable it may be made in its details, will not be used unless the emergency is extreme.

Senator BRISTOW. Mr. Claffin suggested that if our present currency system was left as it is, and a number of associations formed by the bankers, these associations should rediscount for their members and issue a currency in the nature of an asset currency, and that it would take care of the desire for flexibility without disturbing our currency system which is already in existence. Do you think these associations provided for in this bill could be arranged so that they could be organized and be in existence and used for the purposes suggested by Mr. Claffin, and in that way overcome the prejudice that you are referring to?

Prof. SPRAGUE. That is conceivable. If the conditions of issue were made so easy that it would almost be worth while to take out these notes in ordinary times, it might be done. If, for instance, you should set up an arrangement with the avowed purpose that it should be used every year, in the autumn, we will say, and at other times if there was a very moderate strain, it is conceivable that the bankers might get in the way of using that machinery. I am, however, not altogether certain that I should go along with Mr. Claffin in this suggestion, which it is fair for us to recall he made rather in an offhand fashion. I should be inclined to fear that if these associations of banks were set up with power to rediscount and issue notes pretty freely, they would issue notes pretty freely and that credit would be undesirably expanded. I do not feel certain that these more or less voluntary associations of banks with these wide powers would handle these powers as carefully and wisely as a group of regional banks, more or less under the control of a Federal reserve board. No one can say that the scheme would not work well, but I should feel a little less confident of good results than I should from the kind of institutions proposed in the bill before us.

Senator BRISTOW. You think the banks would be inclined to inflate the currency under the system suggested by Mr. Claffin more than under this regional-reserve system that is suggested in this bill?

Prof. SPRAGUE. I am inclined to think so.

Senator BRISTOW. Why? What makes you think that?

Prof. SPRAGUE. My observation is that the bankers in this country, and indeed in other countries as well, in periods of active business lend to the full extent of their lending power, whatever that may be. The moderate contraction of the last 10 months would not, in opinion, have taken place if the banks had held in their vaults say a couple of hundred millions more of cash with the same deposit liabilities that in fact they had. I believe if there had been 200 millions more of cash scattered about among the banks in this country,

that instead of moderate contraction during the last few months there would have been further expansion.

Let us suppose that we had had such voluntary associations of banks with power to issue notes. They would have rediscounted to a considerable extent during the last autumn. And I am inclined to think that the notes which they put out would not have come back for redemption; that they would have remained in circulation and a little of the gold certificates, of United States notes that are now in the pockets of the people, would have drifted into the coffers of the banks and would have made there a basis for further credit expansion. I am not sure of this, as I have said before, but I do believe that we are more likely to get that element of conservatism in the handling of these great powers of extending credit through a comparatively small number of boards and through a central board at Washington than we are through an indefinite number or an uncertain number of voluntary associations of banks.

Senator BRISTOW. That is all I care to ask the professor.

Senator REED. First, Professor, I want to ask you if you have ever been a practical banker yourself?

Prof. SPRAGUE. No, sir.

Senator REED. You have studied and read, I presume, a very great deal on this question?

Prof. SPRAGUE. And, I may add, argued a good deal with banker friends.

Senator REED. I only wanted to know just whether you had seen the practical side, because I wanted to ask a question which would relate to that, which I am going to ask you now.

Were you here when Mr. Alling gave us his views with regard to gold reserve?

Prof. SPRAGUE. Yes, sir.

Senator REED. His plan differed from this plan suggested in the bill, radically. Have you given any thought to the suggestions?

Prof. SPRAGUE. It is a little difficult to express an opinion about a proposition which one has heard only in these hearings before there has been any opportunity to read them over.

Senator REED. I just asked you if you had considered them?

Prof. SPRAGUE. I had some impressions, but they are not such settled convictions as I might have after reading over what he has said. But my feeling as he outlined his scheme was that he was attempting to secure certain results by means of mathematical ratios which, to my mind, can only be secured by a competent management. I do not believe that it is possible to devise any system of ratios of gold to note issues and ratios of cash reserve to deposit liabilities of Federal reserve banks which will insure that the powers of such institutions will be wisely used and be available for all sorts of situations. It does not, to my mind, matter very much whether we place a 40 per cent reserve or a 33½ per cent reserve or any other ratio of reserve against the notes or other obligations of these Federal reserve banks. Whatever the ratio is, the management will be obliged to maintain a considerable reserve above that ratio in ordinary times, so as to have something to use in emergencies. But what they should have above the minimum legal requirement can only be determined by experience.

Senator REED. Yes. And frankly speaking, any system which has not been tried out must necessarily contain at least some of the elements of an experiment?

Prof. SPRAGUE. Exactly.

Senator REED. I wish, if you could do it in a very brief statement, you would give us your idea of what would constitute an ideal banking system in the United States, disregarding, now, this bill.

Prof. SPRAGUE. Some years ago I prepared a series of articles later published as a book with the title "Banking Reform in the United States." The propositions which I then made differed to some extent from those which we have before us, and differed even more from those in the bill of the National Monetary Commission, in that I took the position that the minimum amount of change should be made in our banking system necessary to secure a given result; and if I were to develop an ideal banking system or measure of legislation it would involve making a minimum amount of change to remove present defects.

Senator REED. No; that is just exactly what I do not want you to do. I want you just to imagine this country now as a country without a banking system at all, and you gifted with the absolute power to establish a banking system which would be the best that your ingenuity could conceive.

Prof. SPRAGUE. I should, in the first place, permit banks to be established with branches within at least county areas, and perhaps somewhat larger jurisdictions, although I should not be willing to go so far as to establish a branch bank system covering an area as large as the State of New York.

Senator REED. You say a branch banking system. That implies a head, and it would mean that there should be a central bank?

Prof. SPRAGUE. No; I mean that any bank would organize branches. The biggest difference between our banking system and that in other countries is that we do not permit the individual banks to have branches, and I do not believe in the overgrown system of branches which characterizes banking in many other countries. I think, however, we have gone a little too far in splitting banks, localizing banks, and I should like to see our banks given the power to operate branches within a moderate area. I believe that that would give better banking accommodation in sparsely settled sections of the country.

Senator REED. So that now you would establish a system of banks in which a member of that system would have the right to have branches?

Prof. SPRAGUE. Within restricted areas.

Senator REED. Within restricted areas. Very well. Now, what is the next step?

Prof. SPRAGUE. In the second place, I should permit these banks to conduct every variety of financial business, the operation of savings departments and of certain kinds of trust-company business. I am convinced that experience shows that the "department store" principle in banking is a sound one under proper legislation and supervision, of course.

This would give the national banks the ability to hold their own against State institutions which, in many parts of the country, they do not now possess.

As regards reserves, I should, because of the large number of our banks, continue to impose a reserve requirement. This is a requirement peculiar to the United States; and the fundamental reason is

the large number of banks which we have; and my slight modification with reference to branch banks would not greatly diminish the number.

I should have no more than two classes of banks—country banks and reserve agent banks. I would permit any bank that cared to enter into this class of business to become a reserve agent bank. All banks which did not care to qualify for such business would be country banks, wherever situated. The reserve agent bank would have to have a higher capitalization than country banks and hold a larger reserve, of course. But I would permit country banks to keep perhaps a third of their required reserve, whatever it might be, with these reserve agents.

I should further insert a provision in the law regarding the method of paying interest upon bankers' balances, whether counted as a part of the required reserves or not.

The trouble which we have experienced in the past on account of the concentration of balances of country banks in city institutions is very largely due to the fluctuating portion of such balances. Country banks, for example, increase their reserve balances by perhaps 50 to 100 millions of dollars between the end of May and the end of July. These balances and something more are withdrawn in September, October, and November. The city banks, because they pay interest upon daily balances, must fully employ them. When they receive funds from country banks in June, they must employ those funds, even though they know that those funds will be withdrawn in September or October. Now it happens that there is no temporary requirement for accommodation from city banks during just those few months when their country balances are at the maximum. It is possible, however, in most years to lend these funds on stock-exchange securities. It is a favorite period of the year for bull campaigns in stocks. When the balances must be withdrawn in the autumn, these stock-exchange loans are contracted and prices go down. No one is harmed in ordinary years except those who are speculating in securities; but in unusual years it is very difficult to withdraw the funds thus employed.

If the bankers themselves had adopted an arrangement for interest on balances under the terms of which interest would be paid on minimum monthly balances during periods of six months, there would not be this temporary inflow of funds to New York City, the use of which has never served any particularly useful purpose. A country bank, under this arrangement, would receive interest on that balance, the lowest balance which it held—not to any day during a period of six months, because that would be unfair, but its lowest average monthly balance during any six months' period.

A simple modification of the method of paying interest on deposits like this would have vastly diminished the disturbances which in the past have been caused by the concentration of bank balances in the cities.

Some years ago I was of the opinion that the changes which I have mentioned, together with a specially taxed and definitely limited asset currency, would be entirely sufficient to enable our banks to pass through periods of emergency without breaking down or without suspension of cash payments. I am no longer of that opinion. Both bankers and the public have lost confidence to such an extent in our

banking machinery that confidence can not be regained unless some pretty considerable and striking change is made in the system.

On the whole, I am therefore of the opinion that some sort of central rediscounting institutions are now needed to give bankers and the public confidence in the system.

The stronger, however, the individual banks are and the more perfect their arrangements among themselves the less burdensome will be the task which will fall to the rediscounting institutions. The bill of the National Monetary Commission did not add in any direction to the strength of the banks or strengthen their relationships one with the other, but left things as they were and provided a rediscounting association. The present bill does make important changes in the relations between banks, but, as I said this morning, I think it goes too far in breaking up those arrangements, with the consequence of concentrating relationships between the many thousands of banks on the one hand and the Federal reserve banks on the other.

I believe, as I intimated this morning, that the reserve agent banks might well act in a sense as buffers between the regional banks and the great mass of country banks, not separating the country banks from the regional banks by any means, but continuing the relationships with reserve agents so that the country banks will have more places to which to go for accommodation, and not find accommodation unduly restricted because of lack of a particular kind of security.

Putting it in another way, it seems to me altogether wise to minimize, so far as is compatible with the purposes in view, the duties and responsibilities of the regional banks; and particularly is this true during the first few years after institutions are set up. If they work well, it may in the future be found a better arrangement to withdraw country balances entirely from reserve agents. If the regional banks were providing a better service, that would be pretty certainly largely done without any legislation.

If I were going to add an entirely novel provision to this bill it would be the one regarding the method of paying interest upon bankers' balances. There will be bankers' balances, even if this measure is passed, because there are large bankers' balances over and above reserve requirements, and there will still be the tendency for bankers to send temporarily idle funds to the cities for short periods of time in order to get the 2 per cent; and the situation that is created by the use of such temporary funds by the city banks will create pressure upon the regional banks for accommodation. If it were thought feasible to insert a provision in this bill regarding the method of paying interest upon bankers' balances, I think it would prove of very great service to the managing boards of the regional institutions.

Senator SHAFROTH. Professor, I want to ask you just one or two questions. Will you state whether, in your judgment, the provision concerning the discounting of paper at the regional reserve bank and the issuance of currency upon the same would take care of the national-bank notes that are outstanding now, the 700 millions of bank notes?

Prof. SPRAGUE. I suppose it could, but it would be most undesirable. Suppose, for instance, that these notes are retired, according to the provisions of this bill, 5 per cent year after year. That

would mean 35 millions each year. Well, 35 millions might not make a very appreciable impression, particularly if currents of trade were such as to bring in that year a very large amount of gold. But next year another 35 millions is withdrawn, and another 35 the year after. Sooner or later this withdrawal of the national-bank notes would have an effect upon bank reserves. It would not lessen the amount of money in use among the people in their pockets; it would come out of bank reserves, and the banks would find that their lending power was lessened somewhat. They would find it necessary to go to the Federal reserve banks to rediscount, and it might work out that in the course of 20 years the volume of rediscounts would expand and provide the security for an equivalent of these national-bank notes which were being retired.

I think that might happen, but I think it most undesirable that these Federal reserve banks should be doing so large a business right along simply for the purpose of keeping national-bank notes afloat, those notes which have been for many years a permanent part of the circulating medium and which the ordinary requirements of the population absorb.

Senator SHAFROTH. Then you think that the operation of this bill, which is called the Owen-Glass bill, is not desirable so far as its feature of retiring national-bank currency is concerned?

Prof. SPRAGUE. Exactly. I think it most unsatisfactory.

The CHAIRMAN. I will ask you just one question, Professor. In case of the substitution of legal-tender notes for the present national-bank notes, do you think that that would cause a material increase of credits in the country by enlarging the reserves?

Prof. SPRAGUE. I do not. The national-bank notes are now pretty completely in circulation outside of the banks in so far as they are not held by the State banks as reserves.

The CHAIRMAN. As pocket money, you mean?

Prof. SPRAGUE. Yes, as pocket money by the people, in so far as they are not held by the State banks as reserves. Every year as the business of the country increases an increased amount of money is used outside of the national banks in the pockets of the people or by State banks, so that I do not think the conversion of the seven hundred odd million dollars of national-bank notes to legal-tender notes would make any appreciable difference now, and such slight difference as it might make would be a diminishing influence if we assume no further increase in the total. I regard it myself now as quite negligible.

Senator SHAFROTH. Professor, I have been requested to ask you a question. While I am anxious to have Mr. Berry go on the stand, I think I ought to ask this one question. What would the effect be, in your judgment, upon the repeal of the United States statute that imposes a tax of 10 per cent upon State bank circulation? Suppose it were repealed.

Prof. SPRAGUE. I think that we have altogether too many banks in this country to permit them generally to issue notes secured generally against their assets. There are so many banks that it would be probably out of the question to set up any system of regular redemption. A provision of law forbidding any bank to pay out the notes of any other bank would have some influence in checking undue expansion of the notes, but it would not be sufficient. Many people

are constantly dwelling upon the Suffolk banking system of Massachusetts and its device of daily redemptions. That system was a very perfect one so far as its redemption device went. The notes were redeemed steadily, constantly, and under that system it was impossible for any single bank to largely increase its note issue, for the reason that it was certain that an unusually large amount of its notes would be presented against it for redemption; but when all of the banks in Massachusetts were expanding at the same time, the system of daily redemptions did not check the expansion in the slightest degree. While each bank found that more of its notes were being presented for redemption, each bank found that it had more notes of other banks to be redeemed as an offset, and it worked just as it does in the case of checks. Checks are steadily redeemed, but if all of the banks are expanding, clearing-house operations do not reduce in the slightest degree the volume of deposits.

The result in the case of Massachusetts banks was this: That they increased their note issue to such an extent that practically all of the gold money was forced out of circulation. In the first place it was drawn into the bank by the simple process of substitution, but it did not stay there. Loans continued to be expanded, and in making payments outside of New England, where the notes were not so satisfactory as gold, the gold gradually drifted away. The result was that the banks were conducting business—both deposits and notes steadily retired—on a basis of practically no cash whatever. That is what would happen in this country under a system of universal asset currency even though an arrangement for steady redemption were set up.

In the course of time bank notes would gradually be substituted for lawful money and gold now in circulation. That would be attracted into the banks and be made the basis for additional loans, which would force up prices and gradually force an amount of gold out of the country unless we had a collapse before that process was completed. It is only by moderation in loans that credit can be kept within due bounds. No processes of redemption will accomplish that purpose when the banks generally are expanding their loans.

Senator POMERENE. I want to ask you just a question or two. Assuming that this regional system of banks is adopted, what do you say as to the wisdom or unwisdom of permitting the public to subscribe for this stock, instead of the banks; either in part or whole?

Prof. SPRAGUE. I see no objection to it whatever, and I do not feel that there would be any tendency on that account for the people to demand that the Federal reserve banks lend directly to individuals. People who invested in the bank stock would be a comparatively small number compared with the total population of the country.

Senator POMERENE. In your judgment they would subscribe for that about as they would subscribe for an issue of bonds if the Government should issue bonds?

Prof. SPRAGUE. Yes.

Senator POMERENE. And if that were done, would you not to that extent be increasing the bank capital of the country—that is, by not requiring so much to be paid or subscribed by the banks?

Prof. SPRAGUE. Well, I am not certain of that. The banks now, most banks, have various investments which are not strictly of a banking sort—bonds, for example. I should expect that the banks would

sell some of their bonds to provide themselves with the funds for their capital subscription. The bonds we will assume for the sake of the illustration will be purchased by the individuals who might, under the other arrangement, have bought stock in the proposed bank.

After all the amount of funds which are available for banking purposes depends more largely upon the amount of funds which people leave with the banks than it does upon the capital, and the increase in capital is not necessarily a net increase in the available banking fund. I think, however, it would probably, to some extent, though not to the extent of the capital subscription, add to funds available for banking purposes.

Senator POMERENE. Senator Bristow's objection seems to be that the country banks are opposed to subscribing for the amount of stock in the regional banks provided for in this bill. It occurred to me that if that objection is sound, by opening up this stock subscription to the public you could provide for the necessary capital for the regional banks in that way.

Prof. SPRAGUE. It might make necessary some changes in the method of selecting the managements of the Federal reserve banks.

Senator POMERENE. Probably so.

Prof. SPRAGUE. That would open up a wide field for discussion. If the capital can be disposed of to individuals without involving any other change in the bill, I do not see that there is any objection which can be made. The one that the bankers made seems to me to be rather fanciful. They contended that then the banks would soon begin to do business with the public. I do not think there is anything in that at all.

Senator POMERENE. Just another question on which I want to get your view. This bill provides that the reserve funds for the redemption of the reserve notes shall be gold or lawful money. What do you say as to whether that should be limited to gold or not?

Prof. SPRAGUE. I do not feel that that is a matter of serious importance. The European central banks, with the exception of the Bank of England, have always had to support a considerable amount of other than gold money in their reserves. The amount of lawful money which this institution would in any conceivable circumstance find itself burdened with must be exceedingly small, because, as I have said several times, practically all of the lawful money is in constant use outside the banks. If lawful money is not going to be increased in quantity, I think it is a matter not worth bothering about, whether the reserve is to be gold or gold and lawful money.

Senator SHAFROTH. That is all. We are very much obliged to you, Professor.

STATEMENT OF HON. WILLIAM H. BERRY, OF CHESTER, PA.

Senator SHAFROTH. Mr. Berry is the gentleman whose book we started to read in the committee and of which we read several chapters.

I wish it also to appear in the record that Mr. Berry was at one time treasurer of the State of Pennsylvania.

Senator POMERENE. And he is now collector of customs.

Mr. BERRY. There are two general schools of thought on this currency question, one of which supposes that it is necessary that a certain restraint be put upon the activities of the people. I think that school would perhaps be most ably represented by the professor who has just preceded me and to whose remarks I have listened with so much interest.

The other school of thought is that in which the concept of individual freedom in the matter of activity is the great consideration. I am of the second class. I do not believe that any restraint should be put upon the activity of any man. I do not believe that it is wise to put any restraint upon any individual who wishes to exercise his activity in the production of wealth; nor do I believe that any man should sit in judgment as to what activity he should engage in.

Therefore I approach this subject from a different standpoint altogether from that which the professor has presented. I am sorry to break in upon your deliberations because it will be a rather abrupt change in the viewpoint at least.

I am not a banker. I am like the fellow who when he was asked whether he was the mate of the vessel or not said, "No; I ate the mate."

I am the fellow who stands on the outside of the bank, and I speak from the standpoint of the business man who uses the banks.

The Senate Committee on Banking and Currency sent out a list of questions, which in my judgment were very searching and covered the entire field of thought under consideration. I spent a good deal of time in endeavoring to intelligently answer those questions. There were 33 questions, but they are not all quite pertinent to this discussion this afternoon. I shall not trouble you with any of the details in regard to the organization of the bank and I have no suggestions to make along that line.

Senator SHAFROTH. Mr. Berry, I read those answers, and I feel that they ought to go into the record right here. They are splendid answers to those questions.

Mr. BERRY. I am perfectly willing to put them into the record, but I thought it would be rather an abuse of your time to undertake to read them all now. There are a few which it will be necessary for me to refer to as I make my argument on this bill in order that they may be properly understood.

The CHAIRMAN. I think it would be well to have the questions of the committee and the answers prepared by Mr. Berry incorporated in the record.

Mr. BERRY. I want to make this preliminary statement. I believe, with the President, that every man who has an asset to hypothecate ought to be able to secure credit in a competitive market, in a market which would establish a just interest rate, and it is with that point in view that I have prepared the figures I have here to submit to this committee.

I believe that to be the great desideratum.

Now, it will save time for everybody concerned if I go over some of these answers and refer to portions of them respecting matter which I think very pertinent. In the first place, I would like as many of you gentlemen as can to make use of this table. It is a table compiled from the report of the Comptroller of Currency and appears in my books.

Senator SHAFROTH. That shows that only 8 per cent of the money of the country is used.

Mr. BERRY. My remarks will be largely a statement of facts.

The first question asked by the committee was:

What are the essential defects of our banking and currency system?

My answer to that is: The basic defect of the system is in the inability of the banks, collectively, to secure legal tender money in sufficient quantities to enable them to safely meet the legitimate demands for credit.

By "legitimate demands" I mean such as are accompanied by the offering of adequate security.

Any such demand for credit would incite an active competition among the banks for the privilege of supplying it, if they could safely do so; in which case an equitable interest or discount rate would be automatically established, and discrimination in favor of certain borrowers would be reduced to the minimum or entirely eliminated.

Under natural laws, as well as existing statutes, the power of the banks to extend credit is limited by the amount of reserve money that they hold.

They can not discount paper beyond this point.

The CHAIRMAN. There is not the slightest doubt about that.

Mr. BERRY. I will continue. Banking is founded and operated upon the law of averages determined by experience. Of the checks drawn by an individual against his account, only a small percentage will demand cash payment; the rest will be deposited, and a transfer of credit on the books will take care of them; but those who ask for the money must receive it. So that while the exact amount of money necessary to promptly meet this demand in any given case may be debatable; the fact that the bank imperatively needs some money in order to discount paper and physically care for the checks drawn against an account is beyond question.

Safe banking requires a liberal percentage above the amount ordinarily found necessary to pay checks.

In addition to this physical limitation, and because of it, the statutes require the national banks to hold an average of about 12.5 per cent of legal tender against deposits; but by means of deposits of legal tender in these banks by the State banks, trust companies, etc., the general average in the banks collectively may be, and is, considerably reduced.

A point is, and must be finally reached, however, when no further reduction in the per cent of reserve can be safely or legally made, and when this point is reached no further credit can be floated, no matter what security is offered.

In such case the transfer of cash from one bank or one city or even from one country to another can not help the general situation, since it does not increase the total held, and therefore the absolute solvency of our banks, as proven by their four billions of unimpaired capital and surplus, which is held in the form of so-called quick assets (stocks and bonds), is of no use whatever in the premises.

In such case there is nothing the banks can do but refuse to extend credit. If credit is refused, panic conditions are set up which compel the banks to withdraw existing credit.

Inevitably extensions will be refused to and withdrawals made from those in whom the bankers are not personally interested, and all the evils of a so-called money or credit trust or monopoly at once appear.

Therefore the demand for credit can not be met.

A careful study of the following table, taken from the report of the Comptroller of the Currency, June 30, 1912, will show that 10 per cent of reserve money held against deposits approaches the danger line and is certainly the limit of safety.

The table in my answer shows the condition of 25,193 banks of all kinds, compiled from the report of the Comptroller of Currency, June 30, 1912 (pp. 39 and 40).

It is not an exact transcription. Two or three of the columns have been brought together so as to condense it. All of the obligations are in one column and all the cash assets are in another column, so that the basis of percentage can be had.

The table is as follows:

[The national-bank notes are included in the demand obligations. The 5 per cent redemption fund is also included in the total cash.]

[Amounts in millions.]

Years.	Capital and surplus.	Loans and discounts.	Government deposits.	Total cash in all banks.	Total demand obligations.	Per cent of cash to obligations.
1864	\$391.0	\$70.7		\$198.3	\$544.8	\$18.5
1865	451.5	362.4	\$58.0	199.4	830.5	24.0
1866	561.2	550.4	39.1	231.9	1,122.7	20.0
1867	577.7	588.5	33.3	205.6	1,101.7	17.1
1868	595.8	655.7	28.3	200.7	1,291.8	15.5
1869	615.7	686.3	12.8	162.5	1,337.5	12.1
1870	646.4	719.3	13.2	187.7	1,356.3	13.9
1871	659.8	789.4	11.1	194.0	1,578.2	12.2
1872	748.0	871.5	12.4	177.6	1,693.3	11.6
1873	748.5	1,439.9	15.1	218.2	1,776.5	12.3
1874	750.2	1,564.5	10.6	252.2	1,875.8	13.4
1875	846.8	1,748.1	10.2	238.7	2,115.3	11.2
1876	863.9	1,727.1	11.1	226.4	2,084.5	10.8
1877	874.7	1,720.9	10.9	230.5	2,115.0	10.8
1878	825.4	1,561.2	25.6	214.6	2,043.4	10.5
1879	826.5	1,507.4	252.1	216.3	2,254.0	9.6
1880	825.4	1,662.1	10.7	285.5	2,279.7	12.5
1881	864.3	1,901.9	12.2	295.0	2,621.5	11.2
1882	900.7	2,050.3	12.6	287.1	2,781.9	10.5
1883	973.4	2,133.6	13.9	321.0	2,899.5	11.0
1884	1,036.0	2,260.7	14.2	321.2	2,875.9	11.1
1885	1,040.0	2,272.3	14.0	414.3	3,017.5	13.7
1886	1,080.5	2,456.7	17.1	375.5	3,067.1	12.9
1887	1,267.0	2,944.9	23.2	432.8	3,498.2	13.1
1888	1,347.4	3,161.1	58.4	446.1	3,636.6	13.0
1889	1,425.2	3,475.2	46.7	499.1	3,953.8	14.0
1890	1,552.7	3,842.1	30.6	478.3	4,219.6	11.3
1891	1,648.9	3,965.9	25.9	478.1	4,346.2	11.0
1892	1,721.4	4,336.6	14.2	586.4	4,820.3	12.1
1893	1,781.1	4,368.6	13.7	515.9	4,896.1	10.7
1894	1,752.2	4,085.0	14.1	688.9	4,837.1	14.2
1895	1,759.6	4,268.8	13.2	631.1	5,113.1	12.3
1896	1,756.3	4,251.1	15.4	531.8	5,160.7	10.3
1897	1,725.2	4,216.0	16.4	628.2	5,221.7	12.0
1898	1,724.7	4,652.2	52.9	687.8	5,831.0	11.7
1899	1,734.7	5,177.6	76.3	723.3	6,944.4	10.4
1900	1,906.9	5,657.5	98.9	749.9	7,603.1	9.8
1901	2,031.7	6,425.2	99.1	807.5	8,878.7	9.0
1902	2,298.5	7,189.0	124.0	848.1	9,838.1	8.9
1903	2,595.3	7,738.9	147.3	857.2	10,060.1	8.5
1904	2,753.4	7,982.0	110.3	990.6	10,509.9	9.4
1905	2,902.7	9,027.2	75.3	994.1	11,871.4	8.3
1906	3,224.2	9,893.7	89.9	1,016.4	12,816.6	7.9-6.5
1907	3,335.8	10,763.9	180.7	1,113.7	13,828.2	8.0-6.6
1908	3,513.7	10,438.0	130.3	1,368.3	13,528.5	10.0-8.6
1909	3,634.6	11,373.2	70.4	1,452.0	14,743.2	9.8-8.8
1910	3,832.5	12,521.7	54.5	1,423.8	16,013.5	8.8-8.0
1911	4,018.0	13,046.0	48.4	1,554.1	16,640.5	9.3-8.0
1912	4,176.9	13,953.6	58.9	1,572.9	17,790.0	8.2

It appears from the table that in 1865 the reserve cash held was 24 per cent of deposits; and through the substitution of bonds for United States notes, and an accompanying expansion of credit amounting to \$860,000,000, the reserve was reduced to 11.6 per cent in 1872. This forced a curtailment of credit that caused the panic of 1873.

This curtailment raised the percentage of reserve to 13.4 per cent in 1874, from which time it steadily fell to 9.6 per cent in 1879. Credit was restrained and panic was only averted by the deposit of \$250,000,000 of Government funds in the banks. (See table, p.563.)

In the next decade the coinage of silver under the Bland-Allison Act increased the legal tender money in banks, and for this reason an increase of \$700,000,000 of new credit was accompanied by a rise in the reserve cash to 14 per cent in 1889.

This result was hastened by the fact that in 1878 the balance of trade turned in our favor, and in 1877 the excess of exports over imports of merchandise was \$150,000,000, and continued at this average throughout the decade (1877 to 1887).

This favorable balance in merchandise gave rise to an importation of gold during this period amounting to \$21,654,000 per year, or a total of over \$216,000,000, which, added to the \$240,000,000 of silver coined in that period, made a total increase of legal tender or reserve money in the country, above the current coinage of gold, or \$456,000,000 in the decade. This accounts fully for the rise in per cent of reserve during this period of business activity and credit expansion.

In 1888 the balance of trade turned against us for two years, and in the period from 1888 to 1896 the average in our favor was reduced from \$150,000,000 to \$80,000,000.

I wish you would note carefully this statement, gentlemen. So much has been said of the cost of gold under which we labored in 1893 that this is a very important statement.

This necessitated the exportation of gold, and in this period of nine years \$298,000,000 of gold went abroad, or \$33,000,000 per year. The coinage of silver (\$24,000,000 per year) was not sufficient to supply this loss and provide a basis for expanding credit, and the per cent of reserve cash rapidly fell to 10.7 in 1893. There were no funds in the National Treasury from which to help the banks as in 1879 and other years. New credit was necessarily refused, and panic ensued during which \$280,000,000 of existing credit was withdrawn.

I take the position firmly and undertake to defend it against all comers that that cataclysm was due solely to the exportation of gold, due to the change in commercial relations between this and foreign countries.

Strange to relate, as a remedial (?) measure, the purchase of silver was stopped at this time, and the only available source of reserve money shut off in time of famine, and the country wallowed in the slough of depression until the discovery of new gold fields and new processes for refining low-grade ores in 1897 and 1898 increased the rate of gold production in the world by 50 per cent in two years, and for the simple reason that we had no money in the bank upon which we could maintain the credit necessary for our business.

This gold gave immediate relief, and a period of world-wide business activity and credit expansion was inaugurated, unparalleled in

history. Reserves in our banks were strengthened, but new and undreamed-of concepts of our productive powers were awakened, and the expansion of business soon overtook the increased production of gold, and while reserves increased enormously in actual volume the percentage began to decline and in 1901 had fallen to the unprecedented low level of 9 per cent. The reduction continued until in 1906 it had fallen to 7.9 per cent, although the total reserve held had increased 47 per cent.

At this point it became impossible for the banks to physically meet the cash payments of checks or to comply with the law as to reserves, and in the midst of unparalleled optimism and business activity the crash of 1907 came.

The railroads of this country were overwhelmed with business. There was not an idle car in the United States when the panic struck us in 1907, and that panic came simply because the banks of the country were unable to meet the requirements of the law as to the reserves and they were compelled to withdraw credit.

Senator REED. You spoke of the railroads. That was true of every industry, was it not?

Mr. BERRY. Yes, sir.

In the year ending June 30, 1908, no new credit was created and \$320,000,000 of existing credit was withdrawn.

The deposit of \$100,000,000 of Government funds in the banks, together with \$100,000,000 of forced imports of gold and the withdrawal of \$300,000,000 of credit, raised the reserve to 10 per cent in 1908, since which time it has again fallen to 8.2 per cent in 1912. The figures for 1913 are not at hand, but large exports of gold have been recently made, and the banks have been retrenching, which indicates that the reserve is now at or below the point of collapse in 1907.

It is my firm conviction that the credit situation of the United States is more strained than it was at this time in 1907 by reason of the fact that these \$63,000,000 of gold has left the country, and some additional credit has been expanded.

These facts clearly show the cause of our financial difficulties, and, in my judgment, completely exonerates the banks from all blame for it.

Judged by the work it does, our banking system is, in my opinion, the best in the world. The difficulty is wholly resident in the currency end of the system.

Those are the two great factors in the currency of the Nation.

Our currency is a compound, consisting, first, of legal-tender money uttered solely by national authority; and, second, of circulating credit mainly emanating from the banks.

Money is a resource or asset that is given by law a fixed power to extinguish debt. The credit that circulates with and in lieu of it is a debt or a promise to pay money. It is circulated by and for the convenience of those who create it, and it is received by the public on sufferance.

The proportion of credit, therefore, that can circulate at par with money depends upon the disposition of the people to voluntarily receive it.

Experience in this country, as indicated in the table, shows that 100 per cent of credit to 10 per cent of cash in banks is about the highest proportion possible. The slightest hesitancy on the part of

the banks in paying any kind of cash the customer wants increases the amount required.

The law fixes a lower proportion (100 to 12.5) in the banks over which the Government has supervision.

The law also fixes the amount of money available in the country by designating the sources from which alone it may be supplied, and since the difficulty is resident in the scant supply the law alone can remedy it.

Now I take up the next question:

To enumerate concisely the advantages and disadvantages of the present system.

In answer to the first question I have described at length the one essential defect of the system. There are others, but they are trifling.

The advantages of our present banking system are many.

First. It consists of about 26,000 independent banks widely distributed over an enormous territory, so wide indeed that collusion and monopolistic control are well-nigh impossible.

Freed from the difficulty inherent in the scarcity of reserve money, competition among these banks for the privilege of extending credit would insure an equitable interest rate and a supply of credit equal to the demand.

This would allow our people to indulge their disposition to improve their condition without limit other than their ability and disposition to work.

Second. This system, comprising 26,000 banks, has been a natural growth answering a demand for banking facilities wherever it has appeared. These banks have an unimpaired capital of \$2,000,000,000 and a surplus of more than \$2,000,000,000. They carry \$5,000,000,000 of quick assets (stocks and bonds) and are carrying nearly \$20,000,000,000 of credit upon \$1,500,000,000 of cash.

They have established clearing-house facilities, local and general, that make their credit universally mobile with a trifling cost for exchange. They are capable of furnishing to the people of this Nation all the credit they need, and fail to do so solely because they are unable to convert their vast assets into new reserve money any faster than the gold supply will permit.

No new banking machinery is needed.

If any extension should be needed (as it will), the energy and initiative of the people will supply it when and where it is needed just as it has in the past.

The experience of the past 10 years shows that the natural expansion of business in this country requires an annual increase of bank credit amounting to more than \$1,000,000,000.

Senator REED. You mean a billion dollars of new money?

Mr. BERRY. I mean new credits, new bank credits, discounts of paper, and other methods of established bank circulation.

Senator SHAFROTH. On the basis of eight to one, it would be about \$125,000 of new legal-tender money.

Mr. BERRY. In 1910 the banks extended \$1,300,000,000 of new credit; in 1912, \$1,150,000,000.

Assuming that 10 per cent of legal tender is necessary to carry credit, the banks, collectively, must secure \$100,000,000 of new legal-tender money each year to safely meet this demand.

It is the experience of 50 years that the banks can secure only one half of the new money that comes into the country; the other half remains in the hands of the people. It follows, therefore, that in order that the banks may secure \$100,000,000, an increase of \$200,000,000 must be made in the country each year.

Senator SHAFROTH. Mr. Forgan said that the building up of legal money was one to eight. That is the reason I said \$125,000. You say one to ten.

Mr. BERRY. Yes.

The most favorable view that can be taken of the prospect is that the annual average importation of gold for the last 32 years, which is \$5,000,000—you will find that in the Statistical Abstract. There are mutations—it goes in more rapidly one year than another.

That will be continued, and that the highest yearly production of gold in the country, \$90,000,000, will also continue.

Thirty millions of this annual product is used in the arts, leaving \$60,000,000 for coinage, to which add \$5,000,000 imported, and we have \$65,000,000 as the total possible annual increment from gold, as against \$200,000,000 that the country needs.

In the presence of these facts it is no wonder that the banks do not respond to the demand for credit, for while they have \$5,000,000,000 of quick assets it is impossible to liquefy them in sufficient quantities to do so.

Nor is it surprising that an abnormally high interest rate obtains, nor that discrimination between borrowers leads to charges of conspiracy by lenders.

All of this is inevitable in the presence of a limited supply of credit which is forced by a limited supply of money.

The banks have vast resources unimpaired (stocks and bonds), but are unable to increase reserves, and must refuse credit.

I now take up question No. 3, which is:

What are the chief purposes to be attained by an improved system?

I answer that question as follows:

The chief purpose is to provide an unlimited supply of credit everywhere available, so that any man who has an asset to hypothecate as security can not only obtain credit upon it, but may do so in a market where competition among the bankers will insure him a just interest rate.

Bankers will readily extend credit when it is to their interest to do so, and since only a 10 or 15 per cent reserve is necessary, the conversion of a \$150 asset bearing 4 or 5 per cent interest into cash will qualify them (without reducing their total of assets) to take on \$1,000 of discounts at 6 per cent; but under existing conditions, where all the banks are loaned up (the conversion of the asset into new money being unlawful), the sale of the asset can not be made except at a sacrifice, and when sold by one bank to another does not help the general situation, since to qualify one bank to loan \$1,000 has disqualified another.

There is no remedy along that line.

If there was a place where certain forms of bank assets (the public credit, for instance) could be converted into money, outside of the general market, bank reserves could be strengthened when

needed, and the demand for legitimate credit met, the interest rate kept normal, and the general profit to bankers increased.

I will take up question No. 4, which was as follows:

Should national banks continue to have a bond-secured currency?

I answer "no," and for several reasons.

First, this currency is of less value to the banks or to the community than the capital invested in the bonds would be if it was employed, as it should be, in the more proper and profitable forms of banking.

To illustrate: In round figures \$700,000,000 of bank capital is invested in these bonds; \$35,000,000 more of their cash is impounded in the redemption fund to which the Government finds it necessary to add \$25,000,000 more; making \$60,000,000 absorbed in maintaining current redemption for the notes issued against the bonds. \$650,000,000, or 87.8 per cent of the entire issue, was thus redeemed in 1912.

We may assume that one-half of these notes are constantly loaned and earning 6 per cent for the banks, say \$25,000,000 per annum, to which add \$20,000,000 interest on the bonds, or \$50,000,000 in all accruing to the banks on a total investment of \$730,000,000, or a trifle less than 7 per cent per annum.

Now, if these bonds were sold to the Government for new legal tender United States notes, and the bank notes destroyed, the proceeds (\$700,000,000) held in bank reserves would enable them to carry the five to seven billions of credit which is now needed and can not be granted, and from which at 6 per cent they would receive \$300,000,000 per year, or six times the present return, while general business, using the credit, would reap a far greater return.

Second. The bank note is a mongrel in our currency. It is given, as I believe unjustly, certain monetary privileges and masquerades as money until it reaches the bank, where its real character is disclosed, and it runs immediately to the redemption bureau, for the sole reason that it is not money and can not stand in bank reserves.

Eighty-seven per cent of the entire issue runs back in a single year, and the 5 per cent fund of the banks being found insufficient, the Government furnishes the rest.

Third, a bank note secured by any kind of collateral is a form of credit; it is a promise to pay money, and therefore can not be justly or wisely given legal tender powers and made the basis of further expansion of credit or promises to pay money. There is no bottom to that pit. The piling up credit upon credit is dangerous, and therefore a remedy is not possible through the issue of credit notes of any kind.

Every note or coin that carries legal tender power and circulates in the Nation should be issued by the General Government, not as a loan secured by bonds or any other collateral—for this is banking, and the Government should not engage in banking—but by issuing it in exchange for an equivalent in value, just as the gold coin and gold certificate are issued. This is a Government function and can not be safely or lawfully delegated.

The bonded debt of the Nation in the hands of the banks is an equivalent in value to the money it represents. It is an evidence that an equivalent sacrifice has been made to the community by the

holder of it, and, when surrendered, affords the most just and direct way to supplement the mining of gold and furnish the banks with the needed legal cash basis for their credit.

I have shown, in answer to question No. 2, that in order to safely carry the billion of new credit that the Nation needs each year, \$200,000,000 of new legal-tender money is necessary, and that only \$65,000,000 can be secured from mining importation of gold. We must, therefore, either supply this deficiency with legal-tender paper or refuse to allow business to freely expand—to adopt or practice another proposition, and say, "Hold on."

The only alternative is to reduce the required reserve of legal cash or put some form of credit currency in reserves with it, and thus invite disaster. The issue of credit upon credit in endless succession is to invite disaster and is entirely unnecessary.

Banking is not a governmental function. All the circulating credit, of whatever form, should emanate from the banks. The local bank is alone capable of determining the validity of the demand for or the value of the assets offered to secure credit in its vicinity, and should loan its credit on its own initiative and at its own risk, reaping the benefits and suffering the losses incident thereto. This credit will circulate by the sufferance of the people, because they find it more convenient and less expensive than money. It should—and would, if enough could be carried by the banks—automatically correspond in volume to the growing needs of the people.

It may be noted in passing that since the population is constantly growing and the scale of living constantly rising, that even a temporary shrinkage of credit can not occur unless forced by circumstances outside of the volitions of the people, so that if we remove this outside pressure we need have no concern about retiring any of it.

The sole cause of the failure of credit to expand in response to demand is the impossibility of securing sufficient reserve money to safely carry it. The sole cause of contraction is the effort of the banks to adjust the volume of credit to their scant reserves.

Bank notes, however issued, can not remedy this evil, unless they are given power to stand in reserves—a travesty upon sound finance that would finally result in chaos.

If the essential difference between credit and money is held in mind, much of the confusion of thought on this subject will disappear.

Credit arises out of the voluntary arrangements between individuals, and without the sacrifice of an equivalent in value.

For example, citizen A goes to banker B, and on giving security, directly or indirectly, is given a credit on the books of the bank, which he uses as currency while he still owns and uses the asset against which the credit was issued. In other words, he has the "cake and the penny too," having made no sacrifice whatever except the interest charge. Nor has the banker sacrificed anything beyond the use or impounding of the fractional reserve required to carry the loan, for which, and his service in cashing checks, he is receiving the interest.

On the contrary, legal-tender money is purely a creation of law, and the universal practice of sane lawmakers is to demand the absolute sacrifice of a full equivalent in value by the individual receiving it to the community issuing it.

For example, it is assumed that the effort involved in the production of 25.8 grains of gold is equivalent in value to a dollar of legal-

tender currency, and the law provides that any person presenting that quantity of gold as evidence of this sacrifice, may have it coined into a dollar, but the gold must be sacrificed or devoted to the money used, and finally surrendered in exchange for other valuable things desired. The owner can not keep his gold as an ornament and use it as money at the same time; he can not have the "cake and the penny, too."

Money should always and only be thus issued, and when thus issued an overissue is not to be feared, unless the gold or other form of wealth thus used should by some fortuitous circumstance become accessible in large quantities without effort, in which case sane legislation would deny it the privilege of free coin.

A Government bond is an evidence of sacrifice just as surely as is gold or any other commodity. The concrete result of the sacrifice involved in acquiring a bond is not a piece of any one metal or thing, but is just as tangible in the form of Government machinery and the public works in general as is gold. The Panama Canal is just as useful to humanity and just as real as \$350,000,000 of gold would be.

The community has received the benefit of the sacrifice involved in producing the bond in the form of a perpetual utility and may justly convert the bond into money—as justly and I think more wisely even than gold—not by a process of hypothecation as security for bank notes, but by a process of coinage into legal-tender notes.

Senator REED. I do not understand that last remark:

Not by a process of hypothecation as security for bank notes, but by a process of coinage into legal-tender notes.

Senator SHAFROTH. That means the issue of legal tender.

Mr. BERRY. That means the purchase by the Government of the bond before maturity with new legal-tender paper.

Senator BRISTOW. If I understand your position, it is, then, that the Government when it expends, as it has expended, \$350,000,000 on this canal that it could have issued \$350,000,000 of legal-tender notes——

Mr. BERRY. No.

Senator BRISTOW. And paid the bills?

Mr. BERRY. No. I think, brother, if you will wait until I have finished you will get the answer to what is in your mind. No; that would not do at all. That is where we got to actually in war time. We issued money in war time in response to the exigencies of the war. We wanted to fight a battle, and we ground out a basket of money and fought the battle, regardless of where the money came from, and as a result we got more money than business could absorb, and it depreciated. It is not safe to put out money directly for public works. Build your canal with bonds, give your bonds or issue them to be converted at the will of the holder into legal tender, and then the money will come out in response to the demands of business, and no faster. That will be the result of this proposition as I see it.

I come now to question No. 5:

Should the present requirement of reserves for national banks be reduced, increased, or otherwise modified?

I would like to have your especial attention to this.

One of two things must be done—and I think the whole problem is right there.

Senator REED. State that again, please.

Mr. BERRY. One of two things must be done: We must either reduce the required per cent of reserve, or make it easily possible for banks to maintain the present requirements without refusing or withdrawing credits.

The whole question of safety is raised by this consideration, and I would say at once that in the interest of general business any change made should be in the direction of greater safety rather than less.

The principal value of reserves, beyond the actual necessity for cash payment of checks, is to inspire the general public with confidence in the banks; and up to a certain point, at least, the larger the reserve known to be held the less will be required, for when confidence is fully established nothing but the amount of cash physically necessary to pay current demands would be needed.

This amount is variable, being greater in some places than in others, and varying in different seasons and different years in the same place, but never very large at any time or place, unless confidence is disturbed, in which case an enormous quantity may become necessary.

It is a wise provision, therefore, to have an ample reserve of legal-tender money in all of the banks and public supervision to announce it; and unless there is some compelling reason it should not be reduced.

There is no such reason, but, on the contrary, there are many reasons why the present requirement should be maintained or increased.

I have shown, in answer to question No. 4, that the conversion of \$700,000,000 of bank notes, which are now a burden upon reserves, into reserve money would largely increase the earning power of the banks without increasing or decreasing the total of their surplus assets, cash taking the place of the bonds therein. The notes are now a liability.

At the same time this would afford a basis for the credit needed in general business, so that a direct benefit would result inside and outside of the banks.

An enormous increase in the safety of general business would result if the necessity for restricting credit was shown to be certainly and permanently removed.

I have no interest in any scheme that does not look to the prevention of panics and not to their amelioration after they are here. What we want is a preventive, something that will make it impossible for us to have a panic in the United States.

From the standpoint of the banks the question of safety is not important. The banks are already safe; they have a constant inflow of maturing paper upon which they can compel payment in case of necessity.

Right here I might interpolate that there has been some discussion as to the difference between commercial paper and farm mortgages as a basis for rediscounting. The essential reason at the bottom of the opposition to the use of a farm mortgage for that purpose lies in this fact, in my judgment: With a commercial note involved, whose maturity is almost immediately at hand, somebody's notes are coming due every day. The bank can force the borrower to sell his stuff in a stringent market, whereas if the loan is put up on a mortgage, the mortgage can be sold, but the seller is the bank, and the banker does not want to sell it in a bad market.

Senator BRISTOW. Mr. Berry, what we are undertaking to remedy is to provide the bank with the means by which it will not be necessary for it to force the maker of this note to sell his stuff on a stringent market and thereby bring about a depreciation.

Mr. BERRY. That is exactly what we want to do. I agree with you perfectly on that, and the standpoint I have outlined here is at least looking in that direction. But I wanted to introduce the idea there, because, as I have said, at the bottom of the whole opposition to our fixed asset, like mortgages or bonds, lies in the fact that if the sale is to be made, the banker has got to make it and not the borrower.

Senator SHAFROTH. And if there is any sacrifice, the banker will take it?

Mr. BERRY. The banker will take it. On the other hand, as it is now, in the case of a stringency, the banker calls my note and says, "Mr. Berry, I want the money." "I have not got it." "Sell something; it don't make any difference whether you can get a good price for it or not, go and sell it and bring me the money." If it was a loan on a mortgage, and he was hard up for money and he had to have it, and the mortgage was not due to-day and he could not force me, he would have to go and sell it; and a mortgage is just as salable as any commercial paper, except that it falls to the other fellow; that is all there is to that, in my opinion.

Senator SHAFROTH. So that the banker must supply the same logic to himself that he does to others?

Mr. BERRY. So that the same logic must be applied to both.

But this can only be done by forcing their customers to sell their assets on a strained market and often at a sacrifice.

The banks are safe, but general business is never safe, and at irregular and unexpected intervals is made to suffer an enormous loss by the contraction of credit.

A comparison of money quotations of bank stocks with rails or industrials on any given date will show a startling contrast.

Bank stocks range far above par, some of them many hundred per cent, while the other stocks struggle to keep at par.

There is no valid reason why banking should be any more profitable than any other business, and it would not be if competition was as active behind the bank counter as it is in front of it. This would be the case if every bank could build up its reserve at will at the expense of its surplus assets.

The remedy lies, therefore, in providing the opportunity for the banks to easily maintain reserves rather than in reducing the required reserve. The only alternative, as I have said, is the restriction of the volume of business, and this is the cause of all our trouble.

There is a disposition to regard money held in reserve as inactive and practically useless. No greater mistake could possibly be made. The money in bank reserves is the most active and useful money in the country. It makes possible ten times its volume in circulating credit, and without it our business would be decimated. The most important work that statesmanship can do is to make it easily possible to maintain it.

Senator POMERENE. Mr. Berry, referring to the difference between mortgage paper and your commercial paper, to which you alluded a moment ago. You can only compel, if the bank is a holder of commercial paper, the maker to sell when that becomes due?

Mr. BERRY. That is right.

Senator POMERENE. He can do the same thing with his farm paper?

Mr. BERRY. Sure, he can do the same thing if it is a mortgage.

Senator POMERENE. So that it is not a difference in kind; it is merely a question of degree, if anything.

Mr. BERRY. A question of degree solely. There is not any difference in the security. So far as I can see, one is as good as the other, except that there is a constant stream of maturing paper coming into the bank, and he can make the borrower sell it, and the mortgage, if sold, the bank must sell it, because it is not due for five or six years, and he can not compel the maker of the mortgage to pay it.

Senator REED. Therefore, he has to go out and sell his own note.

Mr. BERRY. His own security, the mortgage, his own asset. In a case like that the mortgage is always sacrificed, and he can never get half of what it is worth.

Senator SHAFROTH. He can not sell a note before maturity?

Mr. BERRY. Yes.

Senator REED. As an illustration, I go to a bank and put up my note for \$10,000 due in 30 days. At the same time I put into the bank or sell to the bank a farm mortgage of \$10,000 due in five years. The bank has to have money. It can say to me on the first of next month, "Your note is due, and we want \$10,000 of money, and if you have not got it, go and sell your stock of goods, or sell whatever you have—cotton, wheat, or whatever you have—and bring it here." On the other hand, with the other security, it has got to hock that paper around itself.

Mr. BERRY. Sell its own notes.

Senator REED. But it is a better security, as far as safety is concerned.

Mr. BERRY. I would not say it was any better, Senator. I do not think that a mortgage on an individual piece of property is any better than the note of a reputable man who has plenty—a dozen different kinds of property, which is reachable through process of law. I would not say there is any difference in the safety of it.

Senator REED. Of course back of this note, which is secured by a specific piece of property, lies all the credit of the man who has issued it?

Mr. BERRY. Yes.

Senator REED. So that it is better, and it is so regarded as far as actual security is concerned?

Mr. BERRY. Yes.

The next question is:

Should an elastic currency be authorized by law? If so, should it be limited, and to what amount?

The first question may be answered in the affirmative, for the reference is doubtless to the money factor in the currency, and money can only come into existence by the operation of the law.

If we are going to have any currency, the law has got to do it, and it must be established by law, whatever it is.

Elasticity, in the sense that it will automatically increase in volume in response to, and only in response to, the legitimate demands of business, should be its chief characteristic.

Provision may be made for an automatic decrease in volume, but if it is issued under proper restraints it will never decrease in volume. If it is called out only in response to the growth of business, it can never retire unless the business diminishes, and business in this country is not destined to diminish. It never can diminish, except when forced to do so by the scarcity of money, and never will.

I wish to impress that thought upon this committee. If this money is issued under proper restraints it will never decrease in volume. If it is called out only in response to the growth of business it can never retire until the business diminishes and business in this country is not destined to diminish.

In a country covering the diversity of climate and conditions that this does business may and does experience local mutations of activity, but generally speaking there is no month in any year when the volume of business generally recedes. I have sought in vain to discover a period long or short in the recent history of the country when it was necessary to decrease the volume of money on account of a scarcity of business, but I have found many periods long and short in which business was of necessity withdrawn on account of scarce money. Elasticity "downward" or "inward" may be provided for, but it will never be used.

The credit factor in the currency emanating from the banks shows the same persistent disposition to expand and would constantly and regularly do so if an adequate supply of money to carry it was automatically supplied.

To the second part of the question I would answer that it should not be artificially limited. If an adequate sacrifice is demanded in its issue, natural laws will regulate the volume automatically.

A demand strong enough to overcome the resistance imposed by the sacrifice will alone be able to bring it out, and the continuance of the business that brought it out will keep it out. Elasticity, in the sense that any individual or clique, public or private, may exercise a controlling influence over the volume of currency, is not desirable.

The arbitrary fixing of the discount rate is a means to such control, and should be punished as a crime instead of being authorized by law.

Competition on both sides of the bank counter is the only safe reliance for establishing the discount rates.

We need to disabuse our minds of the erroneous notion that the people can not be trusted to know when they are doing all the business they wish to do.

When anyone offers satisfactory security for credit he should be able to get it in a competitive market, and he will be if we provide for the instant response in reserve-money volume to every such demand.

No sane man will borrow money on good security and pay interest for it unless he sees some way in which he can profitably use the money, and every such demand for money must be considered legitimate.

The so-called rigidity of bond-secured bank-note currency, or its failure to relieve a stringency by expanding, is charged to the fact that it is based on bonds of which there is a fixed amount. This is a mistake. The bond issue has never been fully used for note issues. Moreover, the extent to which it is now used is the result of pressure

from the Treasury Department, and not natural voluntary expansion.

Again, when a stringency occurs, the retirement or contraction of the existing volume of bank notes, instead of expansion, occurs. Every time you have a stringency the bank note contracts and does not expand. This can not be due to the fact that it is based on bonds, but it is due to the fact that the bank note is a form of credit and not money.

Whenever a stringency appears it is from the lack of reserve money upon which to carry credit, and the banks, in an effort to strengthen reserves, send in for redemption their holdings of bank notes other than their own.

Stringency always arises from an overissue of credit as compared to reserve cash, and bank notes, being the most readily liquidated form of credit existing—Uncle Sam pays if the issuing bank is tardy—they are sent in for redemption first.

A moment's thought will show that this result is inevitable and reveals the cause of it.

A banker finds that his reserve is depleted and must be restored. The only possible way to restore it is to call a loan. That is the only way he can build up his reserves; he must call a loan to build up his reserves. He has many loans that are drawing interest; all are in the process of maturing and can be called if necessary at maturity, but he finds that he has one loan that is fully matured and which is not drawing interest. It is in the form of bank notes other than his own, in the cash drawer, and to call it will not discommode his customers, so he sends it in for redemption, gets legal tender for it, and fixes up his reserve.

Senator POMERENE. You say he must "call" his loan. Is that strictly correct? If it gets below the required reserve point, of course, that is the only way to build up his reserve, by calling a loan? Another way is where his deposits accumulate without loaning out any more.

Mr. BERRY. To refuse further loans?

Senator POMERENE. Yes; refuse further loans.

Mr. BERRY. Yes. I mean by "calling a loan"——

Senator POMERENE. I catch your point, but I thought you did not fully state it.

Mr. BERRY. I put in a month's note to carry my business over the period in which I accumulate stock, and that period is six or seven months. At the end of the first three months I go there to get that note renewed. I want the banker to carry it another three months, and he says he can not do it. "Mr. Berry, you will have to pay me." That is what I mean by calling a loan.

Senator POMERENE. Under that state of facts——

Mr. BERRY. But the bank note does not interfere with any of his customers at all, and he fires that in first.

Senator REED. But what Senator Pomerene meant was, that he might just let his present loan stand, but as people deposited then quit loaning, and the effect of that would be the same; that is, would have the same effect upon the commerce and business of the country. But now, let me understand you—were you through with that?

Senator POMERENE. This reserve is simply against further loans; it may be used for the purpose of paying off the mortgages.

Mr. BERRY. I do not catch that, Senator.

Senator POMERENE. Suppose the reserve would have to be \$50,000, and it fell down to \$48,000. If I am a depositor there, I can continue to draw out my money. It is only a reserve as against loans?

Mr. BERRY. Yes. I get your idea now. I understand you. But the bank may not make any further loans until it has made up some way or other its reserve, either by calling paper or accumulating, or as you say, current deposits.

Senator REED. Let me get a point clear in my mind. The bank can not count as any part of its reserve bank notes?

Mr. BERRY. No.

Senator REED. That is right, is it not?

Senator SHAFROTH. A national bank can not; the State bank can.

Senator REED. The national bank can not. A national bank has \$100,000 of bank notes in its vaults. It can not count them as part of its reserve. It needs \$100,000 to build its reserve up to the legal requirements. Thereupon it will take those \$100,000 bank notes, its own——

Mr. BERRY. Its own it can not use. It must hold its own. It can not send in its own notes.

Senator REED. It can send in the notes of others?

Mr. BERRY. Yes, sir.

Senator REED. It sends them down to Washington, and it gets back gold certificates, greenbacks, or some form of money issued by the Government. The result, then, is that every time the 7,354 banks of the country gather up the notes of each other and send them down here and get Treasury notes and put them in their vaults, when they have sent them down here they have depreciated that class of currency. But, now, the Treasury notes come in and take their place, do they not? Then that does not make an actual contraction, does it?

Mr. BERRY. There is no contraction involved in that, except this, that there is a physical inertia. That 5 per cent redemption fund maintained by the banks here is called back. It has been out at times, but the Treasurer has complained seriously for the last four years that he has got about \$25,000,000 or \$30,000,000 of United States money invested in those notes all the time in addition to this \$35,000,000 of the banks.

Senator SHAFROTH. And it is a contraction to the extent of the time that is taken from Chicago to Washington and return?

Senator REED. Where does the Government get this money that it uses to redeem these bank notes?

Mr. BERRY. This \$35,000,000, the 5 per cent fund provided by the banks themselves?

Senator REED. Yes.

Mr. BERRY. I think if a bank sends notes in to the extent of \$1,000 they are immediately forwarded to the bank that issued them, and they must make their 5 per cent good. They are paid for out of the 5 per cent fund.

Senator REED. Then when they make it good, they have got to take other money to make it good with?

Mr. BERRY. Surely.

Senator REED. And that does make a contraction at that point, does it not?

Mr. BERRY. I do not think so, because each takes the place of the other in the exchange.

Senator REED. Let us follow it and see about that. I want to get that clear. If I am muddled on it I want to get unmuddled.

Let us say that there is \$100,000,000 of bank notes in circulation. There are in the Treasury of the United States \$5,000,000 of a redemption fund. A condition of affairs arises whereby the reserves of the banks have been cut down so low that they all want money, and they gather up actually all of the \$100,000,000 and they send it down to the Treasury. The Treasurer takes the \$5,000,000 and pays out, and it is short \$95,000,000. Whereupon it goes over into its vaults and takes out the other \$95,000,000 and redeems this paper. We are even at this point. There has \$100,000,000 come in and there has \$100,000,000 gone out. But what happens?

Mr. BERRY. The outlying banks have sent that—

Senator REED. The next step is that the Government says to these banks: "Send us \$95,000,000," and they have to send the \$95,000,000, and the Government locks it up. Now, you have retired \$95,000,000.

Mr. BERRY. Because you had it locked up before you started.

Senator REED. I do not believe it.

Mr. BERRY. Oh, yes; you could not have had it unless the Government had \$95,000,000 locked up before.

Senator REED. But when the Government sent back that \$95,000,000 in payment of those notes, then you have locked it up again.

Mr. BERRY. Yes; but it was locked up before.

Senator SHAFROTH. But they transfer that to the General Treasury and pay it out.

Senator REED. I do not care anything about that. I tell you it was an actual decrease of that amount of money in circulation. I may be wrong; but I do not think I am.

Mr. BERRY. I think you are mistaken.

Senator REED. But I think you are wrong. We are supposing that there are \$100,000,000 of bank notes out in circulation to-day. There is in the Treasury of the United States the sum of just \$5,000,000 reserve against that.

Mr. BERRY. Belonging to the banks.

Senator REED. Belonging to the banks; yes. And there is just \$95,000,000 of Government money. They have not got any more.

Senator SHAFROTH. You mean the legal-tender money?

Senator REED. I mean money of any kind. That is all they have got.

Mr. BERRY. Yes.

Senator REED. And the banks conclude that they want to redeem—to get this legal-tender money that is over here in the Government's vaults for use, to add to their reserves. They take \$100,000,000 of bank notes out of their vaults. It is out in circulation now, when they take it out of their vaults, is it not?

Mr. BERRY. Yes.

Senator REED. They send it to the Federal Government and they get \$5,000,000 that they have there and \$95,000,000 of the Government money for it, do they not?

Mr. BERRY. Yes.

Senator REED. And they take that back and put it in their bank. Now, they have just as much money as they had, and no more, as they had before the operation began, have they not?

Mr. BERRY. Yes.

Senator REED. Now, what has happened? The Government had this \$95,000,000 locked up. They have taken this \$95,000,000 which was locked up and exchanged it for \$95,000,000 which was in circulation, have they not?

Mr. BERRY. Yes.

Senator REED. Then the Government says, "Pay us back our \$95,000,000; we want to lock it up again"; and the banks do pay it back, and it goes into the Federal Treasury and is locked up and is not in circulation?

Mr. BERRY. But \$95,000,000 of bank notes went the other way at the same time.

Senator REED. No.

Senator BRISTOW. No; it was not bank notes; it was reserve money that went back; bank notes are not reserve money. Ninety-five million dollars of bank notes have been returned to the banks.

Mr. BERRY. But it was a bank note in the first place that went back to the Government and was lodged in the Treasury. Ninety-five million dollars went back to the banks and was lodged in the banks. It was an exchange.

Senator REED. The Government takes that \$95,000,000 of bank notes and destroys them.

Mr. BERRY. No; the Government says, "Give us our money," and sends them back. I am talking about currency redemption now, not the reserves of banks.

Senator REED. Well, how does that help the Government? I am going, for the sake of making this a plain illustration, to assume that there are just two kinds of money in the country.

Mr. BERRY. Yes.

Senator REED. Bank notes and gold. There are \$100,000,000 of bank notes in circulation that can not be used as reserves. The reserves drop down. The banks thereupon say, "We have got to have these reserves replenished with gold from the vaults of the Treasury." They take their \$100,000,000 of bank notes; they send it down to the Treasury. There are \$100,000,000 there of gold; that is all the money they have there. Five million dollars of it belongs to the banks, and \$95,000,000 to the Government. The banks say to the Government, "Redeem this money and give us gold." The Government takes this \$100,000,000 of gold—\$5,000,000 of which belongs to the banks—and sends it to the banks, and the Government puts in its vaults \$100,000,000 of bank paper. That far your theory is correct. Next day, the Government of the United States says to the banks, "Pay us back our gold. We redeemed your paper, and now you owe us \$95,000,000; please pay it back."

Mr. BERRY. Yes.

Senator REED. And there is no more bank paper sent into the Treasury.

Mr. BERRY. But there is bank paper sent back, and it goes back—

Senator REED (interposing). Wait a moment, please. Consequently, the banks take the gold, which is all they have now, and send

it back, and the Government sends back their paper; and they are not a bit better off than they were the day before the operation began.

Mr. BERRY. You are right as to that.

Senator REED. Now, whenever this money is really sent into the Government, and gold is really sent out, or Treasury notes—but I will stick to my original illustration of gold—the only way that gold can constitute a permanent reserve for the banks is to contract the currency by the amount of bank currency sent in to the Treasury; so that it is a contracting operation, is it not?

Mr. BERRY. If you are speaking of the retirement of the currency, yes; but we are speaking of currency redemption now. Then it is paid right out again.

Senator SHAFROTH. Yes; it is paid out again.

Mr. BERRY. But as to the retirement of the notes (which is limited to a certain amount per month) your statement is correct.

Senator REED. But it is a contracting process?

Mr. BERRY. Yes.

Senator REED. But when they get down to counting the money for reserves, that is a prescribed fund; and I thought I was talking in consonance, now, with your idea which you have expressed (although I put it in different language) that the first thing that retires in that case of a stringency was the bank note.

Mr. BERRY. That is also right.

Senator REED. Now, when that retires that means a contraction, does it not?

Mr. BERRY. Well, you, see, as I said in the first place, there is a certain physical inertia that is involved in that operation.

Senator REED. Well, we will cut the inertia part of it out for the moment.

Mr. BERRY. Well, that is all there is there.

Senator REED. No; there is the actual retirement there. The banks must, of course, build up the kind of money that will act as a reserve; and they do so by sending in bank notes.

Mr. BERRY. Well, if they retire the bank note and get legal tender for it, in that case, you are perfectly right; it is a contraction. But I am speaking about currency redemption, not retirement. At the very moment you want the money for reserves, that is the moment you lose it; because it takes a week to get the money from the bank to the Treasury and back.

Senator SHAFROTH. And it is therefore an actual contraction for a week.

Senator REED. I do not care about that feature.

Mr. BERRY. And you will find the very moment you want it is the very moment it runs away.

Senator REED. Now, back of these bank notes there is what?

Mr. BERRY. There is the Government bond.

Senator REED. Of course, if the bank brought its bond which it had paid the Government money for to the Government, that is the way it would settle it, would it not?

Mr. BERRY. Yes.

Senator REED. The banks have got the \$100,000,000 of bonds now, we will say. Now, let us see if that would amount to the same thing.

Senator SHAFROTH. Certainly, if you present the bond it would make no change.

Mr. BERRY. Well, if you do not get new money for it.

Senator SHAFROTH. If you do not present the money for it, you are merely "running around the barn."

The CHAIRMAN. That is what this redemption amounts to; it is merely "running around the barn." It is not a retirement of the bank note at all.

Senator REED. But you have not gained anything by the process; conditions are the same as before.

Senator SHAFROTH. Well, there is the economic loss of time.

Senator REED. I do not care anything about the economic loss of time. I am speaking of the fact that it is going to contract this currency—the process of redeeming notes I have described and illustrated.

Senator SHAFROTH. There are a very large number of redemptions made of national-bank notes every year. Last year there were \$600,000,000 redeemed; and according to that, if your theory of a contraction were correct, there would be \$600,000,000 less of national-bank notes outstanding now than last year; and instead of that there are more.

Mr. BERRY. The only loss is in transition, in the movement back and forth.

Senator SHAFROTH. That is all.

Mr. BERRY. It is the inertia that is involved there.

The CHAIRMAN. Senator Reed, will you let me explain the matter?

Senator REED. You will not explain it so that I will understand it.

The CHAIRMAN. I was entertaining the hope that I could.

Senator REED. Because you will talk over my head. But I am really serious about wanting to get this method in my mind; and after I get through with this difficult question, then I shall be glad to hear all you have to say in explanation.

There is, in the case I put, in the country just \$100,000,000 of bank notes. There is in the Treasury just \$100,000,000 of gold. The Government obtained that gold by selling the 2 per cent bonds—\$95,000,000 of it; and the other \$5,000,000 the banks put in.

That is all it has. It holds the bonds; it holds the money. The banks find that they have to have \$100,000,000 of gold to make their reserves good; and they have to gather up \$100,000,000 of their paper; all there is. They say, "We will go to the Federal Government and get this gold." They go to the Government and get this gold. They get \$100,000,000 of gold from there, and there is not a cent left. And they take it over here and put it in their vaults; and they put in the vaults of the Government \$100,000,000 of bank paper.

Now, the Government says, "All right; you owe us \$951,000,000." The banks say, "Very well; take your bond." Now, what is the effect of that operation?

Mr. BERRY. Why that is the most simple thing. If you will do that you have got the whole thing solved.

Senator REED. But the effect of that is that \$100,000,000 of bank paper is wiped out; it no longer exists. And there is just the same amount of money in the country as there was before you ever issued a bank note.

Mr. BERRY. With this exception, that now that bank could float \$1,000,000,000 of credit which it could not float before. That is the whole difference.

Senator REED. Very well, But there was prior to this time in circulation \$100,000,000 of bank paper and \$100,000,000 of gold in the vaults of the Treasury—but it was locked up.

Mr. BERRY. Yes.

Senator REED. And you have now released the \$100,000,000 of gold in the Treasury.

Mr. BERRY. Yes.

Senator REED. And put it in circulation—against the bank note.

Mr. BERRY. In other words, you have changed the \$100,000,000 from bank notes to legal-tender gold; and now your banks can float a billion dollars of new credit.

Senator SHAFROTH. And the bank note goes out again?

Mr. BERRY. No; the note is destroyed with the bond.

Senator REED. Now I understand your logic. There is \$100,000,000 less bank notes in existence?

Mr. BERRY. Yes.

Senator REED. But \$100,000,000 of gold has been unlocked from a place where it could not be used and has gone into circulation in lieu of the \$100,000,000 which retired from circulation.

Mr. BERRY. That is right. But the plan I propose would not have changed the gold situation at all and would have added \$100,000,000 of new legal-tender paper to the circulation.

Senator REED. I do not understand your plan.

Mr. BERRY. The plan is that the bank can take this \$100,000,000 of bankers' notes to the Government, along with the bond, and say, "Here is your stuff; give me legal tender for it." It sells the bond and the notes both for \$100,000,000 of legal-tender paper. Now, it takes that back, and it does not decrease the Government holdings at all. That money was made brand new by the printing-press for that special occasion; new money.

Senator BRISTOW. Now, what becomes of these notes of the bank?

Mr. BERRY. They are burnt up.

Senator SHAFROTH. That would be a substitution of one currency for another?

Mr. BERRY. Yes.

Senator BRISTOW. What does the bank give to get this legal-tender paper?

Mr. BERRY. Its \$100,000,000 of bonds.

The CHAIRMAN. The bank has these bonds in the comptroller's office; and Mr. Berry proposes that those bonds shall be burned up and canceled, and that the bank notes assumed by the United States, as they come in, shall also be burned up, because these bonds belong to the Government. And the Government, in order to prevent contraction will issue in lieu of those national-bank notes as they are burned, legal tender of the United States.

Senator REED. But why do that, when you have just told me that we did not contract the currency; we actually substituted good money for bad?

Senator SHAFROTH. Because, in one instance, he referred to the fact that the bond was not presented for cancellation. In that event, there was no contraction. But if you say, "I want the bond and the whole circulating medium destroyed"——

Senator REED (interposing). Well, then, if you did not destroy the bond—I will go back to my illustration: The bank takes its \$100,000,000 of paper to the Treasury and gets the \$100,000,000 of gold; and the next day the Government says, "Pay us back." What are they going to pay back with?

Mr. BERRY. With that same money they take.

Senator REED. If with the same money, then their reserves are in the same shape the day after to-morrow that they were the day before they started.

Mr. BERRY. Precisely.

Senator REED. So that they have not done themselves a particle of good by the operation.

Mr. BERRY. Not a particle; and they are doing it every day, to the tune of \$700,000,000 a year.

Senator SHAFROTH. Each bank has but a certain proportion of this outstanding \$700,000,000. And when the demand is made to restore this money, it is made on all the banks and not on one bank alone. And for that reason it does serve its purpose, until more notes accumulate in the bank vaults—

The CHAIRMAN. Senator Reed, I think you do not distinguish between one bank and another. There is all kinds of difference. When bank No. 1, for instance, sends in the bank notes of bank No. 2 for redemption, bank No. 1 proposes to get legal tender for the money of bank No. 2. The Government redeems the notes of bank No. 2 in lawful money, and sends the lawful money to bank No. 1, and sends this note back to bank No. 2 for redemption.

Senator REED. Exactly. But the grand total of the operation is that every dollar of paper that is taken down to the Federal Government has got to be redeemed in lawful money.

The CHAIRMAN. The Government redeems it and charges it up to the bank which issues it.

Senator REED. And when the bank of issue is finally confronted with its paper, which the Government has redeemed, it has got to take it out of the body of money in the country?

Senator SHAFROTH. It is not the same bank.

Senator REED. I understand; it is one bank playing against another. But the sum total of all the operations must be a contraction.

The CHAIRMAN. Well, when you in the period of a year send in the \$600,000,000 of bank notes for redemption, there goes out of the Treasury the \$600,000,000 legal tender notes; and the Government collects that amount of \$600,000,000 from the notes it redeems. Therefore it is just like running around the barn.

Senator REED. Well, you can not tell me that you can fill up the gold reserves of the banks without taking that gold from some place, or that you can burn up that paper money that once represented that without losing something in the volume of money in the country.

The CHAIRMAN. You do not burn up the notes in the redemption of money.

Mr. BERRY. The only case is when you substitute legal-tender paper.

Senator SHAFROTH. And substitute the bond.

Senator REED. And if you do not do that—

Mr. BERRY. It is just the same.

The CHAIRMAN. It is confusing to talk about the retirement of these notes at the same time you talk about redemption. There is as much distance between the two operations as between the North and South Poles. The redemption process consists in a bank sending in the notes of some other bank and getting the lawful notes from the Government, and letting the Government collect the lawful money from the bank which emitted the notes.

Senator REED. Well, when the Government has collected from the bank, you are just taking that much money out of the general aggregate of the country.

The CHAIRMAN. Out of the reserves.

Senator REED. That is contraction.

Mr. BERRY. No; there is no contraction other than is involved in the inertia of the movement.

Senator BRISTOW. But, Senator Reed has been talking about restoring the reserve of the bank which is depleted; and whenever the bank sends in money which is not reserve and gets money which is reserve, that money is retired, not redeemed. He says it is retired; he is right. You can not restore your reserve with a money that is not legal tender.

Senator REED. And if any of you gentlemen can convince me of that you will convince me that a man can lift himself up by his boot straps.

Senator SHAFROTH. Here is this \$100,000,000 that has been redeemed; it goes to one bank and comes from another. What is the reduction in circulating medium?

The CHAIRMAN. Just exactly.

Senator BRISTOW. This way of building up reserves comes to nothing, because if you do not issue money that is reserve money you do not have to reserve any.

Mr. BERRY. It affects the individual bank. It does not help the general situation an iota.

Senator REED. That is what I meant.

The CHAIRMAN. It does not help the general situation at all.

Senator SHAFROTH. To this extent it affects it, however, that it takes about a year to get around with all these redemptions to the Treasury, and back again into circulation.

Senator REED. Now, you have gotten away from my original illustration. I was talking about a condition that did not affect one individual bank but a general condition of the country, such as you say now obtains when the reserves are so low that they must be replenished.

Now, when that is true, there are a multitude of banks in the same unfortunate condition; and that multitude of banks will begin sending in their money; and if they all are in that condition, they are all bound to send in their money.

Mr. BERRY. Yes.

Senator REED. And the whole point that I have in mind is that, in the hour of depression and danger, we have got a system that is likely to cause actual contraction of the volume of money in the country.

The CHAIRMAN. It does contract it just to the extent of the physical inertia.

Mr. BERRY. That is the point I am trying to make clear—that the ultimate contraction is simply what lies in the inertia, which, however, becomes enormous at times, because everybody is doing it, and all the money is on its way to Washington or back again.

Senator SHAFROTH. Not at the same time, however?

Mr. BERRY. Practically at the same time. There is as high as \$50,000,000 tied up in this way.

The CHAIRMAN. Here is the Treasury statement of September, 1913, which shows national-bank notes on hand of \$52,000,000. This includes \$48,000,000 which the Treasury has redeemed, and for which it will receive payment from national banks. That is, a certain group of banks has sent in \$48,000,000, and that is redeemed through the agency of the Government, and the Government then collects the money of the banks whose notes it has redeemed. It just transfers legal-tender money from the banks whose notes are emitted to the banks which hold those notes for redemption. That is all.

Senator REED. But when the Government gets in that \$48,000,000, it is going to get that in lawful money?

The CHAIRMAN. Yes.

Senator REED. And there is going to be that much lawful money locked up in the vaults of the Treasury?

The CHAIRMAN. Well, that much money has just been taken out.

Senator REED. And the bank notes are destroyed?

The CHAIRMAN. No.

Mr. BERRY. Oh, no. In the process of retirement they are, but not in redemption.

Senator REED. I am speaking about the process of redemption.

The CHAIRMAN. Those \$48,000,000 of bank notes are sent back to the banks which emitted them; all national-bank notes are sent back in such cases, and those banks have got to send lawful money for them. But the other banks had received lawful money for them when they sent them to the Treasury.

Senator REED. So that the minute they send the lawful money back to the Federal Government it is no longer in their vaults?

The CHAIRMAN. No.

Senator REED. And it does, therefore, cut down those reserves to that extent?

The CHAIRMAN. Yes.

Senator REED. So that it is an utterly useless thing, except that you can temporarily create a sound reserve while the money is in transit?

Senator SHAFROTH. Yes.

Mr. BERRY. Yes.

Senator REED. And that is just exactly like my keeping my bank balance good by drawing a draft on you, Mr. Berry, and you drawing on Senator Shafroth, and he on the chairman, and my finally going around to make my draft good?

Mr. BERRY. Yes.

Senator REED. That seems to me an utterly useless process.

Mr. BERRY. The biggest piece of foolishness in the world.

The CHAIRMAN. It is.

Senator REED. But if somebody says, "Pay up," you can not prevent that?

Mr. BERRY. No.

Senator REED. Then somebody is going to say, "Redeem our bonds down here, and we will take the gold," and when that is done there is a contraction.

Mr. BERRY. You are right. Now, the greater the percentage of these notes in circulation, the larger will be the proportion of such deposits and the larger the demand for redemption. The issue of credit notes tends to greater rigidity, and not to greater elasticity, and can not therefore be used for this purpose. I wish to impress that upon this committee, because I think it is very important.

Now, it will make no difference whether that note is issued by the United States Government or by the banks. The same thing is true of it in either case. If it is not competent to stand in reserve when it is issued, it is not useful—

Senator SHAFROTH. Pardon me for interrupting you; but do you have to leave the city to-night, Mr. Berry?

Mr. BERRY. Well, I want to leave. But I will telegraph to Pittsburgh that I can not go there to-night. I do not want to disturb you gentlemen; but I have devoted a great deal of study to the subject—

Senator SHAFROTH. We are very much interested in what you say.

Senator REED. Yes; there are some further questions I should like to ask you.

Mr. BERRY. Then I will stay here. The paper which I have prepared with reference to this bill you will not be thoroughly interested in unless we have had this preliminary discussion. The first 10 comments on the questions are very brief. I have no instructions to give the committee in regard to the management of your Federal reserve banks.

(Thereupon, at 5.45 p. m., the committee adjourned until tomorrow, Thursday, September 18, 1913, at 10.30 o'clock a. m.)

THURSDAY, SEPTEMBER 18, 1913.

COMMITTEE ON BANKING AND CURRENCY,
UNITED STATES SENATE,
Washington, D. C.

The committee assembled at 10.30 o'clock a. m.

Present: Senators Owen (chairman), Reed, Shafroth, Pomerene, and Bristow.

The CHAIRMAN. Mr. Berry, we will be glad to have you proceed.

**FURTHER STATEMENT OF WILLIAM H. BERRY, OF
CHESTER, PA.**

Mr. BERRY. As I remember, I finished discussing question No. 6 and my answer thereto, and I will now continue where I left off.

Senator REED. Referring to your answer to question No. 6 I should like to ask just one question. Do I understand that you mean that in the crop-moving period, while there is a demand for money, a large amount of it to move the crops, and when the crops are moved that particular demand has ended that immediately there is some other counterbalancing demand—

Mr. BERRY. The miller, for instance.

Senator REED (continuing). In some other part of the country or in some other line of industry that takes up the same money that the crop-moving demand did. That is what you mean, taking the whole average?

Mr. BERRY. Yes, sir.

Senator REED. Very well; I understand.

Now, I will ask another question, because I have the matter in mind. I do not mean to go into it in detail: In your answer you assume that the volume of trade in the country is constantly on an increase, and you say that the crop-moving period, while it demands a lot of money, as soon as it is over there are other activities that demand the same money; but you go further than that in this statement, and claim this: That there will be constantly from year to year an increased demand for money. Now, do you not think that statement is rather too broad?

Let me illustrate what I mean by this further question: Whether in periods of greater activity running over several years, perhaps, there will be greater demands than there would be in other years growing out of the multitude of conditions?

Mr. BERRY. There are such periods undoubtedly, but they arise solely from the fact that during the period in which the great activity is manifested the money supply is accelerated prior to the development of the business.

Senator REED. Now, are you not making the mistake of attributing everything to the volume of money? Let me illustrate again: Suppose there is a great war, such as we had here in the United States between the States, which paralyzes the industry to a very large extent of a great nation and puts out of good working order the entire commercial system of the world. Would not that depress production?

Mr. BERRY. Yes.

Senator REED. Then, are there not cases where, for instance, there may be a world shortage in the production of cereals and crops of all kinds. Does that not have its depressing effect on all lines of production, upon all commerce and all trade?

Mr. BERRY. There would doubtless be an effect resultant from a world shortage of crops. There would be fewer crops to move and fewer crops to handle.

Senator REED. There would be less buying and less selling?

Mr. BERRY. There would be less buying and less selling as measured in crops, but ordinarily a condition of that sort increases the price level and involves the use of practically the same amount of money in either case.

Senator REED. Does not it decrease the sale of other commodities?

Mr. BERRY. Not necessarily.

Senator REED. I am trying to just see whether your rule is not subject to some qualification. You say, "not necessarily," but is that not very likely to follow, given this sort of condition in the United States of two or three short crops. The farmer can not buy as readily as he can with full crops. The country merchant therefore finds his sales are curtailed and his purchases are necessarily curtailed until finally you reach the factory. Do not conditions of that kind come?

Mr. BERRY. They certainly do come, but as to whether they influence the volume of business or not I very much question.

Senator REED. You do not question the fact, do you now, that if you have bumper crops, if you have plenty of rain and plenty of sunshine, and there are great crops raised in the country, so that there is plenty of stuff for people to live upon, that that stimulates every kind of business. You do not question that do you?

Mr. BERRY. No; I would not question that as a general statement.

Senator REED. If it stimulates every kind of business, the more business you do the more money you get in circulation, do you not—more circulating medium?

Mr. BERRY. Surely.

Senator REED. In addition to the mere matter of crops, do not we have this condition to contend with, which has this effect upon the demand for money: We have a period of good crops and everything is running in fine shape; people begin to expand, they build houses, they buy automobiles, they start new enterprises of a thousand different kinds. The demand for money is very heavy, and then, after a while, they just reach the limit. They have gone a little too far, and there comes a period of settlement and curtailment. Is not that a thing to contend with and does that not affect your general rule?

Mr. BERRY. Well, perhaps so. I think there is no doubt but that the relative world production of crops directly from the ground affects the general world activity, but my experience and my search, as I have stated in this previous answer, is to the effect that practically, as a world problem, that does not occur. We do not have any appreciable variation.

Senator REED. But we do in this country.

Mr. BERRY. Yes; and they do in other countries, but while it is good here it will be bad there and it is a compensatory matter.

Senator REED. You say if it is bad here it is good there?

Mr. BERRY. Yes.

Senator REED. Now, if you had a world-circulating medium those conditions might equalize.

Mr. BERRY. But we have a world medium; and they have a world medium.

Senator REED. Oh, no; we have a monetary system for our own country. Let us suppose this sort of condition: Splendid crops all over the world except in the United States for three or four years in succession and poor crops here for the same period of time, so that we would have a short production with very little surplus to market, and what little we did have to market would get low prices because of the production abroad. That is bound to produce depression here, is it not?

Mr. BERRY. Yes; but your first assumption is that we have a currency confined to this country and that is an error.

Senator REED. Well, I admit it is not strictly a fact.

Mr. BERRY (continuing). Because the currency question is a world question, and just as long as that condition is set up wherein there is a scarcity of products in one country which affects the price limit, just that instant it begins to move the money from one country to the other.

Senator REED. You mean to move the gold.

Mr. BERRY. Yes; because the gold is the one common factor in the various currencies and that makes it a world question.

Senator REED. But in this bill we are not dealing with the gold so much as we are dealing with the question of other kinds of money.

Mr. BERRY. I think we can not deal with the question at all without having prime reference to gold.

Senator REED. I think there is much truth and philosophy in what you said, but I think your inference is too broad—entirely too broad.

Senator SHAFROTH. Is it not a fact, though, that there is more currency needed when these depressed times come, when the banks are demanding of the people that they pay their notes, than in the boom times?

Senator REED. The people who hold the money do not need more.

Senator SHAFROTH. Well, there is a limitation of things and there is a demand for liquidation, and if money were plenty there would not be a call upon them.

Senator REED. Liquidation once made is over.

Senator SHAFROTH. That is true.

Senator REED. But in business and good times one business transaction simply leads to another and another.

Senator SHAFROTH. But that liquidation that takes place produces a condition where there is panic, and everybody concedes that we need money in panic times.

Senator REED. Your philosophy would lead to this: That in good times we would not need any currency, but when bad times come we would need a great deal of money.

Senator SHAFROTH. I do not think that; I think there is a truth to a great extent in what you say, but I do not think that they recognize that when the depressed times—

Senator REED. There ought not to be a contraction.

Senator SHAFROTH. I think so too.

Senator REED. There ought not to be, then, a forced contraction, making it hard to transact business.

Senator SHAFROTH. But at the present time it is my judgment that we need a good deal of money.

Mr. BERRY. If you confine this to a single locality or a single nation in the consideration of this question, you will encounter just the question that you have raised; but if you take the broad effect and assume, which I do, that the currency problem is a world problem and that it can not be localized, the question is better understood. Therefore the world progress and the world development are things that you must have in view; and this is the point that I make—that at no time have I been able to find when the world at large was required to reduce its currency because of a reduction of business.

Senator REED. You spoke about world supplies and world conditions, and you spoke about one country being considered by itself. Do you not think that world conditions, that these periods of settlement, are world-wide?

Mr. BERRY. Surely.

Senator REED. For instance, I notice that in a number of our panics in this country there was a panic in England the very same year or a year or two previous. Nearly every panic we have had within modern times, they have had a panic in England at the same time or perhaps a year earlier, just giving time for the reflex action.

Mr. BERRY. I think if you will allow me to finish the discussion of my paper you will get my view as to all these facts.

Senator REED. I just wanted to get your point of view in that connection. If you are about to take it up, you may as well proceed.

Mr. BERRY. I will now take up question No. 7.

Should such currency be the notes of individual banks, or of a central reserve association, or of a number of regional reserve associations, or of the United States Treasury?

I answer that question as follows: The notes must of necessity be issued from the United States Treasury.

To be of any service whatever they must be clothed with legal-tender power—the power to extinguish debt—and therefore competent to stand in bank reserves as a liquid asset.

Such notes can only be issued by the General Government. Even the sovereign States are forbidden by the Constitution to make anything but gold or silver legal tender.

If any bank is permitted to issue circulating notes, all banks should be permitted to do so; and all such notes should be purely credit instruments, devoid of all legal powers, and circulate, as other credit instruments—checks, etc.—must do, on the sufferance of the public.

I do not think that such an issue would be profitable to the banks or desirable in the community. The maintenance of redemption for them would absorb as much or more of reserve money than would a similar amount of book credit.

In my judgment, the Government should issue all the notes as well as coins that are used in the country, and they should all be made a full legal tender for all debts, public and private, in the nation.

If there were no profit in issuing notes, the banks would not do it. If there is a profit in issuing notes—and there is—it should revert to the Public Treasury, and not to private individuals or banks. Simplicity, economy, and justice would all be accomplished by this process.

Now, referring to question No. 8:

Should these notes be procured from the Treasury on pledge of security; and if so, of what should this security consist? Should these notes be a first lien of the Government upon the assets of the association or bank to which they are issued?

The notes should be procured from the Treasury on the surrender of an equivalent in value, just as gold certificates are procured by the surrender of gold.

In my judgment, the best form of equivalent to be surrendered is a Government bond.

The Government (all the people) have been the recipients of the benefits derived in creating the bond. The Government must pay interest upon it until maturity, and finally pay the individual that owns it the face of the bond.

The Government may justly buy it when voluntarily presented before maturity at the market price, and pay for it with new non-interest-bearing notes payable on demand in gold, to which notes legal-tender powers may be lawfully and justly given.

By a bond issue the Government (all the people) becomes indebted to a part of the people, the evidence being an interest-bearing time obligation. By this process of purchase the Government (all the people) is still indebted to a part of the people to the same extent, the evidence being a noninterest-bearing demand obligation circulating as money.

If this is done only on the voluntary solicitation of the bond holder, who finds that legal-tender money will be of more use or value to him than an investment at current interest rates, no possible injustice is done to him or to his debtor (the people); but a public necessity has been met, and the public has reaped a benefit in the cessation of interest.

If the note is never presented to the Government for payment, by reason of its loss or destruction or by reason of the continued necessity for its presence in bank reserves, the public gains not only the interest but the face of the note.

A private individual would find no advantage in thus converting a bond, for he already has a safe investment at current rates and can not improve it, but a banker would find it to his advantage to convert a \$1,000 bond bearing, say, 4 per cent interest in order to qualify himself in the matter of reserves to take on a safe loan of \$7,000 or \$8,000 at 4 or 5 per cent.

An unsafe loan would not tempt him, so that the notes would automatically come into circulation in response, and only in response, to the legitimate demands of business, and would stay in circulation as long as business continued.

Manifestly, the banker would not convert a bond into money if his reserves were maintained by the voluntary deposit of newly mined or imported gold in his vaults by his customers, so that the mutations of gold production and movement would be met by an automatic adjustment of note issues. If gold increased, note issues would decrease, and vice versa.

I think the same reasoning could be applied to the mutations of current production, and that is the philosophy of the proposition, the mutations of current production. We have a constant in the production of gold, practically; we have a variant in the commodities which are measured by gold. Some years it is greater, some years it is less; so that as the constant is always deficient the supplement which should automatically come into existence would automatically come into existence, following this same reasoning in answer to the mutations of the production of notes, just as it would in answer to the mutations in the production of gold. It would supplement whatever the gold supply failed to produce.

These notes if issued as described would become a permanent part of the monetary circulation. They would never be presented for payment or for reconversion into bonds unless the production of gold became more than sufficient to supply the demand for reserve money, and this, I think, if it ever happens, will make it necessary to deny free coinage to gold.

These notes should be an obligation of the Government and not of the banks, and the question of preferred creditors of the bank is eliminated. In any event, if properly issued they would never be presented for payment, and it is mainly for this reason that the banks should not issue them.

Now I come to question No. 9. That is the most important question of the lot, gentlemen, and I want to have your attention.

Should all currency be based on gold? If so, how should it be issued, and what per cent of gold should be required?

And I answer that question in this way.

In the sense of ready exchangeability, all currency should be based on gold.

Since gold is admitted by law to free coinage at a fixed price in all the important countries of the world, it affords an efficient means of maintaining the par of exchange so necessary to foreign commerce; and certainly the interchangeability of all our forms of money, each into the other at the will of the holder, is a necessity, for this and other reasons.

All forms of money issued by the Government should be full legal tender for all debts, public and private, in the Nation, in which case, with free interchangeability, the most convenient forms would displace the less convenient, and finally an approach to stability of form would be reached and exchanges (redemption) reduced to a minimum. If all the forms were full legal tender, exchange of one form for another would be made only for convenience or export.

When the most convenient forms had finally been selected in proper proportion, exchanges would practically occur only for export, and since gold is recognized as coinable in all the foreign laws on the subject, gold would be sought for this purpose, and the Government should be prepared to exchange gold for any and every form of money at sight.

It should also continue to exchange notes for gold as now, at least until gold should become sufficiently plentiful to require its demonetization. Even then the existing coin should be exchangeable, for it would be the duty of the Government to maintain its gold coin at par with its paper money just as it now maintains its silver coin.

The automatic flow of gold from one country where money has fallen in value to another where it has risen (sufficiently to pay cost of transportation) maintains the par of exchange by a process not generally understood.

If prices rise or the value (purchasing power) of money falls in the United States below the average abroad, an automatic movement of money abroad is set up to restore the equilibrium or par, and gold, being the one factor or element common to all currencies, is the factor that moves, and in the case cited above gold leaves the United States and raises the value of the money that remains by decreasing the supply and reduces the value of foreign money by increasing the supply, so that gold is actually used in the world to dilute or reduce the value of money by its presence and increase its value by its absence.

The notion that currency derives its value from the value of gold is erroneous. Currency derives its value solely from the relative quantity in existence, and anything that serves the currency purpose in any degree is a factor. We have several factors in our currency. In 1913 it stood as follows:

Gold.....	\$611,000,000	
Gold certificates.....	943,000,000	
Total gold.....		\$1,554,000,000
Silver.....	215,000,000	
Silver certificates.....	469,000,000	
Total silver.....		684,000,000
United States notes.....		350,000,000
Bank notes.....	705,000,000	
Other bank credit.....	17,085,000,000	
Total bank credit.....		17,790,000,000
Total currency.....		20,378,000,000

Senator REED. You count in checks?

Mr. BERRY. Count in checks, which circulate as exchanges. Anything which is in process of fact exchange is currency.

The total gold is \$1,554,000,000. The per cent of gold is 7.6.

The total legal-tender money in the currency is \$2,588,000,000, including gold, silver, and United States notes, as against \$17,790,000 of bank credit, or 14.5 per cent, and, unit for unit, the bank credit is more efficient in effecting exchanges than is money.

If we were to suppose that any one factor fixes the value of the rest, we must give the distinction to bank credit. Certainly, if we conclude that the value of gold gives value to all the rest, then it is a case of 7.6 per cent of tail wagging 100 per cent of dog, or 7.6 per cent of dog wagging 100 per cent of tail. (Difficult to believe in either case.)

As a matter of fact, the value of the commodity gold (bullion) is fixed by the value of currency into which it may be freely coined under the laws of civilized nations, two-thirds of the entire product being thus used.

The value of the currency is fixed by the quantity offered in exchange for other things, as compared to the demand (offering of other things in exchange) for it.

The great utility of gold as money is resident in the fact that it is made by law a factor in the various currencies of the world, and affords an automatic method of maintaining the par of exchange.

We need not discuss the primary reasons for the selection of gold for this purpose; they are well understood by students of the problem, but the fact must not be forgotten—gold is the one common factor in all civilized currency systems.

Gold redemption, therefore, must be a part of the plan for an extension of our legal-tender paper circulation, and the facts as to gold are therefore very important.

First. Forty-nine and eight-tenths per cent of all our money (including bank notes) is gold or gold certificates. If we exclude bank notes, we find that 74 per cent of our legal-tender money is gold or gold certificates.

That our people prefer paper money to gold for daily use is proven by the fact that 57 per cent of all the gold in the country has been "redeemed" or exchanged for certificates. The remaining 43 per cent is mainly lying in reserves. Comparatively little of it is in active circulation in the hands of the people.

The issue of gold certificates in 1912 was \$45,000,000, while only \$43,000,000 of gold was added to our stock. Three million dollars of the old stock went into certificates with all the new. Gold will only be sought for export.

Second. The annual requirements for gold export average nothing. For the past 32 years we have imported an average of \$5,000,000 per year.

The largest net export of any year was \$89,000,000 in 1864; that was during the war. So that in an experience of 50 years the export of gold is seen to be a negligible quantity.

It would be extravagantly safe to assume that \$150,000,000 might be needed for this purpose in any one year, and equally safe to assume that an average of \$20,000,000 per year of gold exports would

be the limit for any extended period. For the past 32 years an average of \$5,000,000 per year has been imported.

We have an annual production of \$90,000,000, \$60,000,000 of which is available for money, or three times the possible average export. The ability of the Nation, therefore, to "redeem" its full legal-tender paper in gold is so well assured that we need give the matter no concern.

Third. The necessary annual increment of legal tender in the country is (as we have seen in answer to question No. 2) \$200,000,000 and the annual increment of gold is \$65,000,000. The increment of legal-tender paper needed, therefore, is \$135,000,000 per year, of which the gold increment (\$65,000,000) is 49 per cent.

On June 30, 1912, we had in circulation:

United States notes.....	\$340,000,000
Silver dollars.....	70,000,000
Gold certificates.....	943,000,000
Silver.....	469,000,000
Subsidiary silver.....	145,000,000
Total.....	1,967,000,000

All of which may be considered redeemable in gold.

Neglecting entirely the silver held in the Treasury as an asset, we had of gold at the same time:

In Treasury reserves.....	\$1,093,000,000
In circulation.....	610,000,000
Total gold.....	1,703,000,000

All of which was available for redemption purposes, or 86 per cent of the total redeemable currency.

If we eliminate the subsidiary silver, and the \$1 and \$2 notes, no part of which can be spared from actual use, we find that more than one-half of our money is gold. In other words, we have 100 per cent of gold back of our uncovered money, of which \$1,093,000,000 is already assembled in the United States Treasury for redemption purposes, and amounts to 85 per cent of our redeemable currency.

Starting, therefore, with 85 per cent of gold money in the redemption fund, and currently securing 49 per cent of gold against the new notes to be issued, we would seem to have a competent equipment with which to face a situation in which in the long run no redemption would be required, and in which in all human probability the deposit of gold in exchange for the more convenient forms of paper must increase more rapidly than in the past.

In answer to the second part of this question, I would say that the new currency should be issued by the Treasury Department in exchange for an equivalent in value of Government bonds, whenever and by whomsoever presented, the bonds to be canceled as fully paid.

The notes should be full legal tender for all debts public and private in this country, and redeemable in gold or any other form of currency issued by the Government on demand.

A minimum reserve fund of gold coin amounting to 20 per cent of all outstanding currency other than gold should be maintained in the Treasury, the same to be replenished when necessary by the sale of bonds for gold in the open market.

Since a constant increment of 49 per cent of gold automatically accompanies the proposed expansion of notes, which increment flows of its own volition into the reserve fund, it is altogether probable, if not certain, that the gold reserve will constantly increase, and no bond sale for this purpose would ever occur.

I mean a 20 per cent reserve here as a minimum. You can put it up as high as 33 $\frac{1}{3}$ per cent. You can not maintain it above that and furnish the country with the money it needs.

Senator SHAFROTH. There is not enough gold.

Mr. BERRY. Yes, sir; there is not enough of it.

Now I pass to question No. 10.

If notes are issued to or by an association what should be the limit in amount of this currency for each association, and should this limit be based on its capital stock and surplus?

I now answer that question in this way.

No notes should be issued by a bank or association.

If thus issued, they can not be given legal-tender powers, and would be useless otherwise. If issued to an association or bank by the Government in exchange for an equivalent the question of capital and surplus is not pertinent.

Senator REED. Why is not capital and surplus pertinent?

Mr. BERRY. Suppose I sell you a horse for \$150; I do not care whether you have any capital or assets or not, as long as you pay for the horse.

Senator REED. Yes; but we are not dealing with horses.

Mr. BERRY. We are dealing with assets just like horses, only better.

Senator REED. What kind of assets?

Mr. BERRY. Government bonds.

Senator REED. Nothing but Government bonds?

Mr. BERRY. Nothing but Government bonds.

Senator REED. Well, if you limit it to that, that is true, but if you limit it to any other medium you have a radical departure from the proposition contained in this measure. I understand you with that explanation.

Mr. BERRY. It is only when we introduce the idea of Government loaning money to the banks that the question of security enters the problem, but as a matter of fact if the money issued either as a loan (however secure) or as an equivalent to the asset (bond) surrendered, and only in answer to the demands of business, final payment will not and can not be made unless business is reduced, and business should not and will not be reduced. Therefore the security will only cover the interest payment. The final result will be a perpetual debt and interest payment by the people to the banks and by the banks to the Government (the people), and a horde of clerks to attend to an utterly useless and fruitless mass of detail.

If the money is issued, as are the gold certificates, in exchange for an equivalent, the question of capital and surplus is not pertinent, and no bookkeeping is involved.

I now come to question No. 11.

What device should be provided to force the retirement of this currency in whole or in part when the legitimate demands of trade subside?

I will now answer this question as follows: The legitimate demands of trade do not subside, and when these notes become the basis of

credit in bank reserves they can not be retired without forcing business to "subside."

If, however, it is desired to provide for the voluntary retirement of any portion of the notes—which will never occur (I think it should be forbidden)—the reissue of the bonds in exchange for the notes would be the best method.

I now take up question 12.

If a tax on this currency payable to the Government is provided, should it be graduated so as to increase with the volume of currency issued by the reserve association, or graduated so as to increase with the length of time it is outstanding?

I will answer this question as follows:

There should be no tax, graduated or otherwise, on the notes issued. The tax would be ultimately paid by the borrower, and credit is sufficiently costly already.

Senator REED. I do not like to interrupt you, because you are talking from your manuscript; but I wish you would tell me the sense of the proposition which involves the issuance of an interest-bearing bond, the deposit of that bond with the Government in order to have currency issued against it, and then taxing the currency. We take, for instance, a 3 per cent bond, and then we have a tax upon the currency of a cent and a half. Why not have a 1½ per cent bond and no tax on the currency?

Mr. BERRY. Just as well. I do not see anything in it at all. The proposition, of course, is that the country would hardly stand for the banks having all the cake, and so long as you make them give back a part of the cake in the form of a tax we have endured it. I do not see anything in it. I do not believe in the Government loaning money on any kind of an asset.

Senator SHAFROTH. It is just a circumlocution without any result. It is like this 5 per cent in the Treasury to redeem the bank notes. They send it in and then they send it out. It merely involves loss of time and loss of energy.

The CHAIRMAN. That is right; it is an economic loss.

Mr. BERRY. That is right.

I now take up questions Nos. 13 and 14, referring to the new Federal reserve banks. It is my opinion that no new banking machinery is needed. The issue of money is a Government function, and the Government is already provided with all the machinery needed for this purpose.

The conduct of general business, including banking, is a matter for the people to inaugurate and manage and should meet with as little interference from the Government as possible.

It is only where monopoly is necessarily inherent in a business activity that Government should interfere. Banking is not such an activity, and to secure publicity as to the condition of financial institutions is as far as Government should go in controlling them. Conspiracies among them for the purpose of limiting credit or fixing the interest rates should be treated as crimes and punished under the Sherman law.

Question No. 15 is:

Should such reserve associations have State banks and trust companies as stockholders; and, if so, what requirements should be made of such State banks and trust companies?

In the matter of currency issue, State banks, trust companies, and all other banking institutions should stand on an equality.

Senator REED. Let me ask you a question about that. If I understand your fundamental idea it is this: First, the Government is to issue money; second, if the bank wants money issued to it by the Government it has to take bonds, and it is your opinion that that privilege should be open to any bank, State or National. Is that your idea?

Mr. BERRY. Yes.

Senator SHAFROTH. But the bonds shall not be continued as their security, but shall be sold to the Government for the currency that is issued. That is as I understand Mr. Berry's proposition.

Mr. BERRY. Yes.

Senator BRISTOW. What kind of bonds do you refer to?

Mr. BERRY. United States bonds.

Now, referring to questions 16 to 22, inclusive, with reference to the new Federal reserve banks: In my opinion no new banking machinery is needed. It can serve no useful purpose and will involve a horde of new officers and clerks at high salaries and put an added burden on credit, which the borrower must finally pay.

The banking system of the country as now constituted, with clearing-houses in the principal cities of every "region" in the country, is competent to handle all the credit the country needs. Scarcely an individual bank in the country is handling more than half the business it could handle if reserve cash could be readily secured. Credit would be thus reduced to cost instead of increased.

Question No. 23 is:

Should Government deposits be withdrawn from banks and placed with the reserve associations; and, if so, how should they be apportioned and what rate of interest, if any, should be paid? Within what time could this be safely done?

All Government funds, excepting possibly a small working balance, should be deposited in banks on uniform approved security at interest rates established by competition.

The absorption of money in the Treasury in times of plethoric revenue is an evil. It now causes a depletion of reserves and contraction of business. Under a new law providing for the issue of new legal tender, as I have described, the withdrawal of money into the Treasury would cause an unnecessary issue of new money which might become redundant in case of subsequent large disbursements. The Government should use the banks as other interests do.

With your permission, I will elaborate that statement a little.

Senator REED. What question are you referring to now?

Mr. BERRY. No. 23.

Senator SHAFROTH. It is his answer to the twenty-third question.

Mr. BERRY. When I was treasurer of the State of Pennsylvania I had \$20,000,000 of State funds in my hands all during that period.

Senator SHAFROTH. During what period?

Mr. BERRY. During the period of my incumbency—two years.

Senator SHAFROTH. What years do you refer to?

Mr. BERRY. I refer to 1906 and 1907, during the panic. I had that money deposited in the various banks in my State, and the law fixed the interest rate at which I must deposit this money at 2 per cent and prescribed the various kinds of security I must take for it, but I was absolutely without information as to where that money was most

needed in my State. I had nothing but the importunity of the bankers to guide me. The fellow that was loudest mouthed and put up the biggest holler got the money. But inevitably as soon as I deposited that money at 2 per cent it instantly flowed to the spot that needed it most and where the highest interest was paid. I traced it. I put \$100,000 in a bank in the northern part of the State, and inside of three days that same \$100,000 landed in Pittsburgh. This man was paying 2 per cent for the \$100,000, and he was getting 4 per cent from the Pittsburgh bank. The Pittsburgh bank would not pay my checks. They had \$5,000,000 of my money and would not pay my checks. I had the severest experience I ever had in my life during that panic. I had \$5,000,000 tied up, and I could not get a dollar for four months.

Senator REED. I take it, though, that your idea is that it was unjust to give advantages to a bank that did not need it when there was a bank that needed it so badly.

Mr. BERRY. Yes.

Senator REED. But I call your attention to this fact: The bank that you did let have the money was a bank that had not repudiated its checks, and when that bank put its credit back of the loan or advancement from the State treasury—

Mr. BERRY. He put his cash up—not his credit.

Senator REED. He did not put up cash with the Treasury, did he?

Mr. BERRY. Here is the thought I had in mind. Perhaps I did not express it as well as might be. It should have been this: Had I been permitted to take bids for that money, the spots in the State where the necessity was greatest would have obtained the highest interest rate.

Senator REED. Would you have let a bank have that money if that bank had repudiated your checks?

Mr. BERRY. I would have had the same security in each case. I had the bonding companies of the country behind every loan. Of course if I had been permitted to get competitive bids, at once the money would have gone to the spot where it finally went to, and the State would have got the increased interest instead of the individual bank up in the corner of the State.

Senator REED. When you let the money out, did you not have the security of the bank, and the credit and faith of the bank that got it in addition to any bonds?

Mr. BERRY. Of course I suppose I might have had that, but that was not the security the loan was made on. When a bank failed, as several did, I went immediately to the security and got the money and let them fight the bank. I had no trouble about that end of it; but the point I wanted to make was this: In distributing any amount of money at a rate lower than the prevailing rate it is bound to seek the highest rate of interest which is paid.

Senator REED. Is there not this possible danger in that, unless you put some limitation upon your rule: Let us assume—and my assumption is not made as a reflection upon the group of banks I am going to mention—but let us assume that the banks of New York should become wicked enough in case of financial stringency to conclude that they wanted to corner the money and that they should bid higher than the other banks and get all of the money of the Federal Government, take it to their banks, and keep it away from the other

banks. Might not that be a dangerous situation if the Government was obliged to send it there?

Mr. BERRY. It is no more dangerous, in my judgment, than it now is, because that is the reason the money goes to these centers. They offer more for it than anybody else. They can go to the outlying banks and get the gold and absorb the money of the country by that process. I do not think they ever did do it.

Senator REED. I may be wrong, but I thought the amount of money the Government had, taken as a whole, was the very thing we were dealing with here as a balance check of safety, if I may mix my metaphors, an element of safety in time of trouble; and that the fact that the Government could take that money and throw it into the banks in case of emergency was an element of safety. For instance, if all the banks in New York City were to close their doors the Government of the United States might deposit this money elsewhere in the country and start business going.

Senator SHAFROTH. The net balance in the Treasury on the 13th of this month, Monday, was \$131,390,515.83. The Government could not lend more than that amount.

Mr. BERRY. And one-half of that is already deposited in the banks and \$40,000,000 is in bank notes. They have not any money in the Treasury now, and, very wisely, they put out what they did have.

Senator REED. That does not meet my statement fairly, however. Your proposition amounts to this: First, that the Government of the United States will lend out substantially all of its money, except a small working balance; second, that that money will go all of it to one bank.

Mr. BERRY. Yes; if that bank pays the highest price.

Senator REED. If that bank pays the highest price all of the money will go to that bank, or to a group of banks, if that group of banks should pay the highest price.

Mr. BERRY. Yes, sir.

Senator REED. Now the question I ask is whether that might not be dangerous unless there was some check, some discretion, lodged somewhere?

Mr. BERRY. Well, my theory about it is that the potentiality of the bonded indebtedness of the country for immediate coinage is the great safeguard. If you have the reserve of bank A, for instance, composed of \$50,000 of actual money and \$50,000 of Government bonds, which Government bonds are instantly convertible, we have stopped every possibility of a stringency.

Senator REED. But would you have enough Government bonds out?

Mr. BERRY. You can easily get that. All you have to do here in Congress is to provide for it. There is no trouble about that; that is the safeguard.

Senator REED. Your theory, then, run down, amounts to this: That in order for the Government to have a safe currency in this country it ought to keep always in debt?

Mr. BERRY. Yes; to some extent.

Senator REED. And be constantly charged with a heavy interest account.

Mr. BERRY. Not necessarily a heavy interest account, but an interest account which would be sufficient to erect a dam, if you please, so as to hinder the flow of bonds into the currency.

Senator REED. What is back of a Government bond?

Mr. BERRY. Every stick and stave in the United States.

Senator REED. What is back of the Government guaranty?

Mr. BERRY. The taxing power of the United States.

Senator REED. Then they practically amount to the same thing, except that a bond is written on a piece of paper and the other is written into the law.

Mr. BERRY. Yes.

Senator REED. Why is it necessary to have a bond at all?

Mr. BERRY. Simply to make it automatic, Senator, and take it out of the hands of anybody whose business it shall be to say when you issue money and when not. If I purchase this bond, which is a 3 per cent investment, I will hold it just as long as a 3 per cent investment is a better thing than I can get elsewhere. As soon as the demand for money puts the rate where I can get a better than a 3 per cent rate, I will slip this bond back into the currency. It will do that automatically. Nobody will have to lay awake at night to think about it; it will slip back into the currency just whenever and wherever it is wanted.

Senator SHAFROTH. That will prevent unnecessarily or unduly raising rates.

Mr. BERRY. It will prevent it absolutely. Not only that, it will prevent overinflation. That is what I meant by speaking of this dam erected by the interest rates established by the Government. You must make it to my interest to hold this or I will slip it into the currency; but let it be an interest rate which will make it difficult for me to part with it, so that there will be a resistance which the demand for money must overcome before the money can go out, and it will have a most beneficial effect.

I will now take up question No. 24:

Should every national bank be required to keep its reserve with the association to which it belongs except such as it keeps in its own vaults; or should it be permitted to keep any certain per cent of its reserve with other reserve associations? If so, how much?

Every bank, national or otherwise, should keep its determined reserve in its own vaults. It should be periodically examined, and its condition as to reserve publicly announced.

It is different as to reserves.

Senator REED. That is every national bank?

Mr. BERRY. Every national bank, and every other bank that has this issuing privilege. That is the only thing that I would require of them; that they submit to this publicity of their condition.

Senator REED. I understood you to state that you were going to give the issuance privilege to everybody that has a bond. Just let them walk up and shove the bond over the counter of the Treasury and say, "Give me some money."

Mr. BERRY. Yes.

Senator REED. Then there would be no reason for having a national bank at all, would there?

Mr. BERRY. Not so far as the currency is concerned. Here is the principle of it. Currency is a system of two parts, actual cash and coinable bonds. The storing of all the potatoes or other food in the cellar of the city hall does not increase its power to feed the people of the town unless a scarcity exists that requires restraint of the natural appetite of the people. There is no necessity whatsoever for a concentration of reserves in gold unless such reserves are in such position that restraint must be exercised upon them.

The reserve should consist of two parts—actual cash and coinable bonds. With bonds immediately convertible into cash, the cash holdings need not be much larger than the daily necessities of check redemption require.

The practice of moving the reserves of outlying banks into the centers in the vain hope that by concentrating them their efficiency will be increased, is a snare and a delusion. The storing of all the potatoes or other food in the cellar of the city hall will not increase its power to feed the people of a town, unless a scarcity exists that requires the restraint of natural appetites.

This practice only tends to increase the advantage over the outlying towns naturally held by the cities, and does not materially increase the efficiency of the reserve money.

The reserve cities are nominally required to hold 25 per cent of reserve which is reduced by central reserve deposits to a lower figure, but remains much larger than the actual demands of check redemption require, while in central reserve cities 35 per cent is required, an amount far in excess of actual needs.

If reserve money was distributed throughout the Nation in proportion to the actual demands upon it in the various communities, an equal amount of credit would be more safely carried by it; and the extremities (particularly the farming communities) would be well nourished as the trunk. "Cold feet," or scarce credit, among the farmers would not be so prevalent if the extreme ramifications of the banking system were as well supplied with reserve cash as are the centers, regional or otherwise.

Senator REED. Do you think that your potato illustration is a fair one?

Mr. BERRY. It will not do to test any analogy too closely.

Senator REED. The analogy that can not be tested ceases to be valuable. What we want in the nature of a reserve is something to draw upon in order to redeem obligations that are out. One dollar in a bank may pay \$100 before the dollar has actually gone, but your potato illustration is different. Once the potatoes are gone out they are consumed; they do not circulate.

Mr. BERRY. Well, that illustration halts, I am free to confess, but I think it illustrates my point. This is a subject I have not found possible to illustrate to any great extent. It is so thoroughly unique that a good illustration is exceedingly difficult to find.

Now, as to questions Nos. 25 to 31 I have no suggestions to offer as to the management of reserve associations. They are, to my mind, entirely unnecessary.

Referring to question No. 32:

Are you familiar with the recommendations of the National Monetary Commission made to Congress in January, 1912? If so, what is your opinion of the plan, and what modifications would you suggest, if any?

I am familiar with the recommendations of the National Monetary Commission. My opinion of the plan can be inferred from what I have said in answer to the other questions.

The plan involves a lot of useless machinery and will serve no useful purpose unless the fundamental principles of sound finance are violated by giving a credit note the power to stand in reserve as a basis for further credits. This, to me, is a monstrous proposition from whatever source it emanates.

Question No. 33 is the last. It is a very long one, but it proposes a plan, and I say the plan proposed here is more nearly correct than the Aldrich plan, to my mind.

Instead of calling the new Treasury division a reserve division, I would call it "The division of issue and redemption."

Its assets should consist of the gold and silver now held in the Treasury as trust funds or redemption funds and such other gold as may flow to it naturally in exchange for legal-tender paper currency or to be forced to it by the sale of bonds for gold in the open market.

This division should exchange any kind of legal-tender money for any other kind desired and destroy worn-out notes or defaced coins and replace them with new.

It should exchange new United States notes for Government bonds (when voluntarily presented) at the market price and retire the bonds.

It should maintain a minimum reserve of 20 per cent of gold against the total of all other forms of legal-tender money and furnish gold for export in exchange, and only in exchange for notes, the notes to be withheld from circulation until exchanged for gold on the voluntary solicitation of the holder of the gold, or in exchange for bonds in lieu of new notes.

By this process the volume of legal-tender money can only be changed by the surrender of bonds, and proceeds on the assumption that a Government bond bearing the current rate of interest will not be surrendered unless the demand for credit tends to raise the interest rate, which is a sure indication that more money is needed, and when thus issued will never be retired unless the developments of the country cease.

Under the operation of such a law the bonds bearing the lowest interest rate (2 per cent) would naturally be exchanged first; and the first effect would be to retire the bank notes, at least to reduce them to a volume where they would not be redundant and their redemption a burden.

The privilege of note issues by the banks, if continued at all, should be continued upon the 2 per cent bonds being held as security for them, and they should be stripped entirely of legal-tender powers. By a gradual process the bank notes would disappear and with them the 2 per cent bonds.

A volume could be written as to the advantages to be realized from the adoption of this plan, but I forbear.

Much could also be said as to the danger imminent under the present system, but here I also forbear.

Now, gentlemen, that is all I have prepared to set before you.

Senator BRISTOW. Now, just before you go on I would like to ask this question: How do you get the gold into this reserve? You put the minimum at 20 per cent.

Mr. BERRY. Yes.

Senator BRISTOW. How do you replenish that? Of course, it would be more than that as a rule, would it not?

Mr. BERRY. Yes; at the present time it is about 85 per cent, and I apprehend that it will ultimately fall to 33½ per cent unless the supply of gold production should very greatly increase.

Senator BRISTOW. Suppose it went down to 20 per cent, what would you do to get gold?

Mr. BERRY. By the sale of bonds. We would have to sell bonds in the markets of the world to secure the gold. We have redeemed the bonds and gotten the money out.

Senator BRISTOW. Do you think that with 20 per cent there would not be danger of a period coming when there would be a lack of confidence in these bonds and they would go below par?

Mr. BERRY. No, sir; I do not. I spoke of that as a minimum for this reason: To my mind it seems to have been neglected by most of our people, but it has come to be the duty of the United States to finance the world. We are the greatest Nation on earth, and nearly one-half of the business of the nations of the world is done in this country. Three-sevenths of the entire banking power of the world is in this country, and it has come to pass through the natural adjustment of the growth of civilization that this country is at the head of the procession.

We have South America, Africa, China, and India soon to demand a larger volume of money than has ever been conceived of in our wildest imagining, and it is my judgment that the United States must largely finance those countries. We have the money; we have the resources; and it is up to us to do it. When you come to world finance nothing but gold will do. We are producing an increment of gold yearly which will maintain all the currency that we wish to use on about a 33½ per cent basis. We therefore can very readily spare a billion and a half gold to finance the rest of the world; and ultimately we will be called upon to furnish it.

Senator BRISTOW. Suppose this reserve went down to 20 per cent and some speculators got control of a very large amount of these notes. They would come here and demand the money; the Government would have to pay the gold. It puts its bonds on the market and the gold is cornered somewhere, so that they would hold the Government up for heavy interest rates on the bonds in order to get gold; and then, after the bonds have been sold and they got the bonds, furnished the gold, why, of course, they would have made their speculation and the price of gold would at once go down.

Mr. BERRY. I can imagine such a condition as that, but I can not conceive how it can ever practically happen. There is \$1,700,000,000 of gold in the United States, the largest amount of gold ever assembled in any country in the history of the world. There is no considerable number of people in this world—that is, there is no small number of people, no number of people involving less than 1,000—who could make any impressionable dent on that gold.

It is a practical impossibility that the gold could be cornered now. It has been cornered in times past. It can not be now; the supply is too great.

That is the reason that I read so carefully to the committee the status of the gold situation, to impress your minds with the fact that

at this time in the history of the country gold is so abundant that the fear of its being cornered may be absolutely dismissed. It is a practical impossibility. I can imagine, of course, just as you have, what might be done under those circumstances: but it is out of the question for it to occur.

And, moreover, in the process of incurring the obligation involved in issuing redeemable paper the Government has withdrawn an equivalent of bonds, upon which it has ceased to pay interest, bonds upon which it now pays \$25,000,000 a year interest; in the course of a few years the saving of that \$25,000,000 would be sufficient to enable us to go into any market of the world and beat any combination on earth, and get all the gold we want. We, as a matter of fact, must now be viewed, as a Nation that is master of the situation.

Senator BRISTOW. But you must admit, of course, that if it were possible for the speculators to get control of the gold they could force the Government to bid very high in order to get it.

Mr. BERRY. Surely, I will admit that.

Senator REED. Now, your idea is a currency issued and based upon bonds, and that if a man wants this currency he has got to go and buy a Government bond; then he can deposit the bond and draw currency. And in that way, if we had plenty of bonds out, there would always be plenty of money, because when money was needed they would invest in these bonds.

Mr. BERRY. Yes, sir.

Senator REED. So that takes care of the matter of expansion, in your judgment?

Mr. BERRY. Yes.

Senator REED. And now, when the money becomes less needed, they would prefer drawing interest on the bonds and go back with the money and take the bonds out.

Mr. BERRY. That is in answer to the assumed necessity for that retirement. My own judgment about it, after years of close study, is that they ought not to be granted any such privilege. You should put the restraint entirely upon the issue; but once issued, let it stay there, let no man retire a single dollar of legal-tender money under any consideration. That is my own judgment. But I would not seriously object to your providing for the reissue of the bond in exchange for the money in case the money should become redundant.

Senator BRISTOW. And that money, when you took these notes and bought the bonds, the note would go out of circulation and the bond go in?

Mr. BERRY. Yes; that is a means of contracting the currency. I would personally oppose it, however. In my judgment we should not allow any man, or any set of men, to cancel a single dollar of legal-tender money, for as soon as you do you make trouble, for your price level is adjusted to it, your business community assumes that it is there to stay, and expands business upon it; and if it is retired, it means the contraction of your credit and business, and it puts you in greater danger of a corner of gold than anything else will. You need have no fear of that; but you now have this great danger: It is now possible for one man to go in the banks of New York on any afternoon and deposit his check for \$10,000,000, then take the \$10,000,000 out of the paying teller's window and carry it around and put it in the safe-deposit vault, and on the next morning \$40,000,000 of credit must come down in the city of New York.

The CHAIRMAN. It is absolutely the fact.

Senator REED. How do you mean, "must come down?"

Mr. BERRY. Because the reserve fund is at the ragged edge all the time: and the next Monday morning the banks are \$10,000,000 below in their reserve fund, and they have got to call their credit: that means a loss of \$40,000,000 of credit, four times \$10,000,000.

Senator REED. Why do they have to withdraw \$40,000,000?

Mr. BERRY. Because the ratio of credit to reserve funds in New York City is four to one.

The CHAIRMAN. It is \$1,600,000,000 of these loans against \$400,000,000 of money.

Mr. BERRY. Now, if you have a bond in reserve, that bank, instead of answering to that pressure on the part of the schemer who has withdrawn his cash in order to force a contraction of the credit and the destruction of prices on the stock market, can instantly in that case put his bonds in and secure cash and everything is all right. The knowledge that a potential supply of cash in the form of bonds is always available will stop this practice.

Senator REED. That is, if he has got the bonds?

Mr. BERRY. If he has got the bonds, yes; and we propose to see that he shall have them.

Senator REED. Have you got a plan outlined in your paper which you have prepared of your views of what ought to be done?

Mr. BERRY. No, I have not got any specific statement of plan here. I have simply outlined the principle this far that underlie my thought.

Senator REED. Well, when you are through answering questions by members of the committee, I see you have a paper and I assume you have some plan.

Mr. BERRY. Yes, I have a paper directly bearing on this bill which is pending, and applying these principles to it.

Senator REED. To this bill?

Mr. BERRY. Yes.

Senator REED. I do not see how you are going to apply the principles that you have just announced to this bill any more than you are going to put a square peg in a round hole.

Mr. BERRY. If you apply a bunch of dynamite to a hole in a stone, you know what will happen. [Laughter.]

Senator REED. That kind of application, of course, is possible.

Senator SHAFROTH. Mr. Berry, I thought you said in your prepared statement that the credit was built up upon this money at the ratio of 10 to 1.

Mr. BERRY. In the country at large the rate is 10 to 1; in New York City it is 4 to 1. Now, if that were done in an outlying town, the situation would be that much worse—and it can be done in outlying towns, and I am not sure that it has not been frequently done. It has been done in New York. I have the record to show you that it has been done in New York. My book shows just how it was done.

Senator SHAFROTH. Mr. Alling, vice president of the Nassau Bank, gave the figures as to the amount of their reserves and the amount of their deposits, but I think it was about at the rate of 12 to 1.

Mr. BERRY. Actual issue; yes.

Senator SHAFROTH. In that one case—

Mr. BERRY (interposing). But you know the way they are counted.
Senator SHAFROTH. Yes.

Mr. BERRY. Is the case you spoke of in a central reserve city—is he a New York man?

Senator SHAFROTH. Yes; that is in New York City. Of course, they are bound to keep 25 per cent.

Mr. BERRY. At any rate, I give them credit for 25 per cent. If the ratio should be 12 per cent, the credit would be eight times the amount of money instead of four times.

Senator REED. Mr. Berry, what I am interested in having you do is to put on a piece of paper, without note or comment, the outline material of what you say ought to be done, not with the proposed bill, but with the present situation.

Senator BRISTOW. Would it not be better to have him leave that until he gets through with this subject?

Mr. BERRY. Well, as I have said, Senator Owen, chairman of this committee, has introduced a bill to provide for the retirement of the 2 per cent bonds to meet this situation, and Senator Shafroth has introduced another bill upon the subject. I am rather inclined to think that of the two measures I prefer Senator Shafroth's bill, because it is more frank and direct and will solve this problem. Either one of the bills I think will do that.

Senator REED. Without doing anything else?

Mr. BERRY. So far as I can see, yes. It might need a word or two of change, but the principle involved in both of those bills is the principle I am advocating, and it will furnish the opportunity for the expansion of the currency in response to the demand for it.

Senator SHAFROTH. Here is an article [indicating paper in the Senator's hand] that was written by Mr. Alling, the gentleman I have just referred to, which is upon the same basis exactly. I wish you would read that, Mr. Berry, during the recess of the committee, because it suggests this very plan.

Mr. BERRY. Well, I am very glad to know that there are other people who agree with my views. In fact, my experience has been that there are. I have been a student of this question for 30 years. I have delivered many lectures before bankers' associations and elsewhere and have had many conversations with eminent bankers and others interested in the subject, and I have never found a man who had given sufficient consideration to it, who had fastened his mind upon the fundamentals, who did not agree with me in regard to it. I have not found a single man who has given the matter thought for a sufficient period who did not, and I have a letter from Mr. Andrew Mellen, the president of the Mellen National Bank of Pittsburgh, which is one of the most complimentary letters I have ever received.

Senator REED. Do I understand you to say yourself that all that is necessary to do is to retire the greenbacks—

Mr. BERRY (interposing). You mean the bank notes, do you not?

Senator BRISTOW. The bank notes. The bank notes are a substitute for or an enlargement of the greenbacks.

Senator REED. Please wait until I get my sentiments expressed—is to retire the bank notes and greenbacks and the Treasury notes and every form of paper money, and have an issue in lieu of it as a new Treasury note, and hold back of it the gold reserve that we now have, which is the \$1,100,000,000 that is back of the gold certificates

and the gold that we now have back of the greenbacks, and that will constitute the money of the country?

Mr. BERRY. Practically so, yes. I do not think you need a new Treasury note. Your present Treasury note is good enough. Just extend it.

Senator REED. Well, I think you can not bring in the gold certificate, which is now good for a dollar of gold and which has been described as a warehouse receipt for a dollar of gold, unless you would do it by calling that note in and redeeming it and issuing some note that would not profess to be merely a certificate by the United States that it holds 100 cents in gold.

Mr. BERRY. You will find the details of that kind in this little book. I have planned as I would propose to do it of my own initiative. I do not propose to upset your scheme, but what I wanted was to get this idea of the utterance of notes which are competent to stand in bank reserves incorporated in it or in a separate bill.

Senator REED. Well, in addition to that, Mr. Berry, your idea is that for the future needs of the country we would provide a Government bond carrying a sufficiently attractive rate of interest, so that it would be purchased by people as an investment; and then provide that anybody who had one of those bonds could go down any day and turn it into the Treasury, and if it was a \$1,000 bond, get \$1,000 of these notes?

Mr. BERRY. Yes, sir; practically so. I would not fix it, however, at the face value of the bond.

Senator REED. Where would you fix it?

Mr. BERRY. At the market prices.

Senator REED. At the market prices?

Mr. BERRY. Yes; because it would throw you out if you put it at the face value, because the 3 per cent bonds would probably sell below par. If it did, it ought not to be convertible at par. If it was a 5 per cent bond and sold above par, it ought to be convertible above par. In other words, it ought to be convertible at its monetary market value.

Senator REED. Then, if bonds went up to 120, a man could come down with that sort of bond and get \$1,200 on it, if it was a \$1,000 bond.

Mr. BERRY. Yes, sir.

Senator REED. And the Government would be losing that 20 per cent. It sells the bond at its face value and redeems it at 20 per cent premium.

Mr. BERRY. It may have sold it at its face value, and it may not. It would depend upon what the circumstances were. If you issued a 5 per cent Government bond now and sold it in the open market, it would bring a premium. In other words, the natural interest rate should determine the price of a first-class security and it does, outside of the privilege granted to our 2 per cent bonds.

Senator SHAFROTH. If a man could get the amount of the premium out in the market, he would not think of coming to the Treasury of the United States and taking a lesser premium on the bond.

Mr. BERRY. Certainly not.

Senator REED. Well, I am not so sure about that. I have in mind the fact that it is a common thing for the Government of the United States to sell a bond at par, and then find that the bonds have gone up the next day, or within a week, very materially.

Mr. BERRY. That has happened.

Senator REED. Yes; and it looks to me as though there might be an influence brought about that could put a Government bond up pretty high, if it wanted to, and then come down and have the Government redeem it.

Mr. BERRY. Well, that is a detail that perhaps would have to be discussed.

Senator BRISTOW. Well, suppose 3-per-cent bonds were issued, would there be a sale when money is scarce and rates are high—there would not be a sale for 3-per-cent bonds, then, would there?

Mr. BERRY. There would, at a discount.

Senator BRISTOW. Well, I mean at par. Suppose they were sold at par. If they were convertible immediately, however, at par, they would sell at par, would they not? That is, if it was a 3-per-cent bond and I could buy a \$1,000 bond that drew 3 per cent, and this morning or this afternoon or to-morrow I could go to the Treasury and exchange that bond for \$1,000 of legal-tender notes, and I could loan those notes for 5 per cent. I could take that process, could I not?

Mr. BERRY. Yes.

Senator BRISTOW. How would it relieve a stringency unless the bond were out?

Mr. BERRY. Well, there is \$1,000,000,000 of the bonds out now.

Senator SHAFROTH. A little over that since the Panama bonds were issued.

Mr. BERRY. Over \$1,000,000,000; and we are going to issue more on account of the Panama Canal; and in my judgment we ought to issue more on account of inland waterways, and other public improvements. I see no reason why there should not be a constant modicum of bonds. The annual increment of paper money required now is \$135,000,000, so that if you have twice or three times that amount constantly outstanding it would be sufficient. If you have that amount as compared to \$1,000,000,000, as you now have, that would be all you would want, because you only require \$135,000,000 to supply this deficiency of currency each year. Your present bond issue would last you for several years. The bonds will not disappear any faster than the demands of business call for more money; and your present bond issue would carry you for several years.

Senator REED. I am so much of a farmer on this question that there is one bit of it that is an utter maze to me, and I want somebody to take me up on the mountain and show me the elasticity of it. I understood you to say a little while ago that all there was back of a Government bond was the faith and credit of the United States, but that that faith and credit involved all the property there was, private or public, in the United States.

Mr. BERRY. That is right.

Senator REED. Now, a bond is nothing but a guaranty by the Government; that is all. We call it a bond, but it is nothing more than a promise to pay.

Mr. BERRY. Yes.

Senator REED. Now, if the Government can issue its promise to pay and upon that promise to pay can issue another promise to pay, in the shape of a note which we call currency, why is it necessary to have the bond at all? Back of both is the same thing, the faith and credit and property of the United States.

Mr. BERRY. That is the very consideration, Senator Reed. The only reason why you need the bonds in the process is to safeguard you against an overissue of this currency.

Senator REED. Well, can not we conceive that the United States Government—the Treasury Department—can restrain itself from running away, unless we hobble it in this way?

Mr. BERRY. But you see you are up to either one of two things. You must let this money come out automatically or artificially. Yours is the artificial method. You put it into the hands of some man or set of men to determine where, and when, and how much money shall come out. On the other hand, you should let the automatic forces of trade call it out. The bond is a part of that machinery.

Senator REED. I get your meaning. In other words, when the demands of trade call for money, more money than the interest of these bonds bring, then the man will sacrifice his bonds or sell his bonds in order to get the money, so that the check which the bond puts is simply this, that whenever the interest rate the Government pays is less than the interest rate that money will earn, then people will exchange these low interest-bearing securities for the higher interest-earning money. That is about it, is it not?

Mr. BERRY. Well, that is close to it; but it has one error. The interest rate denominated in the bonds, say 3 per cent, that is the interest rate that the Government pays on the face of the bond. But the exigencies of trade will vary that interest rate, and cause that bond to sell for less or more than its face value, as the case may be.

Senator REED. Yes.

Mr. BERRY. And that interest rate may be higher or lower and the proper interest rate can only be determined by allowing the forces of trade free play, and letting them establish what this interest rate is. It is matter of impossibility for any man or any set of men to tell what the interest rate ought to be.

Senator SHAFROTH. Interest rate on the bond will always be less than the current rate in the market, will it not?

Mr. BERRY. Not necessarily, if that bond is denied the special privilege of note issues, as our present bonds are.

Senator REED. Pardon me, Senator Shafroth, for interrupting you.

Senator SHAFROTH. Certainly.

Senator REED. But let me get this particular thing into my head. But the thing that constitutes a check upon inflation is the fact that the form of security in which a man has his money invested ceases to be as profitable to him or as useful to him as a Government note. That is true, and that check, that sacrifice which must be made, is sufficient, in your judgment, to keep down inflation?

Mr. BERRY. Yes.

Senator REED. Now, then, why must we have Government bonds in order to get that check? Why is it not practically assumed, now that a safe plan is worked out, that we might as well issue this money upon the bonds of cities and States and upon the promissory notes that the individual holds—the promissory notes of another—assuming now that we get that in shape so that that could be done? Why would not that furnish the same check? I have got a 3 per cent bond here of the Government—or, I will say, a 6 per cent bond of the Gov-

ernment—I have got an 8 per cent note of A B, and A B is sound and good. But I need the money. I have got to have money. Now, if I take my 8 per cent note of the individual the sacrifice is just as great, and a little greater, than if I would take my Government bond. The check upon my desire to have money issued by the Government is just as great.

Now, why is it that a bank might not just as well take the notes of its customers which draw 6 per cent, probably, on the average, over the country; take those down to the Federal Treasury and say, "Here is \$1,000,000; it is drawing 6 per cent; I want some money," and get it? I am assuming now that a safe plan is worked out.

Mr. BERRY. I have no doubt but that is just as equitable, except as to this, that it puts the Government directly in the banking business. This note is now an asset of the Government and the Government is going to collect interest from an individual.

Senator REED. No.

Mr. BERRY. And to renew that paper when that individual wants to renew it, or else contract the currency.

Senator REED. I do not think you are right about that at all. We all want to get right. Nobody here ought to have any pride of opinion.

Mr. BERRY. That is right.

Senator REED. I am willing any minute to take back anything I have said the minute before as long as this conference lasts, if somebody convinces me that I am wrong. You run a bank. Let us say it is a great bank, a bank which has \$2,000,000 of stock and with \$10,000,000 of deposits. And suppose I am the Secretary of the Treasury—for a moment. You need \$1,000,000. You take \$1,000,000 of the paper in your bank, and you come down and ask me to issue to you \$1,000,000 of money, and you deposit that \$1,000,000 of paper. I issue you the \$1,000,000 of money. I charge you for that money, say, 7 per cent, just for the sake of illustration. Now, I do not have to collect those notes that you put up with me. You have got to pay me back; you have got to redeem that money I gave you. You will collect \$1,000,000 in and bring it down to me. I do not have to necessarily go out and collect these notes from A, B, or C, do I?

Mr. BERRY. No, not under that supposition. But you are not issuing money at all under that supposition. When those notes are paid back to you, you are just where you were before.

Senator REED. It comes back to just where it went in, and I have not increased it at all. So that it is safer against inflation than it would be if you put the bond in and issued the money permanently.

Mr. BERRY. Safer, if you insisted upon the payment. But the point is that the plan as outlined, will result in a perpetual chain of new people coming in and old people going out.

Senator REED. Will not that be the same thing with your bond?

Mr. BERRY. Oh, no.

Senator REED. Now, let us see why it will not. I am still the Secretary of the Treasury for the moment.

Senator SHAFROTH. We will indorse your bond. [Laughter.]

Senator REED. Yes. In view of some of the men who have held that position in the remote past, anybody can without the slightest

compliment to himself assume that he holds it. And yet I ought not to have said that, perhaps, because they have been mostly good men; one or two wild-catters.

But suppose I issue Government bonds to the amount of \$1,000,000. You are a banker. You have got money in this big bank of yours. You notice that I am giving you all the best of it. I am giving you the money, and I am just holding the position.

And you come down with that surplus of money that you have, and you buy \$1,000,000 worth of those bonds from me, and you take them and put them in your vaults. Some day you need money and you come down to me with that \$1,000,000 and say, "Here is that \$1,000,000 of bonds that I paid you \$1,000,000 for and I want that \$1,000,000 back." I do not know why that does not—

Mr. BERRY (interposing). There is all the difference in the world, Senator Reed, because when I gave you—

Senator REED (interposing). The money went just where the other did, did it not?

Mr. BERRY. Oh, no. I gave you \$1,000,000 for the bonds, and I got the bonds, and then you spent the \$1,000,000 to build the Panama Canal. You have not any money now at all; that money I gave you is in circulation again, having come out through the channels of trade.

Now, I come to you and say "Secretary, here are your bonds. Give me \$1,000,000." Then you give me a million dollars of absolutely new money; you grind your printing presses and give me \$1,000,000 of new money. You add to the circulation by doing that. In the other case you do not.

Senator REED. Yes, I do it. You bring me in the notes; and I grind out of the printing presses \$1,000,000 and give it to you for those promissory notes of A, B, and C.

Mr. BERRY. Then you have to have a perpetual motion of—

Senator REED (interposing). But I take them up quicker than we might in this other way.

Mr. BERRY. It would surprise me if they were ever taken up at all.

Senator REED. Well, just as quickly as they are taken up from your bank the same condition arises again, as a necessity for money, and another bank brings them in, and you do inflate in order to meet the immediate demands of business; and you do retire the circulation as the demands of business are less. I can not see why it is necessary to have a Government bond.

Mr. BERRY. Well, it is not necessary at all, but I think it is more desirable.

Senator SHAFROTH. Under your scheme, Senator Reed, would it not make the United States the purchaser of all municipal and State bonds and other security which the banks have when they wanted the money?

Senator REED. For the temporary purpose, but with the burden attached so great—

Senator SHAFROTH (interposing). What is that burden?

Senator REED. The interest I am charging that bank upon that money that I let it have, and which it can only escape from when

it brings me back that money or exactly the same kind of money issued to some other bank. Now, that is the feature which is contained in this bill. There is nothing new in it whatever. I can not see why we have to have Government bonds under your plan.

Mr. BERRY. I do not think you have to have them. I simply say you should have them in preference to other forms of security, for the reason that you have a public obligation there, and some body is going to be benefited by the fact that this money when it goes into circulation will stay in circulation and never be presented for redemption. It becomes a permanent part of the equipment of the Nation and the people should benefit by it and not any individual or a bank or anybody else.

Senator REED. Are you not mistaken in saying that it stays out in circulation without limit?

Mr. BERRY. No, sir.

Senator REED. Well now, the Government issues \$10,000,000 of bonds, and sells them upon the market, and it gets \$10,000,000 and goes out and spends that; it is not a very desirable thing to be doing now, by the way; but let us assume that it does it. You get this \$10,000,000 of bonds. You bought them because at the time you bought them the interest made it desirable for you as an investor. There comes a time when there is a money shortage. You need money and have to have it. It may be that you have to have that money only because there is a run on your bank; and you may not need it more than 30 days. You bring your \$10,000,000 down to the Government of the United States, and it starts its printing presses whirling to print you \$10,000,000 of money; and you have put your bonds over here with me as Treasurer. The crisis passes; interest drops in the country; you have got a surplus in your bank. Are you not very likely to come down and buy back that \$10,000,000 of bonds?

Mr. BERRY. You are, if—

Senator REED (interposing). Now, when you do that, you have done exactly the same thing that you would have done if you had put up the promissory note that you had in your vaults with me and come and retired the money. When you bring me back \$10,000,000 of this money to buy the bonds back, I put it in my vault. I have got it there, and I have not been wasting it, any more than I would the other money. Do you not come out of the same place, except in one case you pay interest all the way along, and in the other way you collect interest.

Mr. BERRY. I think you come out practically in the same place; but at the same time not just that way. You are saving interest instead of paying it, because you are canceling a bond to get this money out. My thought is that with the sacrifice of a bond as a condition precedent the money would not issue unless needed in business, in which case it would not come back unless business subsided.

Senator REED. In the other case you are charging interest to let the money out.

Mr. BERRY. In the other case you are putting the Government directly in the banking business, which I do not consider desirable.

Senator REED. I want to ask what is the banking business?

Senator BRISTOW. Pardon me for interrupting, but I just want to understand this: If a bank takes \$1,000,000 of its collateral, it has

notes and bonds which would draw interest of from 5 to 6 per cent—varying rates. Now, what interest is it proposed that the banker shall pay the Government for the money which he gets with his collateral? As I understand, the Government is to turn back the collateral when the money is returned. That was your suggestion, Senator Reed. I say, what interest do you propose that the Government shall charge the banker when he brings this collateral for the money which the Government lets the banker have?

Senator REED. Pardon me, I did not know you were addressing that question to me. Will the stenographer read the question?

(Here the stenographer read the last preceding question as follows:)

Pardon me for interrupting, but I just want to understand this: If a bank takes \$1,000,000 of its collateral, it has notes and bonds which would draw interest from 5 to 6 per cent—varying rates. Now, what interest is it proposed that the banker shall pay the Government for the money which he gets with his collateral? As I understand, the Government is to turn back the collateral when the money is returned.

Senator REED. I understand the question now. That is enough. I have no plan, Senator Bristow. I was simply trying to parallel Mr. Berry's bond plan with this other plan that has been suggested in this bill and variously elsewhere.

But the rudiments of the plan, as I understand it, Senator Bristow, are these: That the Government when it issues this money will fix a rate upon it so high that it is to the interest of the bank, as speedily as possible, to redeem it and take it up.

Now, a suggestion was made the other day, which struck me as having a good deal of sense in it—although again I say that I am liable to change my mind if somebody gives me a reason—and that was that if the Government was called upon to issue money and it set aside a certain amount, let us say \$25,000,000, that might go out at a certain rate of interest—let us say, for illustration, 5 per cent. That if another \$25,000,000 was called for, it would make that 6 or 7 per cent; and that every time there was more money called for the rate would go up.

Thus, by the constant rise of the rate, putting a check upon the demand so as to keep it within reasonable limits all the time.

Now, I understand, without knowing much about it, that that is the system that has been pursued in every case, that when they have emitted a certain amount of this paper, they raise the rate, and keep on raising the rate until it becomes practically prohibitive, and thus stop it.

Mr. BERRY. Will it not be better to allow me to read the rest of this paper and get over with this thing, so as to get my views fully before you?

Senator REED. Oh, certainly.

Mr. BERRY. In reference to the Glass bill, which is a duplicate of the Owen bill, would say that I have examined it carefully, and while the answers I have made to the Senate's questions will indicate my view on the general subject of central banks, I would say that I would be willing to endure almost anything in the way of detail in order that the basic principle might be incorporated.

I am not at all sure that the provision requiring national banks to invest a part of their capital in the stock of Federal banks at a maximum return of 5 per cent will not cause a number of them to

surrender their charters. It certainly will unless a compensatory benefit is to be derived from the use of the rediscounting privilege, and I do not see how this is probable or even possible.

As I understand the friends of the Owen bill, their thought is that the assembling of reserves in the Federal banks will furnish an added basis for rediscounting, and therefore help the situation. They are also depending upon the deposit of Government money in the Federal banks as a basis of further credit.

The following analysis and comparison of the Owen bill and the present law seems to me to indicate that this hope, based either upon the accumulated reserves or Government deposits, must prove delusive, and I submit the same for your consideration. (Reading:)

Example of the country banks under the new law.

Supposed deposits.....	\$100,000
Reserve required (15 per cent).....	15,000
Held intact in home banks (5 per cent).....	(5,000)
Deposited in reserve city banks (5 per cent).....	\$5,000
Reserve required here (20 per cent).....	1,000
Held intact (10 per cent).....	(500)
Deposited in central reserve banks (10 per cent).....	\$500
Reserve required here (20 per cent).....	100
Held intact (10 per cent).....	(50)
Deposited in Federal reserve banks (10 per cent).....	50
Deposited by home banks in Federal reserve bank.....	5,000
Held intact by Federal reserve banks (33 $\frac{1}{3}$ per cent).....	(1,683)
Total held intact against \$100,000 deposits in country banks:	
$\$5,000 + 500 + 50 + 1,683 = \$7,233$ or 7.2 per cent	
Total individual deposits in all country banks in 1912.....	\$3,309,515,000
	.072
	6,619,030,000
	231,666,050.00
Total actual reserve held intact against deposits in country banks in 1912.....	
	\$238,285,080

Example of country banks under the present or old law.

Supposed deposits.....	\$100,000
Required reserve (15 per cent).....	15,000
Held intact in home bank (6 per cent).....	(6,000)
Deposited in reserve city banks (9 per cent).....	\$9,000
Required reserve (25 per cent).....	2,250
Held intact (12½ per cent).....	(1,125)
Deposited in central reserve banks (12½ per cent).....	\$1,125
Required reserve (25 per cent), all intact.....	(280)
Total held intact in reserve:	

$$\$6,000 + 1,125 + 280 = \$7,405 \text{ or } 7.4 \text{ per cent}$$

Total individual deposits in all country banks in 1912.....	\$3,309,515,000
	.074
	13,238,060.000
	231,666,050.00

Actual reserve held in and for country banks under old law	\$244,904,11
Actual reserve held in and for country banks under new law.....	238,285,08
Actual saving or release of reserve money under the new law on account of country banks.....	6,619,030

Mr. BERRY. That is the net result of the application of the new law as over the old law to the country banks.

Senator REED. The whole country?

Mr. BERRY. The country banks.

Senator REED. For all the country banks?

Mr. BERRY. That is, national banks.

Senator REED. All of the banks outside of the reserve cities?

Mr. BERRY. Yes.

Senator REED. That is, the three reserve cities?

Mr. BERRY. Yes, sir—no; the reserve cities and the central reserve cities—all of them.

Senator REED. That is what I am trying to get at—whether you say this is held outside of the reserve cities.

Mr. BERRY. Central reserve cities.

Senator REED. You say reserve cities?

Mr. BERRY. All that is held in the country banks, as distinguished from reserve banks and central reserve cities.

Senator REED. All that is outside of these reserve city banks and central reserve city banks.

Example of reserve city banks under the new law.

Supposed deposits	\$100,000
Required reserve (20 per cent)	20,000
Held intact in reserve city bank (10 per cent)	(10,000)
Deposited in central reserve bank (5 per cent).....	\$5,000
Reserve required here (20 per cent).....	1,000
Held intact here (10 per cent).....	(500)
Deposited in Federal reserve bank (10 per cent).....	500
Deposited in Federal reserve bank by the reserve city bank (5 per cent)....	5,000
	<hr/>
	5,500
Held intact in Federal reserve bank (33 $\frac{1}{3}$ per cent).....	(1,832)
Total held intact:	
$\$10,000 + 500 + 1,832 = \$12,332$ or 12.3 per cent.	
Total individual deposits in reserve city banks in 1912.....	\$1,383,813,000
	<hr/>
	.123
	4,151,439,000
	27,676,260,00
	138,381,300,0
	<hr/>
Actual reserve held in and for reserve city banks under the new law.	\$170,208,999.

Example of reserve city banks under the old law.

Supposed deposits	\$100,000
Required reserve (25 per cent)	25,000
Held intact (12 $\frac{1}{2}$ per cent).....	(12,500)
Deposited in central reserve banks (12 $\frac{1}{2}$ per cent).....	\$12,500
Required reserve (25 per cent)—all held intact	(3,125)
Total held intact:	
$\$12,500 + \$3,125 = \$15,625$ or 15.6 per cent.	
Total individual deposits in reserve city banks in 1912.....	\$1,383,813,000
	<hr/>
	.156
	8,302,878,000
	69,190,650,00
	138,381,300,0
	<hr/>
Actual reserve held in and for reserve city banks under the old law	\$215,874,828
Actual reserve held in and for reserve city banks under the new law.....	170,208,999
	<hr/>
Actual saving in reserve money under the new law	45,665,829

Example of central reserve banks under the new law.

Supposed deposits.....	\$100,000
Required reserve (20 per cent).....	20,000
Held intact (10 per cent).....	(10,000)
Deposited in Federal reserve banks (10 per cent).....	\$10,000
Held intact here (33 $\frac{1}{3}$ per cent).....	(3,333)

Total held intact:

$$\$10,000 + \$3,333 = \$13,333 \text{ or } 13.3 \text{ per cent.}$$

Total deposits in central reserve banks in 1912.....	\$1,056,704,000
	.133
	<hr/>
	3,170,112,000
	31,701,120,00
	105,670,400,0

Actual reserve held in and for central reserve banks (1912) .. \$140,541,632,000

Example of central reserve banks under the old law.

Supposed deposits.....	\$100,000
Required reserve (25 per cent).....	25,000
Held intact (25 per cent).....	(25,000)

Total deposits in central reserve banks in 1912.....	\$1,056,704,000
	.25

Actual reserve held in central reserve banks under the old law. 264,176,000

Actual reserve held in central reserve banks under the new law. 140,541,632

Actual saving of reserve money in central reserve banks.....	123,634,368
Actual saving of reserve money in reserve city banks.....	45,665,829
Actual saving of reserve money in country banks.....	6,619,030

Total reserve money apparently released..... 175,919,227

Example applied to all new banks under the new law.

Total reserve required to be held for central reserve banks.....	\$140,541,632
Total reserve required to be held for reserve city banks.....	170,208,999
Total reserve required to be held for country banks.....	238,285,080
	<hr/>
Total reserve required to be held in all national banks in 1912.	549,035,711
Total deposits held in all national banks in 1912.....	5,719,156,000
Per cent of reserves to deposits.....	9.6

Example applied to all banks under the old law.

Total reserve required to be held for central reserve banks.....	\$264, 176, 000
Total reserve required to be held for reserve city banks.....	215, 874, 828
Total reserve required to be held for country banks.....	244, 904, 110
	<hr/>
Total reserve required to be held in all national banks in 1912.....	724, 954, 938
Total deposits held in all national banks in 1912.....	5, 719, 156, 000
Per cent of reserves to deposits.....	12. 6
	<hr/>
	724, 954, 938
	549, 035, 711
	<hr/>
Actual money apparently released from national bank reserves	175, 919, 227

Reduction of general reserve: 12.6 per cent — 9.6 per cent = 3 per cent.

In this process there will have been absorbed into the Federal banks a part of the reserve money of the country which is now carrying credit on a 15.6 and 25 per cent basis and which in the Federal bank will be on a 33 $\frac{1}{3}$ per cent basis.

Senator REED. What do you mean—Federal banks?

Mr. BERRY. These new banks—Federal reserve banks.

Senator REED. Federal reserve banks?

Mr. BERRY. Yes.

Senator SHAFORTH. To be created by this bill.

Senator REED. I understand.

This will result in a loss of loaning power in these banks as follows (reading):

Taken from country banks.....	\$165, 475, 750	
Carrying credit in reserve city banks at 15.6 per cent.....		\$1, 060, 613, 000
Taken from reserve city banks.....	76, 109, 715	
Carrying credit in central reserve banks at 15.6 per cent.....		487, 882, 700
Taken from central reserve banks.....	140, 541, 750	
Carrying credit at 25 per cent.....		562, 167, 000
	<hr/>	
Total cash absorbed.....	382, 127, 215	
Federal bank reserve (33 $\frac{1}{3}$ per cent).....	127, 365, 738	
	<hr/>	
Apparently free for rediscount.....	254, 751, 477	
	<hr/>	
Total credit sacrificed.....		2, 110, 662, 700

Mr. BERRY. This loss of credit, however, is partially compensated by a reduction in the per cent of reserve required in reserve city and central reserve banks from 25 to 20 per cent.

The transfer of 5 per cent of reserves in country banks directly to Federal banks results in a minimum loss of \$105,000,000 of usable reserves in reserve city banks. If the country banks still require 6 per cent of money to carry their credits, as I think they will, the loss to reserve city banks will be \$139,000,000, and the compensation, 5 per cent, will be \$66,000,000, making the loss \$73,000,000.

The transfer of 5 per cent of reserve city banks reserve directly to the Federal bank will result in a minimum loss of \$74,379,000 of usable reserves in central reserve banks, and the compensation, 5 per

cent, will be \$50,000,000, showing the loss of \$24,379,000 in these banks.

Seventy-three million dollars plus \$24,379,000 equals \$97,379,000, which is the total loss that must be immediately made up by rediscount from the \$254,000,000 set free in the Federal banks. Now, that money has got to go back at once out of the Federal reserve accumulations for the purpose of sustaining an existing credit.

Senator REED. That is, a country bank is compelled under this law to pay into a regional reserve bank \$25,000, and it must immediately borrow it back?

Mr. BERRY. A part of it.

Senator REED. Well—

Mr. BERRY. Not the outside bank, but the reserve city banks. This \$25,000 that that outside bank puts into the Federal reserve formerly went into the reserve city bank, and there stood at a basis of credit. Now it comes into the Federal bank, where it is a basis of discount, and, in order that that reserve city bank may keep its present credit, it must instantly get a portion of that money back, in order to put us where we now are, without any provision of after expansion.

Senator REED. And it puts this in in place of it?

Mr. BERRY. Whatever it puts there as security, but the point is to keep track of the money.

This leaves \$157,372,477 as the final amount actually released for carrying new credit.

By no possible stretch of imagination can this amount exceed \$175,919,227, as shown in our example applied to all banks, and in practice it must fall much below this figure. This is the extreme possibility of the law in these figures; practically it will be less.

But, assuming it to be all available, it will carry, if distributed in proper proportion to all the banks, at 9.6 per cent, \$1,830,000,000 of new credit, and together with the annual increment from gold will provide for the normal growth of business for possibly two and one-half years. That is the total limit of the beneficial results which can possibly be predicated on the operation of this law, that it will carry the normal development of credit for two and one-half years.

At the end of this time, unless gold production should greatly increase, it would all be absorbed, and the present condition of stress would again be set up. We would back into the same position we are now. The best that can be hoped for from the new law is that the demand for credit would be met for about two years, after which a new adjustment of reserves involving a further reduction in the per cent required would be necessary, and so on, ad infinitum.

But we have thus far entirely neglected the fact that there are other demands for reserves upon the Federal banks, notably the substitution of Treasury notes for bank notes. There are \$730,000,000 of these notes, and their substitution with Treasury notes, as provided in the Glass-Owen bill, will require \$243,000,000 of reserves and will leave the Federal banks not only without funds for rediscount purposes, but with a deficit of \$68,000,000, which will have to be made up by Government deposits.

Senator REED. Will you not state that over? My mind does not move rapidly enough to grasp that as fast as you state it.

Mr. BERRY. But we have thus far entirely neglected the fact that there are other demands for reserves upon the Federal banks, notably the substitution of Treasury notes for bank notes. There are \$730,000,000 of such notes, and their substitution with Treasury notes, as provided in the Glass-Owen bill, will require \$243,000,000 of reserves, which will leave the Federal banks not only entirely without funds for rediscount purposes, but with a deficit of \$68,000,000 that will have to be made up by Government deposits.

Government deposits will help the situation if there are any legal-tender funds in the general fund of the Treasury that may be deposited. A recent report showed about \$40,000,000 of bank notes held in this fund, and these are, of course, useless for reserve purposes, and unless I am greatly deceived, the present emergency will require the deposit of all the legal tender in the Treasury in order to put the present credit fabric on a safe basis, 9.6 per cent, and will leave none for deposit in Federal banks for rediscount purposes.

So far as I am able to judge, the operation of the proposed law will not improve the present situation or furnish any means of meeting the demands for new credit incident to the growth of the country. Nor am I able to see any advantage to the national banks that will compensate them for the investment of a portion of their capital at a maximum dividend rate of 5 per cent.

The net result of the whole transaction will be the retirement of the bank notes and their replacement with Treasury notes, having a $33\frac{1}{2}$ per cent reserve against them, and the reduction of the general reserve under bank credit from 12.6 to 9.6 per cent.

To my mind, the basic fact to be considered is that the gold supply—\$65,000,000 per year—since only half of it will reach the banks, will furnish a basis, at 9.6 per cent, for only \$330,000,000 of additional credit each year, whereas \$1,000,000,000 per year is needed. If we fail to provide other new reserve money, we are shut up to one or two alternatives: We must either refuse to allow business to normally expand, or continually reduce the percentage of reserve to be held against bank credit, a thoroughly dangerous proceeding.

The remedy lies in giving to the new Treasury notes the legal-tender powers that will enable them to stand in bank reserves. The gold supply will furnish to the reserve fund \$32,500,000 per year, which will carry the notes in sufficient volume to furnish reserves for all the new credit we need. As I see the case, we must do this or restrain credit and business.

If we choose the latter course, the trust problem must grow apace and can not be safely treated. Periodic panics must still be expected and all the evils that flow from them.

In my judgment, it is unwise to reduce the per cent of reserves under our bank credit, and it is entirely unnecessary. The notes to substitute the bank notes can be issued directly by the Government in exchange for the bonds and bank notes, and directly to the banks that need additional reserves, as fast and no faster than the demand for credit calls for them; and the whole problem of the 2 per cent bonds, as well as a safe and adequate supply of credit, is solved at once.

The Government should, and easily can, maintain in a special reserve fund a gold reserve together with the surrendered bonds, or a new issue of bonds at a higher rate of interest, as an asset for redemp-

tion purposes. This is what is contemplated in Senator Owen's supplemental bill.

In order to obtain legal-tender notes, the banks could afford to and would make a sacrifice; but to secure a Treasury note that is no better than a bank note and useless for reserve purposes, they could not and would not sacrifice anything.

The problem before us is to break the so-called credit monopoly, which, like every other monopoly, can only exist when the supply of the article monopolized is limited. To do this the supply of credit must be made to readily increase in response to demand.

The supply of credit can only be increased in one of two ways; and as I have said, in answer to question No. 5, we must either reduce the per cent of legal-tender cash reserve upon which it stands or increase the cash, in order that a larger volume of credit may exist upon the present per cent of reserve.

The Glass-Owen bill is seeking to reduce the per cent of reserve, and proposes to make a present of \$175,000,000 flat to the banks by releasing that amount of reserves and make possible \$1,800,000,000 of additional credit upon which they may draw interest.

I submit that the banks are reaping a sufficient return from the interest on their loans without giving them money on which to float them. This is especially vicious, in view of the fact that the gift is made at the sacrifice of the margin of safety in reserves. This "margin of safety" is an asset of the borrowers only, for the banks do not need it for their own protection. They are always safe in that they can and do call loans at will; and it is never the assets of the bank, but always the collateral of the borrower, that is forced to sacrificial sale in an emergency.

But, assuming that it is possible to thus expand credit, which I do not concede, the relief will be only temporary. The situation demands an annual contribution of reserve money in excess of the gold supply; and the maximum supply that can be possibly claimed from this reduction of reserve requirements would not last three years. Practically, the time consumed in making the changes would be so considerable that the supply of credit would not equal the demand at any time in the interim, and fail entirely in the end.

The credit monopoly will, therefore, still exist with its high rates and discriminations, and the people at large will not be greatly, if at all, benefited; while the credit fabric which has failed disastrously three times in a generation on a 12.6 per cent reserve will be still less stable on a 9.6 per cent reserve.

I am constrained to register my protest against this dangerous experiment.

By the second method, the present per cent of reserve can be maintained or increased and the credit monopoly broken by supplying the entire demand for credit through the conversion of the bonded indebtedness of the nation into a demand obligation in the form of legal-tender paper competent to stand in bank reserves.

By this process we will make a present of about \$135,000,000 per year to the Government—the people instead of the banks—which can be devoted to public works; and the benefits of an equitable interest rate, with nondiscriminative and competitive credit to legitimate borrowers, will be realized.

This is not an experiment in any sense. We now have \$350,000,000 of Treasury notes and \$600,000,000 of silver serving the purpose of reserve money, no part of which is giving the slightest trouble, and can not do so, unless a heavy export of gold should set in and continue for years, in which case the resale of the retired bonds is the remedy.

The bank note is the sole cause of redemption trouble, and the new Treasury note will be exactly like it unless given power to stand in bank reserves. Since the figures I have given you were prepared the House caucus has amended the Glass bill, still further reducing the percentage of reserves required in all the banks to an average of 9.2 per cent, as against 9.6 per cent as originally contemplated. This will add \$22,300,000 to the \$175,900,000 apparently released for rediscount purposes, making \$198,200,000.

Carrying this figure through the calculation, we find that the total deficit instead of being \$68,000,000 will be about \$45,000,000. It is therefore clear that the bill as amended is not essentially better than the original.

I am very much obliged to you, gentlemen, for your attention.

Senator SHAFROTH. We are very much obliged to you; but Senator Reed wants to have a talk with you further.

Senator BRISTOW. I think Senator Reed and Mr. Berry had better take a rest and then come back here at 2 o'clock.

Senator REED. I think so.

The CHAIRMAN. At 2 o'clock there is an executive session in the Senate. I do not suppose it will last very long.

Senator REED. Suppose we meet here, Mr. Chairman, immediately after the executive session.

Senator BRISTOW. Mr. Berry, I am very much interested in your statements. You have given, to my mind, some very ingenious suggestions.

Mr. BERRY. Boiled down to its last terms, there is only one suggestion, and that is to substitute legal-tender notes and make the proposed issue under this bill a legal-tender instead of a nonlegal-tender note, and you will have the solution of the problem.

The CHAIRMAN. I think you are absolutely right about the legal tender.

Senator SHAFROTH. So do I.

Mr. BERRY. At the last analysis that is what it boils down to.

The CHAIRMAN. We will now stand adjourned to meet within 10 or 15 minutes after the Senate rises from executive session this afternoon.

(Thereupon, at 12.45 o'clock p. m., the committee took a recess until this afternoon at the time stated.)

AFTER RECESS.

The CHAIRMAN. I submit, from the report of the Director of the Mint for 1912, dated December 31, a table of the monetary statements and approximate stocks of money, in the aggregate and per capita, in the principal countries of the world, pages 66 and 67, annual report of the Director of the Mint.

Senator REED. What year?

The CHAIRMAN. 1912.

STATEMENT OF WILLIAM H. BERRY—Continued.

Mr. BERRY. I do not know whether it would be worth while, Mr. Chairman, to ascertain. There are no statistics that I have ever been able to find which give definitely the amount of banking credit which is available in these various countries. If there were such statistics available it would be instructive to have them along with it. I do not know where such statistics may be found. I have hunted for such statistics, but I do not know where they may be found.

May I just very briefly introduce another thought here? Of course my argument is based largely on the assumption that the supply of legal-tender money is not adequate, and as an indication of its scarcity I have before me the last report of the Treasury Department showing the condition of the national banks on June 14, 1913, from which I secure the following facts:

Those banks held on that date, collectively, \$952,900,000 of legal-tender money. They owed to State banks and trust companies on that date \$862,000,000. They owed a billion and 57 millions, altogether, but there was a counter debit of 194 millions, leaving 862 millions as the net obligation of the national banks to the State banks and trust companies.

The CHAIRMAN. I would like also to put in as a part of that paper this statement dated June 30, 1912. It is a very interesting compilation, and will also go to explain Mr. Berry's evidence.

Mr. BERRY. The difference between what these banks hold and what they owe, net, to State banks and trust companies, outside of their depositors, was 90 millions of dollars; 90 millions of dollars as against their total demand obligations, which were 7,599 millions. That is 1.1 per cent. The extent to which the funds of State banks and trust companies are moving over into the custody of the national banks in order that a legal showing of reserves may be made is astonishing.

Senator REED. What do you mean by that?

Mr. BERRY. Just exactly what I have said. The growth of the system of affiliated national banks with trust companies, next door or on the other side of the hall in the same building, in Pennsylvania, is astonishing.

Senator REED. Do I understand you this way: The bank reserve has fallen below the legal requirement, and in order to make their showing of a proper reserve they simply get into a trust company and carry over and put in their vaults temporarily a certain amount of money?

Mr. BERRY. Which appears as due to banks.

Senator REED. And they make their report upon that, and you say that is done extensively?

Mr. BERRY. Yes, sir.

Senator REED. Could you tell us to what extent?

Mr. BERRY. The general extent is indicated by this report, as I have just analyzed it.

Senator REED. That is to say, that they have actually got about one-tenth of what they ought to have?

Mr. BERRY. Yes. That is, they actually own only \$1 for every \$100 that they had on demand account.

Senator REED. In other words, they shift their reserves from one bank to the other?

Mr. BERRY. Yes.

Senator REED. And a reserve serves twice in that way. I ought to have a reserve of \$1,000,000, and I take all that the law permits me to put in another bank, and I put that over in your bank, and thereupon it begins to operate as a reserve? Is not that the way it works out?

Mr. BERRY. Well, as between national banks that works out, but this other is another thing altogether. It is the affiliation of national banks with trust companies across the hall, or next door, under the same control and under the same management. And when the bank examiner is present in the national bank, that bank is full of money, it having crossed the hall in gripsacks a day or two before; and when the State bank examiner is present in the trust company, the reverse movement occurs.

Senator REED. How would that be prevented?

Mr. BERRY. By making money enough for both of them. I think that is the best way.

Senator REED. How can it be prevented, as a matter of examination?

Mr. BERRY. Simultaneous examination will counteract that.

Senator SHAFROTH. In the State of Colorado we have a State law which provides that the report made by the State banks shall be on the same day as the report made by the national banks.

Mr. BERRY. Yes.

Senator SHAFROTH. And it seems to me reporting all at the same time would check that.

Senator REED. If they tried to beat a law, they could easily enough make one report at 9 o'clock in the morning and the other at 5 o'clock in the afternoon.

Senator SHAFROTH. No; I think they call for it at the close of business on a certain day.

Mr. BERRY. It is a very difficult thing to reach by law.

Senator REED. Following out just what we have been talking about, assume that a bank had sufficient deposits so that under the law its reserve would have to be \$1,000,000. That bank, if it is an ordinary city bank, can put half of that money in another bank, can it not, and hold half?

Mr. BERRY. Yes.

Senator REED. The bank into which the money has been placed can hold $12\frac{1}{2}$ per cent of it, which would be what?

Mr. BERRY. \$125,000.

Senator REED. Twelve and a half per cent?

Mr. BERRY. \$125,000, would it not?

Senator REED. No. Half a million—there is a half million held by the first bank as its $12\frac{1}{2}$ per cent. It is $12\frac{1}{2}$ per cent that it can put into another bank.

Mr. BERRY. Oh, yes.

Senator REED. So that it puts \$500,000 over in the next bank, and that bank can hold $12\frac{1}{2}$ per cent of that \$500,000, which would be \$62,500, would it not?

Mr. BERRY. Yes.

Senator REED. And it can then take—well, I will have to figure that.

Mr. BERRY. That problem is fully figured out in this last paper that I read from.

Senator REED. It could then have the balance of the \$500,000 put into still another bank, and it can take 12½ per cent and keep on shifting that money around and can bring part of it right back into the original bank if it wants to, can it not?

Mr. BERRY. No; I do not think so. It could not do that legally. The law contemplates that a bank can only use a central reserve bank as a depository for its reserve.

Senator REED. That is where it is broken. But, outside of the central reserve bank, is there anything to prevent the country bank from doing so?

Mr. BERRY. The method is to deposit a portion of its reserve in the reserve city bank, and the reserve city bank deposits a portion of its reserve in the central reserve bank.

Senator REED. Can it deposit a part of its reserve in any other bank?

Mr. BERRY. Oh, yes; it is not compelled to deposit any part of it anywhere. As a matter of fact, they do. They deposit a portion of that in the reserve banks and a portion of it in the outlying banks. Funds are put in the central reserve cities directly.

Senator REED. Mr. Berry, taking the system which we now have in this Government, do you regard our system as some people seem to have regarded it—that it is the poorest banking system in the world?

Mr. BERRY. No, sir; I do not.

Senator REED. Do you think it is a good banking system, taken as a whole?

Mr. BERRY. As I have said already in my paper, I believe it is the best banking system in the world.

Senator REED. Now?

Mr. BERRY. Now; yes, sir.

Senator REED. Then somebody, if you are correct, has been grossly exaggerating the evils of this present system; that is, those who have said it is the poorest banking system in the world. They have been grossly exaggerating the defects of the system?

Mr. BERRY. They have been charging the defects to the banking end of it, whereas the defect is solely resident in the currency end of it.

Senator REED. Do you regard our currency system as an exceedingly poor system, or only a system that has some defects in it?

Mr. BERRY. It is a system that has one basic defect in it. It is not capable of expansion with sufficient rapidity.

Senator REED. Taking this banking and currency system as it is now, can you not, in a few words, point out the defects in the currency system? I mean, not in the way of argument, but in a statement of the fact, just in a few words?

Mr. BERRY. Well, the basic defect is in the inability of the banks to secure sufficient reserve money to meet the demand for credit.

Senator SHAFROTH. It is due to the fact that there is insufficient legal-tender money.

Senator REED. Do you agree with Senator Shafroth that it is due to the fact that it has not sufficient legal-tender money?

Mr. BERRY. Yes, sir. In my judgment that is the one real crucial difficulty in the whole situation; and if corrected, the banking system will respond, in my judgment, almost immediately to the demands for credit.

Senator REED. Your method of furnishing the banks with sufficient reserve money, broadly stated, is to make more money?

Mr. BERRY. Yes, sir.

Senator REED. The method that you have in mind for making more money, worked out, would be what? How would you go at it?

Mr. BERRY. To allow any bank that has a Government bond in its assets to present that bond and receive the market price for it in new legal-tender money.

Senator REED. Regardless of what that market price was?

Mr. BERRY. Yes, sir.

Senator REED. Do you think that would prevent panics?

Mr. BERRY. Yes, sir; a panic would be impossible if that law were established.

Senator REED. How many bonds has the United States Government out now that would be available?

Mr. BERRY. A billion, about.

Senator REED. For that purpose?

Mr. BERRY. Yes.

Senator REED. At the present time, in the matter of emergency currency, what does that have to be issued on? What class of bonds?

Mr. BERRY. At the present time?

Senator REED. Yes; under the Aldrich-Vreeland Act.

Mr. BERRY. Why—do you mean the asset currency plan?

Senator REED. The Aldrich-Vreeland Act. If a bank wants money under the Aldrich-Vreeland Act and wants the coin, the Government can coin or print \$500,000,000 worth. With what kind of security is that money obtained?

Mr. BERRY. Why, as I understand, on various securities, to be determined by the judgment of the Treasurer.

Senator REED. It has never in fact been used, has it?

Mr. BERRY. No, sir; nor will it ever be used.

Senator REED. Why?

Mr. BERRY. Because the money is not a legal tender when they get it, and it is of no use to them.

Senator REED. You say it is not a legal tender. It would pay their ordinary customers, would it not?

Mr. BERRY. Yes; but that is not what they want. They have not any trouble in paying their ordinary customers. Their trouble is that their reserves are down, and they can not get money to replenish them from anywhere. That is the trouble.

Senator REED. You make the point, then, as to this money which they could obtain under the Aldrich-Vreeland Act, that when they did obtain it it would not do them any good, because they could not build up their reserves?

Mr. BERRY. That is right.

Senator REED. Let us see if that is literally the case. If you have a bank, and your reserves have got down too low, and you need \$1,000,000 to replenish them—at the same time you do not want to

deny customers the ordinary credits that you have been extending to them—you go over to the Treasurer with such securities as can be accepted under the Aldrich-Vreeland Act, and you get \$1,000,000, and take it down and put it in your vaults. Every man who is doing business with you continues to pay in money to you every day, and the money that you pay out is this \$1,000,000 that you got from the Government. The money that comes in is the ordinary money of the country, the great mass of which is legal-tender money, and can be put in your reserves. Why can you not build up your reserves by that process?

Mr. BERRY. It would not be more than three days after you got that million dollars until that million dollars would appear in your bank or somebody's bank as a deposit.

Senator REED. Part of it.

Mr. BERRY. And the instant it appeared as a deposit you would have to rush somewhere to get legal-tender money to hold against it, and you could not get it.

Senator REED. No; the instant it appeared as a deposit you could turn around and loan it out and pay it out, but continue to conserve and hoard in your vaults the other money that comes in. I can not see why.

Mr. BERRY. Well, if you could persuade the people who make deposits with you to hold always their bank notes and deposit always their legal tender perhaps you would reap a benefit. You doubtless would; but the difficulty is that you and I, when we go to the bank, do not pay any attention to that. We deposit what we have.

Senator REED. Certainly.

Mr. BERRY. And the more bank notes there are in circulation in our town the more there are deposited, and it gets worse and worse every time you put a new one out.

Senator REED. Do you know about what the total money in circulation in this country is, in round numbers?

Mr. BERRY. In circulation? Why, about 2 billion 500 million, in round figures.

Senator SHAFROTH. Two billion six hundred million.

Senator REED. Let us say that the whole \$500,000,000 is issued under the Aldrich-Vreeland Act, that you have 3 billion 100 million. But there is \$5, in round numbers, of money out for \$1 of the emergency money. So that you would take over your counter in the ordinary course of business \$5 of ordinary money where you would take over \$1 of this emergency currency; and most of the money that you take over your counter, other than the emergency money, could be utilized for reserve money, could it not?

Mr. BERRY. Yes.

Senator REED. With that sort of condition, it does seem to me a man could speedily build up his reserve and build it up by legal-tender money. Is not the trouble with the Aldrich-Vreeland Act something else than what you have indicated? It has never been used. Does it not lie in the interest charge, or does it not lie in the fact that the machinery is not adequate for getting it out, or does it not lie in the further fact that a bank does not want to go down there and appear to be in such stress that it needs money?

Mr. BERRY. I think not, and I base my opinion upon the experience that the banks now have with the 730 millions of bank notes. There

is scarcely a bank in the country that does not. You go in some time and pay in a bunch of money and you see the receiving teller shift it, and he will take out every bank note there is in it and put them into one drawer, the near drawer, so that the next fellow that comes in will get that, and it will go out. They do now with that money just exactly what you refer to, to the largest extent possible, and yet 700 millions of it go back for redemption every year.

Senator REED. But it goes right out again, does it not?

Mr. BERRY. I know it does, but it absorbs 60 millions of money to do it.

Senator SHAFROTH. The main defect in the Aldrich-Vreeland bill, as I understand it, is that the bankers' associations, which are required to be formed in the community that wants any money under the Vreeland Act, are not willing to be responsible for each other, and that act requires that there should be a joint obligation of the association; and that has been the reason, as I understand it, that they have not made any demands on the Treasury under the Vreeland Act.

Senator REED. I am satisfied that there must be some reason of that kind, or else there has been no great necessity for money.

The CHAIRMAN. There is another reason, Senator, that has not been commented on, and that is this: Whenever a bank applies under the Vreeland-Aldrich bill to its associates in that association, the condition of that bank is known to the other members of the association—that it is in stringent need—and they do not like to make that confession, because it frightens their depositors.

Senator REED. That is one of the things that I really suggested in that question—that they did not like to apply for it because it was in the nature of emergency money.

Mr. BERRY. That may be a factor. I doubt not that it is, but I base my view upon the experience that we have with the bank notes. A bank note requires an 8½ per cent reserve of legal tender behind it to keep it in circulation, and the Aldrich-Vreeland bill will require the same thing. There is the trouble, and the whole trouble. You have absorbed 75 millions of dollars of legal-tender money whose sole occupation is the maintenance of that 730 millions of bank paper in circulation.

Senator REED. Well, it seems to me you could well afford to absorb that much money if you got that much more for it. You are still multiplying your money very rapidly. But what I am trying to get at is the reason that the Aldrich-Vreeland Act has never been used. Of course, one reason is that we have never had a real panic since we had it. If we had had a real panic, the probabilities are that money would have gone out, would it not?

Mr. BERRY. I do not think so.

Senator REED. You do not think the banks would have used it even in case of a panic?

Mr. BERRY. No; I do not.

Senator REED. Suppose that the Aldrich-Vreeland Act was amended so that any bank, on its own motion, without going to any other bank for indorsement, could take its assets, whatever they were, to the Treasury and get their money issues at a low rate of interest. Would the money flow out then?

Mr. BERRY. Well, it might if the interest rate was low enough and the terms sufficiently attractive; but I do not see how the situation

would be in any degree relieved. My impression is that the more of that money that you have in circulation the more trouble you would have in regard to its redemption. The larger percentage of it that there is in circulation the larger percentage would be deposited. Therefore more reserve should be required behind that money than would be required behind a book credit of the same volume, and you are in no better position. It does not relieve your situation at all.

Senator REED. Just because it can not be used as reserve money?

Mr. BERRY. Surely.

Senator REED. Suppose it could be used as reserve money?

Mr. BERRY. Then you have the problem solved.

Senator REED. That is all that is necessary?

Mr. BERRY. Yes, sir; that is all.

Senator REED. Would there be anything, in your judgment, unsafe in the Government of the United States issuing money in any amount, within the bounds of reason, upon Government bonds?

Mr. BERRY. No.

Senator REED. And if the Government got their securities and piled them up in its vaults, the securities of the citizen and of the banks and of the big corporations of the country, and piled them up in its vaults and also put the faith and credit of the United States back of the money that it emitted, do you think that would impair or jeopardize the credit of the country?

Mr. BERRY. No; I do not.

Senator REED. Then, if I get you right, all that we have to do is to provide that the Treasurer of the United States shall print money, and that whenever any banker comes to the Treasurer with Government bonds or with such other security as may be safe security to issue that money upon it, making that money full legal tender for all debts, public and private? You think that would not impair the credit of the country, and you think that would give us the money to handle the business of the country?

Mr. BERRY. Yes; I think so; but still I would object to the method. That will do the right thing in what I think is, partially at least, the wrong way. I do not think that the assets of an individual—that is, the obligations of an individual—ought to be used for that purpose. I think nothing but the public credit should have that privilege.

Senator REED. That is just exactly what is being done under this present bill, is it not?

Mr. BERRY. Yes.

Senator REED. The assets of an individual are being used, as I understand it. Let us follow that.

Mr. BERRY. Not exactly; I do not mean the assets of an individual, but the obligations of an individual.

Senator REED. Yes; that is what I should have said. A bank is opened for business, we will say, and it loans a million dollars of money and takes the notes of the merchant, the farmer, and everybody else—good safe paper—let us say. It wants to get money from a regional bank. It goes to the regional bank, deposits these securities, and borrows the million dollars. That is the first step, is it not?

Mr. BERRY. Yes.

Senator REED. And the million dollars that is given to it is got out of the vaults of the regional bank. The regional bank then takes

that million dollars of paper, indorses it, which of course makes it that much better, and carries it down to the Federal Treasury, or rather carries it over and it is locked up in a special place with the representative of the Federal Government, who is there in the bank, and thereupon there is delivered, based upon that security, \$1,000,000 of these notes. That is the same proposition that we were first talking about, exactly, except that in this instance you have the indorsement of two banks upon the paper, but nevertheless it is money issued upon the debts of individuals?

Mr. BERRY. Yes.

Senator REED. And if it is proper in that instance it would be proper in the first instance named, provided there is not something defective in the manner of working it out. But the same thing is fundamentally there, the same idea, is it not? Do you assent to that?

Mr. BERRY. Yes, except this, that you have the difference there between the paper which is indorsed by a bank—you included that in your proposition, did you not?

Senator REED. I was first just simply trying to find out whether the money that is issued by the Government in both instances was not issued upon debts of private individuals, including as individuals any corporation, banking corporation, or any other corporation; it is nevertheless money issued upon that kind of assets?

Do you not think that we could let our present banking system stand just as it is and provide this currency by doing two things: First, provide that currency could be issued upon all Government bonds that were brought there with the request that money should be issued upon them; and, second, that there should be vested in the Secretary of the Treasury or comptroller or some other Federal authority the right to issue additional money upon notes of individuals, State bonds, or other banking assets under such rules and requirements as might be provided by these Federal authorities touching the matter of safety, the amount of the issue, etc.?

Mr. BERRY. I think so. I see no reason why you could not do it now just as well as you could under new arrangements. But my fundamental objection to it still inheres. I would not wish to commit myself to a proposition that would allow anything but a public obligation. The absorption of a public obligation into the Treasury in lieu of notes issued ends the transaction. There is no bookkeeping or any horde of clerks necessary to be employed to take care of the proposition. It is a finished transaction. On the contrary, if they have these notes of individuals to handle there is endless detail. This objection is only to commercial paper. Of course, as to a State bond or any other bond having the taxing power behind it, in any considerable area or territory, I would be willing to give that same privilege, but my thought is that the development of this Nation will require the expenditure and ought to have the expenditure of enormous sums of money in the immediate future; and therefore the obligations of the Government issued for the purpose of these public improvements would be a sufficient reservoir, a sufficient source for supplying all of the legal-tender money that the country needs. It would only amount to 135 millions a year. It probably would be more as we grow, but at this moment it stands on the basis of the last 10 years at 135 millions a year.

Senator REED. I think Mr. Berry, I understand that, and I do not want to shut you off from any answer, because you are entitled to have your views plainly set forth. But I think we understand that, and if I may stick to the line of questions I started with I will ask you this: Your idea is that one reason the Government bond is better as the basis for this money than the short-time commercial paper is that when the money is issued upon the Government bond it goes out and stays out and becomes a part of the permanent circulation of the country, unless money becomes so plentiful that interest rates drop to a point where the holder of the money might want to go and take up his bond. That is the reason, is it not?

Mr. BERRY. Yes, sir.

Senator REED. Therefore, what you desire in your plan is not a money that is created only for a few days' time and which must be at the end of that short period absorbed back into the Treasury and distributed, but it is a permanent money. Is that right?

Mr. BERRY. Yes, sir.

Senator REED. If what you desire is a permanent money, a permanent security is the thing to put up upon which to have it issued, is it not?

Mr. BERRY. Yes, sir.

Senator REED. You prefer the Government bond. Now, why not the bond of a State, the unchallenged and undoubted bond of a State?

Mr. BERRY. There is no reason why not.

Senator REED. Why not the bonds of cities and counties, when they have been classified, and it has been ascertained that they are undoubtedly good?

Mr. BERRY. Well, you are approaching the danger line. I think you are getting too near the individual in that, but the principal thing—

Senator REED. I am not approaching it in the matter of the security being good.

Mr. BERRY. No; not at all.

Senator REED. Because I have put into my question the statement that it must have been ascertained to be good I do not mean that every city bond is to be accepted because a city issues it, but I mean when bonds have been issued and when an examination has shown that they have been legally issued—and I will add to that, even bonds that have been issued with the interest regularly paid up for a given period of time, something similar to a requirement, I believe, in the New York statute with reference to certain securities—that would be pretty good security, would it not?

Mr. BERRY. Oh, yes.

Senator REED. You would have a money that was backed by the faith of the United States, would you not?

Mr. BERRY. Yes.

Senator REED. But you would have in the hands of the United States the obligation of either a city or a county or a State.

Mr. BERRY. Or the Nation itself.

Senator REED. But we have also got the Nation itself in the Nation's guaranty. Why does not that furnish a much higher and better class of security than the paper of A B indorsed by the bank B C and reindorsed by the bank C D?

Mr. BERRY. It does.

Senator REED. If what I have suggested by my questions is adopted as a currency measure, then there would be no necessity, in your opinion, for the creation of these reserve banks or any other machinery. The banks would simply go on in their own way and get whatever money they needed as individual banks?

Mr. BERRY. That is the way I should look at it.

Senator REED. I want to get you to help me in finding what is the final result of the organization of all these regional reserve banks. Have you the table before you showing the capital that would go into these banks?

Mr. BERRY. No; they took my manuscript. I had it here, but they have taken it away. But I can recall it very closely.

Senator REED. I am going to insist that I be given the right to carry a gun, for every investigation I have been on just the moment I wanted anything I found the reporters had carried it off.

The CHAIRMAN. I gave instructions to have the manuscript returned to-morrow morning.

Senator REED. But I wanted, if I could, to get this in in accurate figures, for a reason. Of course you could not, out of your mind, recall those figures with absolute accuracy. Have you the total capital, Senator Owen? You have nearly everything of all the national banks.

The CHAIRMAN. Yes; certainly.

Mr. BERRY. I have that right here.

Total capital stock paid in, \$1,056,000,000. Seven hundred and twenty millions of surplus.

Senator REED. If all the national banks came in and paid into the regional reserve banks the 10 per cent required, there would actually be a capital for the regional reserve banks of what?

Mr. BERRY. \$100,000,000.

Senator REED. \$100,000,000 in round numbers?

Mr. BERRY. Yes.

Senator REED. But there would not be any increase of banking capital in the Nation. They would simply take this 10 per cent of their present capital, which they own locally, to reduce their capital that much and transfer it over into the Federal reserve banks?

Mr. BERRY. Yes, sir.

Senator REED. So we have not created a new dollar of money by that process, have we?

Mr. BERRY. No.

Senator REED. If there is \$100,000,000 of capital stock for all of these regional reserve banks, and we had 12 of them, there would be approximately \$8,000,000 for each bank?

Mr. BERRY. For each one, yes.

Senator REED. Yes; \$8,000,000 for each one of these reserve banks. There would be deposited in these reserve banks 5 per cent, an amount equal to 5 per cent of the total deposits of the country, which would be what? I mean, total deposits not of the country but of the national banks of the country.

Mr. BERRY. There is about 6 billions of those deposits. That would be about 300 millions.

Senator REED. Three hundred millions of deposits?

Mr. BERRY. Yes.

Senator REED. But all you have done is to shift it from many banks into one common bank. You have now got a total of \$400,000,000 in assets in these banks, \$100,000,000 of which they own?

Mr. BERRY. Yes.

Senator REED. And you have not added a dollar to the money of the country yet, have you?

Mr. BERRY. No, sir.

Senator REED. What did you say the total deposits of the country were?

Mr. BERRY. The total deposits of the country?

Senator REED. Yes.

Senator SHAFROTH. About 19 billion.

Mr. BERRY. Yes.

Senator REED. Is that for the country, or for the national banks?

Mr. BERRY. That is all together.

Senator REED. What is the total deposits of the national banks?

Mr. BERRY. About six billions.

Senator REED. For the national banks as a whole; the 19 billions includes all State banks and trust companies?

Mr. BERRY. Yes, sir.

Senator REED. You will have, then, in these banks 400 millions of dollars as against 19 billions of deposits. It would constitute a reserve. Can you tell me, in your head, rapidly, about what percentage?

Mr. BERRY. I can not tell you in my head, but I can do it with a pencil in a jiffy. [After calculation:] It is about 5 per cent.

Senator REED. It can not be 5 per cent.

Mr. BERRY. Oh, no. What did you say? What is the total of your cash?

Senator SHAFROTH. Four hundred millions. It would be absolutely just 2 per cent if it was 20 millions.

Mr. BERRY (after calculation). A little over 2 per cent.

Senator REED. And it is 6 per cent, speaking in round numbers. The total assets of the regional reserve banks would be 6 per cent of the deposits of the national banks and about 2 per cent of the deposits of all the banks of the country; and still we have not a single dollar of new money.

Mr. BERRY. No.

Senator REED. When the banks put this reserve of 5 per cent which they now have into the regional banks, it will take \$300,000,000 out of the national banks' vaults at once, will it not?

Mr. BERRY. Yes.

Senator REED. And the \$100,000,000 which they have put in there as capital will also come out of the assets of the banks, will it not?

Mr. BERRY. Just there, Senator, I wish to inquire of Mr. Owen my figures. If you are going to demand that these banks furnish that capital in cash, my figures are not near bad enough. But I have assumed that the capital contributed by these outlying banks would be contributed in the form of securities rather than in the form of cash. If they are going to demand cash, why that is further up in the air than I showed it to you.

Senator REED. But sticking to this one thing, for I am trying to get to a certain conclusion——

Mr. BERRY. You are assuming, now, that it is cash?

Senator REED. Assuming that it is cash we have to put in; but a hundred million dollars of cash out of their vaults as and for capital, \$300,000,000 of cash as and for the reserve of 5 per cent?

Mr. BERRY. Yes.

Senator REED. Necessarily the banks must utilize that \$400,000,000 in some way pretty speedily or else it is going to make a shortage of money in the banks of the country, is it not?

Mr. BERRY. Certainly.

Senator REED. Therefore, is it not true that the result would be that they would borrow from the regional banks back an amount of money substantially equal to the amount they put in?

Mr. BERRY. With the exception of 175 millions. They would have to have it all back instantly excepting 175 millions.

Senator REED. That is 33 per cent?

Mr. BERRY. No; that is the saving that they realize by reducing their reserve requirements from 25 to 20 per cent and from 15 to 12 per cent in the banks.

Senator REED. Yes. That is because the general reserve of the country has been reduced?

Mr. BERRY. That is it. It would all have to go back instantly except 175 millions.

Senator REED. But with an actual shortage of ready money, is it not likely that these banks would borrow back almost immediately the \$400,000,000 they had put in, or substantially all of it?

Mr. BERRY. They could not get all of it. They would not have to have all of it. (After calculation.) They would have to have immediately back 225 millions of it.

Senator REED. Two hundred and twenty-five millions of it that they would have to get back immediately?

Mr. BERRY. Yes, sir.

Senator REED. That leaves you 175 millions, just your figures of a moment ago. Is not the regional reserve bank required to keep a reserve?

Mr. BERRY. Yes, sir.

Senator REED. Of how much?

Mr. BERRY. 33 $\frac{1}{3}$ per cent.

Senator REED. This 175 millions would barely cover their reserve, would it?

Mr. BERRY. If you consider all of the reserve they have to carry, it will not cover it by 50 millions.

Senator REED. Very well. The first thing that happens in this process is that the banks carry over \$400,000,000 and borrow back every dollar of it except what the regional bank has held by way of reserve, speaking broadly, now. I am not trying to speak with absolute mathematical accuracy. That is right, is it not?

Mr. BERRY. Yes, sir.

Senator REED. And we have left now in the banks \$175,000,000, substantially all of which has to be held as a reserve, and we have not added a dollar of new money or new wealth of any kind, have we, up to this point? I mean we have not added anything to the aggregate bank capital of the country?

Mr. BERRY. You have not added a new dollar, no, sir; but you have let loose from the reserves of the country—

Senator REED. That comes under another phase of this bill which reduces the reserves. Mr. Berry, let us say that you have a bank that has in its vaults \$225,000,000 of bank paper and has \$175,000,000 of reserve. There are 12 of these banks, and if they run on the average and they have \$1,750,000 in their reserves which they can not touch, the reserve of each of them would be a little over \$145,000 in its vault, of cash, and that would be held as a reserve. Is that right?

Mr. BERRY. I am not able to follow your figures.

Senator REED. Divide the \$1,755,000, which you say would be left in these banks, by 12, will you, please?

Mr. BERRY (after calculation). I would call it 15 millions, Senator?

Senator REED. You have only got in the banks 400 millions.

Mr. BERRY. Yes; you sent back 225 millions.

Senator REED. You have \$1,750,000 left—

Mr. BERRY. You have \$175,000,000 left.

Senator REED. Oh, yes; then you have how much?

Mr. BERRY. Fifteen millions of money.

Senator REED. Every dollar of which is tied up.

Mr. BERRY. That is not the way my figures resulted. I find that that was outside of the requirements for securing the national-bank notes—that is, the requirements of reserve against the national-bank notes and available balance of about 150 millions in the whole situation, in my figures; but that was before you had included this 100 millions. That makes a vast difference. If you are going to make those people furnish their capital subscription in cash, you would not have a cent, not a nickel.

Senator REED. I want to know how much of a real help that sort of massing of money is when you have massed it in that way and borrowed it back. Where is your reservoir to drink from when the drought comes?

Mr. BERRY. There is none.

Senator REED. That is just the way it has been striking me. It is true that the bank can take these bank securities now, these notes that the banks have put in there for their \$225,000,000, and they can go down to the Federal Government and they can get currency issued.

Mr. BERRY. Yes.

Senator REED. But the solitary atom of original strength now that we have added to this system, the first massing of any of this credit, the first drop of water that has gone into the reservoir from which we are all going to drink in the hour when we are thirsty, came out of Uncle Sam's reservoir, did it not?

Mr. BERRY. New money.

Senator REED. New money that he made. But the banks had not added a penny?

Mr. BERRY. Not a thing.

Senator REED. Then, if Uncle Sam takes his money and deposits it in these banks, of course that is that much more money that they can use; but that money that Uncle Sam issued came out of the Treasury, did it not?

Mr. BERRY. Yes.

Senator REED. So that the only element of strength and the only way these regional banks can do anything is with what they get from the Federal Government; and this talk that we have had here,

that you are going to mass the resources of the country, the reserves of the banks in one common reservoir from which all can draw and which will enable the money to flow from one part of the country to another part of the country, appears to end in an idle dream; that is your view of it, anyway?

Mr. BERRY. Yes, sir. The only thing that promises a possible help in the situation is the reduction of the percentage of reserve required from 25 to 20 per cent and from 15 to 12 per cent. That is the only thing.

Senator REED. We have not added a new element of strength to this by the banking system?

Mr. BERRY. You have added an element of weakness by undermining the credit.

Senator REED. If you want to release 25 per cent of the reserves that we now require the banks to hold, we could do that by enacting the statute changing the requirements of the present law?

Mr. BERRY. Yes.

Senator REED. And then we would have accomplished by that direct method the only good which you see would be accomplished by this indirection?

Mr. BERRY. Absolutely.

Senator REED. Indeed, that provision of this bill which relates to the amount of reserves is a thing that is independent from the scheme itself. It simply is a provision in this bill that the amount of bank reserves may be reduced and they may be distributed differently from what they are at the present time. That is where we come out, is it not?

Mr. BERRY. Yes, sir.

Senator REED. If there is any excuse, then, for this system, it must be found in the fact that it is a device or plan by which before the Federal Government issues this new money it may have the indorsement of this regional reserve bank upon the back of all the individual paper the regional reserve bank has, and which it desires to borrow money from the Government upon. That is about all there is in the whole scheme, is it not?

Mr. BERRY. Yes.

Senator REED. I confess if that is all there is in it I do not see much use in it.

Mr. BERRY. That is all that I have been able to see in it. I do not know whether there is anything that I have not observed or not.

Senator REED. You and I may both be mistaken, and I know that I am very likely to be; but I think with your experience you ought to be pretty sound.

Now, I want to come to another question. I take it that you rather lean to the opinion that one of the weaknesses of our banking system is in requiring banks to maintain as large a reserve as they are now required to maintain. Am I correct in that?

Mr. BERRY. No. My thought would be that they ought to be still required to maintain as large a reserve as they now have, but that it should be more distributed to the outlying banks rather than concentrated in the central reserve city banks.

Senator REED. I was in error. You would require the banks, treating them as a whole, still to keep as large a reserve as they now are required to maintain?

Mr. BERRY. I do not know that I would insist upon that in the central reserve cities. I think the reserve required in the central reserve cities is more than is really necessary.

Senator REED. You misapprehend my question. I say that, treating the banking system as a whole, you do not want to see the local reserves go down?

Mr. BERRY. No, sir; I would not.

Senator REED. That is, if the required reserve figured up to be at 500 millions of dollars, the country bank putting in a certain per cent and the ordinary reserve bank a certain per cent and the central reserve banks a certain per cent, and they aggregated 500 millions of dollars, you might want to distribute the reserves or change the requirements as to what certain classes of banks would hold, but you would still want in the aggregate \$500,000,000?

Mr. BERRY. That is my thought.

Senator REED. The first thing this bill does is to reduce that aggregate, is it not?

Mr. BERRY. Yes.

Senator REED. By how much?

Mr. BERRY. By 25 per cent.

Senator REED. It would be, in round numbers, based upon our present moneys—

Mr. BERRY. About 175 millions is what it figures out for the national banks.

Senator REED. In round numbers?

Mr. BERRY. Yes, sir.

Senator REED. So that the first thing we do by this bill is to take out of the present system 25 per cent of that element of safety which has heretofore consisted in the reserve. Have we anywhere strengthened the system by this process?

Mr. BERRY. Not that I can see.

Senator REED. As a matter of fact, when there is a financial shiver goes over the Nation the danger to the banking system lies in the rush of the people to demand cash and the inability of the banks to supply that cash. If the people never lost confidence we might have hard times, but we never would have a panic, would we?

Mr. BERRY. No, sir.

Senator REED. Because a panic means lack of confidence. If it was known that all of the banks of the country had 100 cents on the dollar in their vaults and had all the deposits there that the depositors had placed there, there never would be any trouble whatever. Of course there would not be any banking business done, but there never would be a lack of confidence?

Mr. BERRY. No, sir.

Senator REED. Then, as you reduce the amount of money held in the vaults of the bank you reduce public confidence in the hour of trouble, do you not?

Mr. BERRY. Undoubtedly.

Senator REED. Then, is not the inevitable effect of this bill such that the people of the country are more likely to raid the banks because the reserve has been cut down 25 per cent?

Mr. BERRY. I can not view it any other way, Senator.

Senator REED. Can you discover in the bill anywhere a provision which offers to the customer of the bank—the depositor of the bank—

anything to compensate him for the additional risk incident to a reduction of the reserve?

Mr. BERRY. Nothing whatever, unless, Senator, a provision is made to have this currency given the legal-tender function competent to stand in bank reserves. If it has, then the credit situation will be instantly relieved.

Senator REED. Coming to that, it of course brings us to quite a different proposition from what we have been talking about. Would you make all the money that is issued by the Government full legal tender?

Mr. BERRY. Yes, sir.

Senator REED. Would you retire the bank notes that are now out?

Mr. BERRY. Yes, sir.

Senator REED. But issue in lieu of them full legal-tender money of the United States?

Mr. BERRY. Yes, sir.

Senator REED. What would you do with the silver certificates?

Mr. BERRY. I would substitute for them United States notes, if anybody wanted them substituted. Otherwise let them stay until by natural process they eliminate themselves, and substitute whatever form of currency is the most desirable or convenient in the estimation of the people that use it.

Senator REED. What would you do with the gold certificates?

Mr. BERRY. The same thing.

Senator REED. How much gold reserve would you hold in the Treasury of the United States back of money issued by the United States?

Mr. BERRY. In my paper I have stated that a 20 per cent minimum would be sufficient. I apprehend that under the present circumstances we would tend toward a $33\frac{1}{3}$ per cent reserve and would never fall below it. We might reach it. It would take a number of years to do it, because we would start with about 85 per cent reserve, and it would take a long time to get down to that. It would never go below that, because the current production of gold would furnish that reserve against the needed legal tender.

Senator REED. What danger is there, in your opinion, with a $33\frac{1}{3}$ per cent gold reserve and with a currency out backed by the faith of the Government, of the gold reserve being depleted by so much of this money being brought to the Treasury and gold demanded; that the paper money would drive the gold out—exhaust our gold reserve?

Mr. BERRY. Issued as I have indicated, with the necessary restraint imposed by the sacrifice involved in its issue, it would never be issued beyond the demands of business, in which case it would not act to drive the gold out.

Senator REED. I wish you would tell me why it would not.

Mr. BERRY. For the simple reason that it is not issued in excess of the demand, not issued with sufficient rapidity to appreciate the prices seriously. If it were issued with sufficient rapidity to appreciate prices, in other words depreciate our money, gold would immediately leave the country for the purpose of improving the condition of the money here. It is only in such cases as that that the Gresham law would be applied.

Senator REED. I understand, of course, that when you come to originally issuing this money upon that plan, it is that it shall be

issued upon a Government bond, the bond being surrendered and the holder losing the interest upon that bond. He will not do that unless there is some demand for the money, some use to put it to. But suppose that half a billion dollars of gold is in the Treasury, and suppose we have issued three billions of dollars of money. What is to hinder the banks of the country, if they saw fit so to do, gathering up money and going down and demanding gold until they would deplete that gold reserve?

Mr. BERRY. Nothing that I can see, except the inconvenience of handling the gold. It is a pretty expensive proposition for a man to handle gold. I am told that it would cost the United States Government hundreds of thousands of dollars even to count the gold which is here, in the loss incident to one handling.

Senator REED. What would there be to hinder the foreign bankers who wanted to transport our gold over there?

Senator REED. What is there to hinder foreign bankers who wanted to transfer the gold over there?

Mr. BERRY. That, I think, is what will transpire, in the event of an emergency, though I am persuaded that the United States is soon to be called upon to finance the world, and I hope we will be able to make provision for the United States Government to send at least \$1,000,000 of gold into the foreign trade in the course of a period of years.

I am satisfied that would take care of the gold, for 90 per cent of the natural flow of business has a tendency to gather gold in the United States, and it would only be in exchange for foreign securities that our gold would go. It would become immediately a foreign asset to the extent of the movement of gold away from the country, but of course that sets up immediately a constant for our increment of interest payments which would further work to our advantage. Of course that is not immediately in prospect; oh, I do not know but what it is immediately in prospect. It is not an uncommon thing for foreign countries to now come to this country to sell their bonds and, in my judgment, that will be increasingly so in the future. We have the largest amount of gold ever assembled in the history of any nation; we have the largest market for the securities of the world, and we must prepare, in my judgment, to assume that burden.

I view with satisfaction a situation in which we would begin to send our money abroad just as for many generations past we have been the recipient of foreign money into this country; but to-day we are at the head of the procession. We are the largest commercial factor on earth; not only the largest but we come pretty nearly being one-half of the whole show right here. Three-sevenths of the entire banking power of the known world is in the United States to-day.

Senator REED. Have you ever given any special study to the Bank of England and its methods of preserving a parity of paper?

Mr. BERRY. Yes, sir; one has to give attention to that, and of course it is very frequently injected into the argument as something to copy.

My own judgment about it is that it is something to avoid. The method of the Bank of England is to conserve its reserve by raising the discount rate. By raising the discount rate it practically puts the brakes on business and stops the expansion of business whenever it is necessary to preserve their gold situation.

Senator REED. Do you not think that there are periods of industrial excitement and development when it is a good thing to put a check on business?

Mr. BERRY. No, sir; I do not. As I told you when I started, I am of the number of men who do not believe it wise to say to any man, "Stop working."

Senator REED. Suppose you said to him, "Stop speculating"?

Mr. BERRY. Well, I would be sorry to see the situation of speculation disturbed. I am satisfied that the whole progress of civilization is the outcome of speculation. Speculation is a factor in almost every exchange. I sell you a horse for \$150. I take that \$150 because that I think the \$150 is worth more than the horse. You take the horse and give me the \$150 because you think that the horse is worth more than \$150.

Senator REED. Well, that does not necessarily follow, and I do not think your illustration throws any light upon the subject in the connection with which you use it. You have two horses and you have use for but one; I have no horse and must have one because I can utilize him. You sell the horse because he is not of use to you and therefore you can afford to sell him for what he is worth, and I buy him because he is of use to me.

Mr. BERRY. That is exactly what I said, stated in another way.

Senator REED. That does not necessarily mean speculation at all. A man who buys that horse does not buy him to speculate on; he gets that horse because he needs him. Take the merchant who has his goods upon a shelf in a store. They are not there for speculative purposes. They are there for sale. I do not think that speculation enters into but a very small per cent of our transactions taken in the aggregate.

Mr. BERRY. Now, it may be in the horse deal that both of us are mistaken. You may discover that the horse was no good to you, and I may discover that the money was no good to me. But nine times out of ten we will discover that we were both right. The speculative idea enters because of the element involved in such a deal.

Senator REED. That is not true of everything we buy, but that is true in connection with trade as distinguished from speculation.

Mr. BERRY. I see nothing there except a difference in degree until you come to the realm of gambling, and it can be easily differentiated. If I bet you \$50 one horse will get over the track before the other that is a gambling transaction, because it is certain one of us is going to lose. If one wins the other loses, but in an ordinary transaction it is quite possible ninety times out of a hundred that both men will make a profit on the deal.

Senator REED. That is what I am saying; that is a legitimate trade instead of speculation.

Mr. BERRY. That is speculation, distinguished from gambling, as I just put it.

Senator SHAFROTH. The difference between you is the difference in interpretation of the word "speculation."

Senator REED. I, of course, was using the term "speculation" in my questions awhile ago to cover such things as booming new enterprises without proper regard for business conditions, boom towns, locating acre property in lots. and that sort of thing.

Mr. BERRY. But that would of course have nothing to do with the level of safety.

Senator REED. That may be true, but we can do too much of it.

Mr. BERRY. Very well.

Senator REED. However, I will not pursue the subject further. I am very greatly obliged to you, Mr. Berry. I have no further questions.

Senator SHAFROTH. I want to ask you a few questions. What effect, in your judgment, would the establishment of such a system have upon the level of prices?

Mr. BERRY. I do not think it would affect the level of prices at all, because I do not propose an inflation. An inflation is an injection of money into circulation faster than the demands of business call for that money and in such cases you will always increase prices.

Senator SHAFROTH. To what do you attribute the rise in prices of commodities in the United States or in the world during the past five years?

Mr. BERRY. In the first place, generally speaking, upon a basis of comparison there has been no rise in prices since 1901. We have what we call the phenomena of high cost of living, to wit, a very large increase in the price of the perishable commodities that enter into the daily consumption of our people. This, in my judgment, is due to causes entirely unrelated to the currency volume.

Senator SHAFROTH. Or to the increased volume of gold which has been added to the currency?

Mr. BERRY. Surely. The explanation of that situation is found in the fact that, for reasons which if I had time I would develop, conditions have led our people to herd in the cities at the expense of the country. In the last decade we have had a 2 per cent increase in our suburban population and a 22 per cent increase in our urban population.

Senator SHAFROTH. What effect does that produce?

Mr. BERRY. It produces a demand for the products produced by the country beyond the supply, and necessarily high prices result.

Senator SHAFROTH. And at the same time that small percentage of population in the country has greatly diminished the producing power?

Mr. BERRY. Surely; the supply of those commodities is not adequate to meet the demands for them by reason of the dissolution of growth in the country which has been so great in the cities and so small in the producing sections. If you wish to determine whether or not the currency is redundant and therefore depreciating you should measure your currency against things which are like it, to wit, those things which do not perish in the use and which persist; and if you will take the experience of the country since 1902 you will discover that the average of such property has gone down steadily for the last five years or six years.

Senator SHAFROTH. Such as what property?

Mr. BERRY. Railroad stocks or industrials. The Pennsylvania Railroad has in that period lost, well, 50 points practically—one of the best properties on the face of the earth—and other properties of the same sort are in the same situation. Thirty rails and nine industrials of the very best selection in the United States have lost on an average of 30 points in that time. They have gone down.

They are properly conformable to the money or gold supply, for, like gold, they stay with you. They are here day after day, not like your perishable products.

Senator SHAFROTH. Are there any elements, in your judgment, that would make my question not a fair test by reason of legislation or demand in recent years to eliminate to a certain extent the income on the franchises of railroads?

Mr. BERRY. I think possibly that there are some things of that sort operating to some degree. I do not think they operate to the degree that some would have us believe.

Senator SHAFROTH. So you think, then, that the increased volume of gold has not had the effect upon the country at large of causing an upward tendency of prices?

Mr. BERRY. As compared with the period of 1896 when we had the rock bottom of prices, we had reason to expect a rise in prices, and we experienced it. Up to 1901 it was very considerable in all lines; but since 1901 it has been retrograding—it has been going back.

Senator BRISTOW. Now you take, as confirmatory to a certain extent to the position of Mr. Berry's, the price of wheat. The price of wheat has not gone up any.

Senator SHAFROTH. I think it has a little, though not very much.

Senator BRISTOW. I do not think the price of wheat is as high as it was a few years ago. In the production of wheat there has been an expansion equivalent, probably, to the expansion of our cities' population, while the production of live stock has not been to such an extent. That is easily observable.

Mr. BERRY. Yes, sir.

Senator BRISTOW. Take sugar. Sugar has not advanced in price, because the expansion of the production of that commodity has been greater than the increase.

Mr. BERRY. That is the final test.

Senator SHAFROTH. And it has been greater than the increased production of gold?

Senator BRISTOW. Yes; I think so.

Senator SHAFROTH. Of course, when you are measuring things according to gold you have to take into consideration the increase and decline of the things that gold measures.

Mr. BERRY. Well, the great increase in gold production in 1897 was a combination accompanied instantly by a phenomenal response in productive lines. On your first question as to what effect the injection of \$135,000,000 of new legal tender money per year into the country would have on prices, my answer was "None at all," for the reason that it would be met instantly by a revival of production along all lines—a stimulus of business which would equal the situation. In other words, this money would come out only in response to that activity, and therefore it would not affect the prices; but if you were to put out \$300,000,000 a year you would affect it. Not only that, but you would soon drive your gold out of the country. You must put it out in response to the demand of business and only in response to the demand of business, otherwise you will have it depreciating just as we had our currency depreciate during the war.

Senator SHAFROTH. Is it also not true that this level of prices is generally a world's level of prices and not that of the United States alone?

Mr. BERRY. Oh, yes; the whole question is a world question.

Senator SHAFROTH. And that any increase of the circulating medium in a country, while it would have a tendency if it was unduly great, to increase prices in the country, would not relatively have that same effect on the world's prices?

Mr. BERRY. The moment you increase prices here you would send the money out of the country. It will go right across the water as soon as you disturb the level. If you inject a credit factor like the national credit in a legal tender note into the currency of the country to any undue proportion it will raise the prices. As soon as you raise your prices your foreign exchange will pull the money out of the country right away.

Senator SHAFROTH. And that will lower prices here?

Mr. BERRY. In other words, each country has a spout that leads into the general monetary reservoir. As you force money into that general reservoir and disturb the level of that reservoir the money must find its proper level.

Senator SHAFROTH. Mr. Berry, you mentioned in your paper about the power of the Bank of England to increase or decrease the rate of interest as being a crime. Now, will you explain what you mean by that and how it works to make it wrong?

Mr. BERRY. Well, in the Bank of England with its reserves being depleted by reason of too heavy discounts, in order to conserve its reserves and restore the discount rates, the inevitable result is to put a brake on the development of business among its clientele. In other words, it is an arbitrary use of power which I do not believe is proper.

Senator SHAFROTH. Then what, in your opinion, will be the effect of the provision of the pending bill which gives the power to raise or lower the rate of discount?

Mr. BERRY. The very same in this case as it is there; it would simply say to people who wished to develop their territory and go hypothecate their perfectly valid securities to get credit with which to do it, "Hold on; we are not ready for you to do that."

Senator SHAFROTH. You think that would have a depressing effect upon business generally and development of the country?

Mr. BERRY. It can have no other purpose than practically stopping the development of the country and setting a brake on the activities of the people. For those who believe that that is the way to run a country, that is a sort of a thing they like. I do not. I am satisfied they are diametrically wrong, and therefore I insist upon it that the office of the Government and the duty of statesmanship is to provide some means whereby the threatened depletion of reserves can be checked by the supplying of more reserves instead of by stopping business which wants to go on in the country.

Senator SHAFROTH. What check would you have in your system for converting bonds into legal-tender money?

Mr. BERRY. No check, except that I would compel the man who had the bonds to surrender them and lose all interest on them.

Senator SHAFROTH. What rate of interest would you prefer to have the bonds issued at?

Mr. BERRY. It is immaterial what rate of interest you issue the bonds at is, provided you do not give them any special privileges, because commerce will take care of the interest rate. If you issue 2 per cent bonds of the United States and go out and try to sell them, you will sell them for about 60, and you will have a commercial interest rate paid on it just the same.

Senator SHAFROTH. Then you would not have any of these bonds come into the Treasury for the purpose of issuing legal tender upon?

Mr. BERRY. Upon these bonds which pay 2 per cent?

Senator SHAFROTH. Yes.

Mr. BERRY. Oh, yes, I think it is incumbent upon the Government to take in those bonds at par.

Senator SHAFROTH. But you would not take in those bonds at the market rate?

Mr. BERRY. No.

Senator SHAFROTH. But you advocate taking in all the other bonds at the market rate. You said that in your judgment a gold reserve of more than 33 $\frac{1}{3}$ per cent could not be maintained?

Mr. BERRY. Ultimately; no, sir.

Senator SHAFROTH. Why is that?

Mr. BERRY. Because the demand for currency in the United States is \$200,000,000 per annum.

Senator SHAFROTH. How do you get at that?

Mr. BERRY. Why, I covered it in my paper. I showed you absolutely that the country has had in the last 10 years a billion dollars a year of new credit. If it is to be issued on a 10 per cent basis, the banks would have \$100,000,000 of new money. The banks are only able to secure and segregate one-half of the new money that comes into the country. Therefore, if the banks are to get \$100,000,000, the country must get \$200,000,000 a year, and the gold supply will furnish you 33 $\frac{1}{3}$ per cent of it. Those are the figures. As a matter of course, one does not wish to be held exactly to mathematical nicety about those figures, but that is practically what the situation resolves itself into. If you do not secure \$200,000,000 of legal tender money you have only two things to do: You have got to restrain business—refuse credit—or attenuate the reserve, and instead of 9 per cent, as now proposed, you must put it down further.

Senator SHAFROTH. You say the banks need \$100,000,000 a year?

Mr. BERRY. Yes, sir.

Senator SHAFROTH. In order to build up their reserves?

Mr. BERRY. Yes, sir.

Senator SHAFROTH. Why do the people need \$100,000,000 a year in addition to that?

Mr. BERRY. For the simple reason, as I will explain: I have got a boy starting out in business who wants a bank account. In order to give him the credit he wants, there is a quantity of money required; it is only one-tenth of what his credit is, however. Suppose it is \$20 and he wants \$200 credit to finance himself. He wants \$20 on his hip, at the same time, and he has got to have it and does get it.

Senator REED. Do you mean that those figures show that those proportions are maintained?

Mr. BERRY. For the last 50 years it has not varied 1 per cent. It is not 50 per cent either; it should be only 46 per cent. The banks only get 46 per cent of the money that comes into the country. It has not

varied 1 per cent on either side of 46 per cent in 10 years. That is rather an odd coincidence, but it is true.

Senator REED. Upon what, Mr. Berry, do you base your conclusion that a gold reserve of 20 per cent is sufficient to maintain a currency of full legal tender money?

Mr. BERRY. On this assumption: The banks of the United States are able to maintain a currency with only about $8\frac{1}{2}$ per cent of cash back of it, 5 per cent of which they furnish, and the rest of which the Government furnishes. If the banks can maintain a currency which is not a legal tender on an 8 per cent basis, I feel absolutely certain that the United States can sustain a currency which is a legal tender on three times that. I think it is beyond question that that percentage of reserves would be all that would be required.

Again, bank credit, which is constantly redeemable, is maintained in the country on an average of 8 per cent reserve; and if bank credit, which is not a legal tender for anything, and is instantly redeemable, can be maintained on 8 per cent basis, certainly the currency of the country, which is a legal tender and only requires redemption for export, can be maintained on a 20 per cent basis.

Senator SHAFROTH. Mr. Berry, Mr. Forgan, of Chicago, when testifying, said that if the present bank currency was converted into a full legal tender money of the Government, that it would produce a great inflation of the currency—no; I believe I am mistaken; it was not Mr. Forgan. Mr. Forgan took the other view. However, one of the bankers from Chicago went on the theory that there would be that much more money that could act as reserve, and inasmuch as you could build up 8 or 10 to 1 on reserves that it would produce a great inflation of the currency. What is your view of that?

Mr. BERRY. That is my judgment. I am satisfied of that. That is the point I have made all the time. The conversion of that money into legal tender would solve the problem that is before this committee. It would supply the country with the legal-tender basis upon which these \$7,000,000,000 of the money that the country at this moment demands and can not get would be supplied.

Senator SHAFROTH. In your judgment, would it be such an inflation as would affect the prices?

Mr. BERRY. No, sir; because it could not come out faster than the demands of business, because the banks are not going to convert that money any faster than the demands for money in their country calls for, and they will do it just as fast as the situation requires, and no faster, because they have got to make a sacrifice to do it.

Senator SHAFROTH. Mr. Reynolds, of Chicago, speaking of that provision of the bill I introduced, converting the bank currency into full legal tender, said that in his judgment the banks would voluntarily offer to surrender their circulation and deliver their bonds upon giving to them full legal-tender money for the bonds, or for the excess, the bonds being hypothecated here in the Treasury Department. In your judgment would that occur?

Mr. BERRY. Yes, sir; I think it would, ultimately; it would not occur suddenly; no man would give up his bond or his currency or his circulation until the demands of his business called for it, and when they do, he will, and just in proportion as it does, he will.

Senator SHAFROTH. His theory was that if the bonds were on the market they would sell at a much less rate than par; that it would be

natural for their interests to cash those 2 per cent bonds so that they would lose nothing on their circulation.

Mr. BERRY. My judgment about it is this: There is a certain proportion of those notes that are redundant. As fast as they were converted that redundancy would disappear. If the banks were not troubled to maintain redemption for these notes, they would have no disposition whatever to redeem them, and to the extent that they are redundant they would be, I think, speedily converted.

Senator REED. Well, but you say that there is not a redundancy of currency now, but there is a shortage.

Mr. BERRY. There is a redundancy of the bank note brought on by the fact that it goes back for redemption, the entire issue in 12 months. If it were not redundant, it would not do that.

Senator REED. You say it goes back because you can not use it for reserve?

Mr. BERRY. Sure.

Senator REED. It is not redundant because it is not currency, but because it is an inferior variety of currency?

Mr. BERRY. That is it.

Senator SHAFROTH. Do you think it would be to the advantage of banks to exchange that currency for the full legal-tender money in order to have it a reserve upon which they could build credit?

Mr. BERRY. Sure.

Senator SHAFROTH. And for that reason most of the bankers of the country would voluntarily come in and surrender their circulation and have full legal-tender money issued.

Senator REED. To take up the bonds?

Senator SHAFROTH. Yes; to take up the bonds.

Senator BRISTOW. Mr. Berry, I was interested in your discussion as to the increase of the currency not increasing prices, unless it was overdone, and you estimated that in the issue of \$200,000,000 additional money in the year would not overdo it. Do you not think that conditions outside of this country might make business dull here; that is, if there should be a lessened demand abroad for our export production, so that we did not have a sale for the things that we make and that caused a dull market, would not that result in a depression of business?

Mr. BERRY. Well, it might, but I think that the foreign trade of the Nation is so negligible as compared to the great volume of trade that if it were all to disappear it would not make any serious impression on the situation.

Senator BRISTOW. Mr. Berry, while the foreign trade is small as compared to our domestic commerce, yet you take a reduction of 15 or 20 per cent in the aggregate business of any concern and it is a very serious thing for it, as a practical thing, is it not?

Mr. BERRY. Sometimes it might be; but this is the way I look at it, Senator: Our foreign trade is far less than that of Britain, it is far less than that of Germany, and yet it is still true that the trade of the United States comprises one-half of the trade of the known world, so that it seems to me like the foreign factor in our trade is practically negligible; but I can not conceive of a condition in which it would all disappear. It might, but it is a very violent assumption.

Senator BRISTOW. Of course, it would not all disappear, no; that is not at all possible. The rate of interest on these bonds which you suggest as the basis of this currency, you say is of no consequence?

Mr. BERRY. That is the stated rate on them, because the actual rate will be the commercial rate for safe investment, whatever it is.

Senator BRISTOW. Suppose they were 3 per cent bonds. At times they would sell for par and at other times they would not?

Mr. BERRY. I think we would ultimately come to a time when they would sell continuously at par. I think the natural interest rate is about 3 per cent and that the interest rate would come down sufficiently to maintain a 3 per cent bond at par; that is, a Government bond.

Senator BRISTOW. Suppose they were sold at par. What condition could result in their advancing to a premium?

Mr. BERRY. Nothing, except the fall of the interest rate.

Senator BRISTOW. The fall of the interest rate?

Mr. BERRY. Yes.

Senator BRISTOW. The increase of the interest rate then would reduce them below par?

Mr. BERRY. Yes.

Senator BRISTOW. If they went down to 95 that would be because of the increase of the interest rate, what advantage would it be to anyone holding any of those bonds to go to the Treasury and get \$95 in currency?

Mr. BERRY. It would not be of any advantage to a private citizen, but to a banker it would be an immense advantage. If I was a banker and had \$1,000 of those bonds, and my reserves depleted, and one of my customers wanted to borrow—I am speaking of an outlying bank—and I could not lend it because I did not have any reserve fund—I have a \$1,000 investment at current rates, whatever they are—if 95 on the basis of 3 per cent, that is what it is—it would pay me to surrender that investment of \$1,000, in order to take on a \$7,000 investment at current rates. As a banker, I could do it; as an individual I would not do it.

Senator BRISTOW. You would go then and sell that \$1,000 worth of bonds for \$950, and lose \$50 in the transaction?

Mr. BERRY. Sure.

Senator BRISTOW. You would have to make up that \$50 in the loan you were making to that individual?

Mr. BERRY. Yes.

Senator SHAFROTH. His loan to the individual would be \$7,000.

Mr. BERRY. The loan to the individual would be seven times the \$1,000.

Senator BRISTOW. Why would it?

Mr. BERRY. That is the basis upon which you can do it; that is the secret of banking.

Senator BRISTOW. I can not see through that.

Mr. BERRY. That is the way it is done. There is not a dollar of it in the country that is not carried just that way.

Senator BRISTOW. He has \$950, and that is all the money he has, and he loans that \$950.

The CHAIRMAN. He loans it over and over again.

Senator BRISTOW. I know that \$950 is redeposited. As a rule, instead of a man taking the \$950 which he has borrowed, he takes—

Mr. BERRY. He takes credit on the bank books.

Senator BRISTOW. He takes credit on the bank books, and takes a check book along and checks it out. Now, the bank has that \$950

there, or the most of it, as a checking account, and he knows from his experience that a certain part of it is going to be left there anyway, and he can afford to loan it.

Mr. BERRY. Sure.

Senator BRISTOW. And meet all of the requirements?

Mr. BERRY. In other words, the banker would be the only man who could afford to merge these bonds into currency, and he would do it whenever a legitimate loan presented itself, and he would not do it when the loan was illegitimate, because he has got to stand behind his loan, and if he loses it he loses it; and he will not take on a bad loan simply because he can sell a \$1,000 bond, but he will take on every good loan he can buy through that process.

On the other hand, I, as an individual, have my money invested in the bond, which is as good an investment as I can buy. I do not want to sell it. I have bought it for investment. But the banker can merge it. He is the only man who can, and he will; but only in response to the demands of business which precedes the issue.

It is only within the last 5 years, after 30 years of study of this problem, that I have been able to see clearly a safe way in which we could absolutely dispense with the individual supervision of the issue of legal-tender paper. I do, now, see it absolutely clearly, safe as a clock—absolutely safe; perfectly and entirely automatic, no advisory board or anybody. It is simply between the banker and his customer; and the natural demands of business will govern, and only the demands of business.

It is perfectly clear that if gold production should be stimulated, and some gold miner should come in and deposit a wad of money, he will not merge any bonds. He has the reserve without it. The mutations of gold production will be met absolutely by the mutations of currency issue. It is the most beautiful automatic proposition that a man can imagine. Not only that, but the mutations of business and the mutations of crops will be met by it. It is hardly conceivable that we will have a crop condition here which will destroy two-thirds of the business of the United States within a year, and unless you do, you still need some legal-tender money along with your gold, for that gold will only carry one-third of the business, and you still need an increment of legal-tender money; but if one-third of your crops fail, instead of issuing \$135,000,000 that year, you will only issue \$65,000,000, because that is all that the business calls for, and you will not have to lay awake, the board or anybody else; simply the man right out on the margin, the man in the immediate touch with the business is the man who does it.

Senator BRISTOW. Suppose this interest rate was fixed at 3 per cent and the Government would issue currency on these bonds at any time and receive them at par, what would be the result?

Mr. BERRY. I think you would lose a very essential feature in the automatic system. You might have occasion, if the interest rate at large, for instance, should increase and 4 per cent should become the general rate, then all these fellows would rush in there and surrender those bonds.

Senator BRISTOW. Then the interest rate would go down?

Mr. BERRY. Well, no matter. You would have a loosening of the automatic process, because you would have an extraneous circum-

stance operating upon it other than the demands of business, but if you hold to the market value of the bond then it does not make any difference where the interest rate goes. This surrender means a surrender at the current interest rate. It varies with the situation all the time. If you have the market price of the bond as the determining factor, then the individual man can sell that bond. Individuals would rush in, you see, to do it. Because I have a 3 per cent investment and I can get 4, and I will sell my 3 per cent bond at once but if I can not sell it only on a 4 per cent basis it is not going to do me any good and I will not do it; it is an automatic situation.

Senator BRISTOW. With the rate on a Government bond at 3 per cent, that bond would sell to an investor, even if he could get 4 per cent, or even possibly 5 per cent, in other investments, because of the desirability of the security?

Mr. BERRY. Sometimes that is true, yes, sir. Of course, I am comparing it with other things that are equally safe.

Senator BRISTOW. There are some desirable things about a Government bond. It is not taxable, and that would not measure the rate of interest, but it would have a tendency, would it not, to make stable the rate of interest?

Mr. BERRY. No; I do not think so. I think it would have a tendency to bring the general rate of interest down; that is what I think, because it would meet the demand for credit, and whenever you have a market in which the demand is equal to the supply, you have a credit rate established which will be dependent upon the cost of extending it, and not upon the exigencies of the situation.

Senator BRISTOW. If that interest rate was 3 per cent and the prevailing interest rates were 6 and 7 per cent, if a man could get 7 per cent for his money a good many of them would part with the bonds and undertake to earn more than 3 per cent on their investments?

Mr. BERRY. Yes.

Senator BRISTOW. And whenever they began to part with their bonds it would have a tendency to depress the advancing interest rate, would it not?

Mr. BERRY. Yes.

Senator BRISTOW. Would not that be desirable?

Mr. BERRY. Sure; that is what I say; that is the ultimate outcome of it—the inevitable establishment of an interest rate based upon the cost of extending credit rather than upon the stress of circumstances.

Senator BRISTOW. Would this tendency to regulate the interest rate be so manifest if the bonds were redeemed by the Government and notes issued at their market value instead of at their face value?

Mr. BERRY. Oh, yes; I think so; that is a necessary characteristic. You must use the market value. I do not think it would do at all to have them redeemable at their face value.

Senator SHAFROTH. They would all rush in at one time?

Mr. BERRY. They would all rush out at one time, and you would have no automatic feature about it.

Senator SHAFROTH. I think that is right.

Senator BRISTOW. I do not think I got one point very clear. You may have explained it while I was out—as to how you would proceed to substitute this currency for the currency that we now have. What would be the methods?

Mr. BERRY. Well, Senator Shafroth's bill or Senator Owen's bill, either one would answer the purpose. I would pass a bill which would authorize the United States Treasurer to accept the 2 per cent bonds, together with the currency that is floating upon them, in exchange for legal-tender money at par, on these 2 per cent bonds, as far as they lasted, because I think it is an obligation upon the Government to take them in at par.

Senator BRISTOW. And they would be presented, of course?

Mr. BERRY. Whenever the bank wanted the money, and only then; they would not all rush in at once, because the banks do not all want the money at once. If there is a bank that wants money and needs it to meet the demands of the situation, let it come in with its bonds and get the money, and let them come whenever they please and let them be just as long about coming as they please—no force about it.

Senator BRISTOW. Let the gold certificates stand just as they are?

Mr. BERRY. Just as they are, unless you wanted to substitute them finally with a Treasury note, which I think would be the wise thing to do—have one kind of money and only one kind of money, every piece of which is a gold certificate to all intents and purposes.

Senator BRISTOW. We have got now \$150,000,000 of reserve gold which is usable for this purpose. When these bonds are surrendered and additional notes are issued, then additional gold must be provided. How do you propose to provide that?

Mr. BERRY. Well, you have \$150,000,000 which is about 33½ per cent of the reserve, against these notes, and if you do not succeed as you have in the past in securing voluntarily from the people gold in exchange for your paper—that is what we have been doing—you would have to say at once, "Now, we will not issue any more gold certificates—no more of these 'warehouse' receipts, but if you have a bunch of gold and it is too heavy for you, bring it to me, and I will give you paper for it—paper which I will pay you gold for whenever you want it, but against which I will not maintain a 100 per cent of gold."

Senator BRISTOW. Suppose they did not bring it?

Mr. BERRY. If they did not bring it, you will have to go into the market and sell your bonds to get gold. In other words, where you take in two bonds of \$1,000, you will have to sell one, if you want 33½ per cent. If you take in three bonds, you will sell one back for gold.

Senator BRISTOW. Do you not think there would be danger in the transition period of your gold certificates going above par?

Mr. BERRY. No, sir; not the slightest danger. Last year there were issued \$43,000,000 of gold certificates, and there were only \$42,000,000 of gold come into the country; \$3,000,000 of the old stock went into the certificates.

Senator BRISTOW. As commonly termed here, those are "warehouse" certificates. The people go down there and they deposit this heavy and bulky material that loses by erosion a great deal in commerce, and they take these certificates that can be reproduced without any loss, and it is common, ordinary business sense for them to do it; but that is a certificate that I have in the Treasury of the United States, stored away there, \$20 in gold, and I can get it any time I want it. This other is a certificate that the United States will pay me \$20 in gold if I demanded it. Now, its value depends upon the ability of the United States to meet that obligation?

Mr. BERRY. Yes.

Senator BRISTOW. The other's value depends upon the integrity of the United States in keeping its contract?

Mr. BERRY. Yes; the same thing.

Senator BRISTOW. Oh, no. One is a trust fund that is there, that the Government has got to steal in order to take it away from you.

Mr. BERRY. You have a contract with the gold-certificate holder that you will keep his dollar there until he brings his certificate. That much is on a 100 per cent basis, and you can not change that until he is willing to change it, but you say to him, "Now, I will not do that for you any more; and if you do not want to take this kind of certificate for your gold, why, keep your gold"; that is all. You say to him, "I will give you legal-tender paper for that gold, if you want it, and I will give you gold for the legal-tender paper whenever you bring it, but I will not arrange to hold 100 per cent reserve against it, but I will arrange and pledge the Nation behind me to give you what gold you want when you come after it." You will find he will come just as quickly to get that kind of a paper dollar as he will for the one he gets now.

Senator BRISTOW. Why do the bankers say that this \$345,000,000 of greenbacks ought to be retired; that it is bad money, ought not to have been issued, and ought not to be maintained?

Mr. BERRY. I never could understand that. I do not want to impute a sinister motive to anybody. I do not think probably it has a sinister motive back of it; but naturally if I am in the coal business, I do not want any more competition in the coal business than I must have. I want the market where I can control it, and this \$350,000,000 of legal-tender paper in this country is a part of the currency that the bankers have never been able to exercise any control over, and they have always opposed it. To-day that \$350,000,000, together with \$650,000,000 of silver certificates and coin—a billion dollars of that kind of money—is afloat in this country and practically carrying one-half of the business of this Nation to-day, and without it we could not do one-half of the business we are doing. Not a dollar of it has ever been offered for redemption since 1893. Then, as I said to you in my general statement, the cause of that offering was just such as we would meet again if the same condition were repeated. We had been exporting gold at the rate of \$35,000,000 for 10 solid years and we ran out of gold and the Government simply had to furnish it, and did the only thing it could do—went out with its bonds and bought it and furnished it; and that is what we would have to do again if the same conditions were repeated. We made a bad bargain buying some of it, but bad as it was, it had to be done and it was the proper thing to do. There was nothing wrong nor incongruous about it; a perfectly natural proposition. We had had 10 years of exporting in which we put out \$35,000,000 each year, excess of the exports over imports. During the years previous to that we had imported gold and we had quite a stock of gold when that drain began, and it went out continuously for 10 years, due to the balance of trade set up by crop conditions in the two sections of the world. As soon as that changed—and it did change almost immediately after that—gold began to come back into the country again, and we have not had any trouble since.

Senator SHAFROTH. Mr. Berry, you said that the bankers were unanimously against a currency of this kind. I want to call your attention to the fact that in an article——

Mr. BERRY. I want to qualify that, if I said "unanimously." I want to say there are some notable exceptions.

Senator SHAFROTH. This paper I refer to was written in March, 1908, by Newton D. Alling, vice president of the National Nassau Bank of New York, in which he uses this language:

And that is what this new issue should be; a gold note based upon a certain specie reserve which should be a percentage rather than a fixed amount. To many such an issue appears as fiat money and they at once throw up their hands and refuse to consider it. But it is not fiat money any more than gold is, as long as it is always redeemable in gold. To be sure, it should be given the legal-tender quality in order to give it an equal power with gold in order to make it a better representative of the gold for which it stands.

Mr. BERRY. That is all right; I agree with that. I might have written that myself.

Senator SHAFROTH. The sentiment just expressed in that quotation I have read exactly conforms with your theory of the character of money that should be issued?

Mr. BERRY. Absolutely.

Senator REED. I wanted to ask Mr. Berry to give me a little light on this: If the Government was to issue money with bonds and gold as the basis—20 per cent reserve of gold—to carry out the plan which you have already outlined, but which I need not repeat, as the record will show it, what will there be to hinder the banks gathering up large amounts of this paper and making demand upon the Government for gold, depleting the reserve and forcing the Government to sell its bonds in order to replenish the gold?

Mr. BERRY. Well, sir, if you can conceive of the possibility of the banks doing that—of course, it is hardly supposable that the whole banking fraternity would go into that conspiracy, or any considerably large percentage of them go into a conspiracy, for that purpose. If you can conceive that they are going out in the gold market in this country, where we have \$1,600,000,000 of gold in the circulation, and making a demand for gold that would force the hands of the United States, then there is a possibility that there would come a time when the United States would be forced to sell bonds.

Senator REED. Could not that device be used to compel the United States to sell bonds and being compelled to sell them and compelled to get the gold to pay a very high rate of interest?

Mr. BERRY. If you can conceive that possibility of their going out in this market where \$1,600,000,000 of gold is in existence, and if where \$100,000,000 of gold a year is produced and brought into the game, if you can conceive of the possibility of cornering that market, then your surmise is possible. I have no fear of it myself, because I think it is impossible to corner that market.

Senator REED. There is no such a thing as having a gold reserve that can not be attacked by that process, unless you have dollar for dollar, is there?

Mr. BERRY. No; and I do not see why you can not attack it then just as well.

Senator REED. You could; but of course you could pay out.

Mr. BERRY. If you were obliged to hold 100 per cent you would be in just the same fix.

Senator REED. Where a man brings you in \$1,000,000 you give him \$1,000,000 worth of gold?

Mr. BERRY. You have got \$1,000,000 of bonds to make the reserve good. If you have to maintain it at 100 per cent, you have got to go out and sell bonds to put it in.

Senator REED. You did not understand. If we had no money out into the country except that had a dollar of gold lying back of each dollar issued, then, of course, they could not raid the Treasury, because when they brought in a gold certificate and got a gold dollar their gold certificate would be retired?

Mr. BERRY. Sure.

Senator REED. Unless you do have 100 cents of actual gold reserve for every dollar's worth of certificates out it is always conceivable that some kind of a raid can be made.

Mr. BERRY. Yes, sir.

Senator BRISTOW. Senator Reed, if I may interrupt you, could that be done now by gathering up the national-bank notes and going in and demanding gold for them?

Senator REED. Could it be done?

Senator BRISTOW. Yes.

Senator REED. I do not see any reason why it can not be done, and I do not see any reason why you should not take the national-bank notes and gather them up and go to a bank with its own notes and demand gold, and there is not a bank in the country which could redeem its own circulation at once.

Senator SHAFROTH. There is no profit in doing it, and therefore it is not done.

Senator REED. If it goes on this way with the banks at present, it would seem that it might go on that way with the Government provided we keep within such bounds and limits that the financial men of the country and the country itself did not become alarmed. I confess I have never seen a method by which you can maintain a parity of money with 20 per cent reserve except the element of faith enters into it.

Mr. BERRY. I do not think the element of faith would enter into it, Senator. There is the element of faith, in a certain sense now, back of it, that the Government will maintain its integrity. The Government in order to get this money out, understand, cancels a bond obligation. It has got that bond, and according to Senator Owen's proposition he proposes to put that bond right in the reserve fund and to allow it to draw interest which will accumulate in the fund, which is not a bad idea. So that stands potentially, on the instant, the bond ready to be thrown on the market to get the gold. If the Government of the United States can not beat the banks it is pretty nearly time we found it out.

The CHAIRMAN. Mr. Berry, right here I call your attention to the National Bank of Belgium, with 40,000,000 pounds of assets, which only keeps a reserve of 19 per cent of gold against its notes, and it has been perfectly successful in doing so.

Mr. BERRY. Absolutely.

Senator SHAFROTH. Canada has 25 per cent reserve in gold.

Mr. BERRY. That is the reason I called your attention to the Belgian situation. If you have read carefully the history of the Belgian

banking system you have found that it is the most interesting of the whole European banking systems.

The CHAIRMAN. That confirms what you say about possibilities even without the Government behind it, as suggested here.

Senator SHAFROTH. I have had a question that was presented to me to ask you. It is this:

Would not an interchangeable bond be absorbed as a permanent investment security and refuse to come out for exchange into Treasury notes?

Mr. BERRY. Well, I do not think so. I do not see why it should. Of course, the holder of that bond in this primitive form of investment might demand a little premium on it when the bank wanted it for this purpose, but a little extra pressure and a little more raise in the interest rate will bring it out. It is bound to do it. You just let that pressure loose so that it will always be effective, and if there is any resistance against its coming out, the interest rate crawls right up and begins to pull harder and harder until it comes over.

Senator BRISTOW. Of course, if the bonds bear a higher rate of interest, it would take a higher commercial rate of interest to bring it out?

Mr. BERRY. Sure; but that would be corrected in the selling price of the bond, Senator. If I had a 6 per cent Government bond, for instance, and the general interest rate was 4 per cent, that bond would sell for 120, and I could coin it at 120.

Senator BRISTOW. How would you determine the marketable value of a bond?

Mr. BERRY. That would have to be done, I think, by an average of a certain period prior to the transaction. These securities are listed in the market all the time, just as they always are—they have no special privilege—and they would have a market value. There would be no day or season of the year in which this could not be done.

Senator REED. Mr. Berry, could you not add an element of absolute safety to your plan if you would provide that instead of the Government issuing \$1,000 of Treasury notes whenever a man comes in with his bond for \$1,000, that the option of determining that be in the Secretary of the Treasury or in a board, if we wanted to create one. We have got it now so that you can not go to Heaven without a commission.

Mr. BERRY. My hands are up. I do not believe there is any man here or elsewhere who ought to have anything to do with it.

Senator REED. As a check upon it?

Mr. BERRY. We do not want a check upon it. Why should you wish to check it, Senator?

Senator REED. If it was thought that it might run away, the plan could simply be adopted and a check put upon it until the plan was tried out.

Mr. BERRY. Yes; you could do that as an experimental safeguard, I suppose.

Senator SHAFROTH. I want to ask Mr. Berry another question concerning whether there is in this bill any provision that would not contemplate the retirement of the bank currency without any reissue?

Mr. BERRY. Unless I have sadly misinterpreted the bill, it seems to me like it contemplated the retirement of the bank currency and the issue of Treasury notes in place of them, on 33½ per cent basis of reserve.

Senator SHAFROTH. But that only upon the hypothecation by the bank of 30, 60, or 90 day paper?

Mr. BERRY. No; not as I understand it.

Senator SHAFROTH. There is no currency under this bill that is contemplated to be issued without the hypothecation of 30, 60, or 90 day paper; and to have that system take the place of a permanent \$700,000,000 of our circulation in the shape of bank notes, it seems to me, might jeopardize our currency very much indeed before retirement.

Mr. BERRY. Well, if they are retired without substituting them, it would be a serious contraction which would result in a catastrophe.

Senator SHAFROTH. Prof. Sprague, I think it was, or some one, said that there would not be sufficient transactions in 30, 60, or 90 day paper to take in the bank notes and issue money upon that temporary paper to permanently supply its place. What do you think of that?

Mr. BERRY. I do not know anything about that. I do not know how much of that kind of paper there is out.

Senator SHAFROTH. Do you think that the money that should be issued, called in this bill "Treasury notes," should be only for temporary emergency paper?

Mr. BERRY. That is what it will be, unless it is made legal-tender paper—it will only be temporary—because it will come back by the process of redemption, just like the bank note does, but if it is given the legal function it will stay out, and then it involves the incessant, endless chain of the substitution of new paper every 90 days for the old paper.

Senator SHAFROTH. And do you think that it is practicable to do that for as large a volume of money as the national-bank notes?

Mr. BERRY. I do not.

Mr. H. J. BROWNE. Assuming that this convertible bond bears a current rate of interest which will make it attractive for permanent investments, and then it became necessary to hold the price of those bonds to get them out from the permanent investment, what is there to stop hoisting the price of those bonds to some incredible figure, so long as they may be presented to the Treasury for redemption at that market price in legal tender, and the legal tender may then be presented to the Treasury for redemption in gold? It looks like an endless chain with no limit on the price that the issue bonds could be held at.

Mr. BERRY. I see the point of your inquiry. I would simply say that the remedy, in case such a condition were set up—for I assume that such a condition would never be set up except through a conspiracy—the remedy would be for the Government to immediately unload bonds on the situation.

Senator SHAFROTH. Could there not be a power invested in the Secretary of the Treasury to issue the money in his discretion and thereby make a check upon any of these abnormal situations?

Mr. BERRY. I would not want to put in anybody who would have any arbitrary control of the situation. I wish to have an automatic response, and I do not see any reason for that fear. One can conjure up, as did Senator Reed, a situation in which you could imagine how

the cornering of the gold might force the same situation. There the cornering of the bonds would furnish the same situation. There is not any question about that, on the one hand, as I have answered in the matter of the gold supply being of such volume that that corner is practically impossible; whereas in the second place, the Government having a store of bonds in its vaults, the minute it discovered that that scheme was in process would unload its bonds on the market and break that corner in no time, if we were driven to that extremity. I do not think that either one of those things would ever happen. I can not see any reason why they should.

Senator BRISTOW. If this bond was redeemable only at par, that could not happen, could it?

Mr. BERRY. No; that could not happen, but still—

Senator SHAFROTH. But you get your gold in partly because the rates of interest of one year differ from the rates of the next year.

Senator BRISTOW. That would have a regulatory effect on the rate of interest.

Senator SHAFROTH. It would only go to a premium where the money was worth more.

Senator BRISTOW. That may be, but we have known it to go to a premium of 10 per cent.

Mr. BERRY. Your thought is pertinent there, Senator, that when the interest rate rose you would be all right, but when the interest rate fell, then you would be—

Senator BRISTOW. Then it would be the other way?

Mr. BERRY. Yes, it would be the other way.

Senator SHAFROTH. What if the bonds fell below par?

Senator BRISTOW. The interest rates would be high when the bonds would be below par.

Mr. BERRY. Yes, that is so.

Senator BRISTOW. When the interest rate goes up the bonds would go below par, because the owner of the bonds would take the bond and get the cash and loan it at a higher rate than the bonds called for?

Mr. BERRY. Yes.

The CHAIRMAN. The committee feels greatly indebted to you, Mr. Berry.

The committee will now stand adjourned until 1 o'clock to-morrow.

(The documents submitted by the chairman of the committee follow.)

Paper currency of the United States, by denominations, outstanding June 30, 1912.

Denominations.	United States notes.	Treasury notes, 1890.	National-bank notes.	Gold certificates.	Silver certificates.	Total.
\$1.....	\$1,830,994	\$373,606	\$343,588	.....	\$161,327,436	\$163,875,624
\$2.....	1,374,959	241,744	164,312	.....	62,854,116	64,635,131
\$5.....	169,049,930	688,160	141,565,470	.....	227,178,187	538,481,747
\$10.....	114,137,926	898,470	328,508,870	\$226,435,300	20,757,611	690,738,177
\$20.....	12,192,432	434,970	224,856,140	256,496,964	4,488,670	498,469,176
\$50.....	1,841,375	14,550	16,373,800	55,053,055	4,417,760	77,700,540
\$100.....	4,696,400	166,500	35,032,350	80,127,550	480,220	120,503,020
\$500.....	4,470,000	.....	89,500	18,239,000	22,000	22,820,500
\$1,000.....	38,077,000	111,000	23,000	66,765,500	23,000	104,999,500
\$5,000.....	.....	.....	.....	95,020,000	.....	95,020,000
\$10,000.....	10,000	.....	.....	241,920,000	.....	241,930,000
Fractional parts.....	.....	.....	50,684	.....	.....	50,684
Total.....	347,681,016	2,929,000	747,007,714	1,040,057,369	481,549,000	2,619,224,099

Memorandum indicating probable changes in reserves under H. R. 7837.

[52 central reserve city banks now on 25 per cent basis.]

[All dollars in millions.]

Net deposits.....		\$1,568
Required reserve.....		392
On hand, cash and legal tender.....		405

Under new bill: Nine per cent in vault, 4½ per cent in Federal reserve banks, 4½ per cent optional.

Under the new bill, assuming that the optional reserves would be equally divided in all cases between the banks' own vaults and the Federal reserve banks, and that the funds of the Federal reserve banks could be loaned up to 33½ per cent requirement, and would be actually loaned up to 50 per cent, the following results would follow:

Cash, 9 per cent=\$140+½ of 4½=\$35 in own vaults.....	\$175	\$175
Net cash required, 4½ per cent+½ of 4½ per cent=\$105 (½ to ⅔ loanable) in Federal reserve banks.....	35	53
Capital stock, \$182, and \$18 required (½ to ⅔ loanable).....	6	9
Net requirement.....	216	237

Total requirement, \$216 to \$237, against \$405 on hand.

Surplus available, \$168 to \$189.

[315 reserve city banks now on 25 per cent reserve basis, one-half with reserve agents in central reserve cities.]

Net deposits.....	\$1,945	9 per cent=\$174, cash.		
Required reserve..	468	5 per cent= \$97, Federal reserve banks.		
Specie and legal tender.....	248	4 per cent= \$77, optional.		
With reserve agents..	232	In vault, \$174+½ of \$77=\$212. Cash, \$212	\$212	\$212
Additional reserve..	28	In Federal reserve banks, \$97+½ of \$77=		
Capital stock.....	264	\$135. One-third to one-half cash.....	45	68
		For capital stock, one-third to one-half		
		of \$26.....	9	13
		Total cash.....	266	293

Cash actually required, \$266 to \$293. On hand, \$248.

Additional cash needed, \$18 to \$45.

[7,173 country banks now on 15 per cent reserve basis, 6 per cent in vault 9 per cent with reserve agents.]

Net deposits.....	\$3,610	New bill requires 5 per cent cash in vault.		
Required reserve...	541	5 per cent in Federal reserve bank, 2 per cent optional.		
Specie and legal tender.....	266	5 per cent=\$180, in vault.		
With reserve agent..	310	5 per cent=\$180, in Federal reserve bank.		
Additional reserve..	186	2 per cent=\$72, optional.		
Capital, \$610.		In vault in cash.....	\$180	
		Plus one-half of \$72.....	36	
			\$216	216
		One-third to one-half cash required for Federal reserve bank.....	60	90
		One-third to one-half of one-half of \$72 for Federal reserve bank.....	12	18
		10 per cent of capital, \$610, for stock (two- thirds to one-half loanable) cash needed..	21	31
		Total actual cash required.....	309	355
		Less actual cash on hand.....	216	216
		Deficit cash.....	93	139

Summary after considering net cash requirements, after discounts permissible to member banks.

52 central reserve cities have surplus cash equal to.....	\$168 to \$189
315 reserve city banks have deficit cash equal to.....	\$18 to \$45
7,173 country banks have deficit cash equal to.....	93 to 139
	111 184 184 111
Cash deficit or surplus.....	-16 +78

To which should be added one-half to two-thirds of \$210 United States cash in Federal reserve bank.....	\$105	\$140
And 10 per cent of \$500 of savings deposits (assuming 5 per cent reserve instead of the present 15 per cent required).....	50	50
	139	268

Available—minimum legal tender cash \$139 to \$268 maximum—loanable on basis of 12 per cent to 18 per cent, making possible an expansion of credits equal to a sum from four and a half to seven times such minimum or maximum as such cash may be in country banks or reserve city banks, a probable average expansion of credit from \$600,000,000 to \$1,500,000,000.

Bonds held in trust for National Banks. Sept. 13, 1913.

Kinds of bonds.	Rate of interest.	Total amount outstanding.	Bonds held for national banks.			
			Total.	To secure circulation.	To secure deposits of public moneys.	
					Value at par.	Value at rate approved by department.
GOVERNMENT.						
I. U. S. loan of 1925, at par.....	4	\$118,489,900	\$37,992,400	\$34,390,700	\$3,601,700	\$3,601,700
U. S. loan of 1903-1918..... at par.....	3	63,945,460	25,891,200	22,132,200	3,759,000	3,759,000
U. S. Panama of 1961..... at par.....	3	50,000,000	17,296,200	.....	17,296,200	17,296,200
U. S. consol of 1930, at par.....	2	646,250,150	616,521,300	603,775,900	12,745,400	12,745,400
U. S. Panama of 1936..... at par.....	2	54,631,980	54,249,360	52,964,860	1,284,500	1,284,500
U. S. Panama of 1938..... at par.....	2	30,000,000	29,424,140	28,822,140	602,000	602,000
Philippine loans, at par.....	4	16,000,000	5,967,000	.....	5,967,000	5,967,000
Porto Rico loans, at par.....	4	5,225,000	1,821,000	.....	1,821,000	1,821,000
District of Columbia..... at par.....	3.65	6,949,650	933,000	.....	933,000	933,000
II. Territory of Hawaii, 3½ per cent bonds at 90 per cent of par; all other Hawaiian bonds at market value, not exceeding par.....	(1)	6,515,000	1,998,000	.....	1,998,000	1,950,900
MISCELLANEOUS.						
III. Philippine Railway Co.....	4	8,551,000	118,000	.....	118,000	600,271
Manila Railroad Co., at 90 per cent o. market value, not exceeding 90 per cent par.....	4	6,735,000	10,000	.....	10,000	6,750
IV. State, county, city, and other securities ²	(1)	.....	33,609,254	.....	33,609,254	22,576,308
Total.....		1,013,293,140	\$26,630,854	\$42,685,800	\$4,545,054	73,144,029

¹ Various.

As security for deposits made in connection with crop movement Government bonds are accepted at par, other bonds at 75 per cent of market value, and commercial paper at 65 per cent of face value. Other outstanding bonds, \$186,662,286.

When banks have occasion to withdraw bonds held by the Treasurer to secure deposits of public moneys, the following shall be the order of withdrawal: Group IV, Group III, Group II, and Group I.

Bonds within a group may be interchanged by banks if desired, but bonds in a lower group may not be substituted for those in a higher group, except that an initial substitution of bonds of a lower group for those of a higher group may be made to an amount not to exceed 30 per cent of the total security value of bonds held for a particular bank. National-bank depositaries which have not as yet taken out the full amount of circulation authorized by law may withdraw United States 2's and substitute for them bonds in Group II, provided the 2's as withdrawn shall be used as security for additional circulation.

Daily statement of the United States Treasury at close of business Sept. 16, 1915.

CASH ASSETS AND LIABILITIES.

GENERAL FUND.

ASSETS.		LIABILITIES.	
<i>Cash.</i>		<i>Current liabilities.</i>	
In Treasury offices:		In Treasury offices:	
Gold coin.....	\$48,698,805.49	Disbursing officers' balances....	\$76,262,786.16
Gold certificates.....	64,872,850.00	Outstanding warrants.....	1,823,348.93
Standard silver dollars.....	3,740,127.00	Outstanding Treasurer's checks..	7,476,697.99
Silver certificates.....	13,183,004.00	Post Office Department balances	12,361,628.16
United States notes.....	5,837,393.00	Postal-savings balances.....	1,509,009.54
Treasury notes of 1890.....	4,488.00	Judicial officers' balances, etc...	6,343,080.42
Certified checks on banks.....	301,582.00	National-bank notes, redemption fund ¹	20,666,426.00
National-bank notes.....	151,792,262.02	National-bank 5 per cent fund..	28,071,077.85
Subsidiary silver coin.....	18,527,844.36	Assets of failed national banks..	10,110,129.54
Fractional currency.....	347.26	Coupons and interest checks....	131,107.19
Minor coin.....	1,608,335.63	Miscellaneous (exchanges, etc.)..	7,171,832.34
Silver bullion (available for subsidiary coinage).....	2,091,539.21	Total.....	171,927,124.12
	210,658,577.97	Subtract checks not cleared....	23,472,913.67
In national-bank depositories:			148,454,210.45
To credit of Treasurer United States.....	62,676,478.39	In national-bank depositories:	
To credit of postmasters, judicial officers, etc.....	6,346,620.86	Judicial officers' balances, etc....	6,346,620.86
In treasury, Philippines:		Outstanding warrants.....	509,200.06
To credit of Treasurer United States.....	3,016,856.05	In treasury, Philippines:	
To credit of disbursing officers..	3,430,796.73	Disbursing officers' balances....	3,430,796.73
		Outstanding warrants.....	1,291,932.00
			160,032,760.10
Total.....	286,129,330.00	Net balance in general fund.....	126,096,569.90
		Total.....	286,129,330.00

THE CURRENCY TRUST FUNDS THE GENERAL FUND, AND THE GOLD RESERVE FUND.

ASSETS.		LIABILITIES.	
Currency trust funds:		Outstanding certificates:	
Gold coin.....	\$866,618,964.00	Gold certificates outstanding.....	\$1,084,234,169.00
Gold bullion.....	217,615,205.00	Silver certificates outstanding.....	488,916,000.00
Total gold.....	1,084,234,169.00	Treasury notes outstanding..	2,614,000.00
Silver dollars.....	488,916,000.00	Total outstanding certificates.....	1,575,764,169.00
Silver dollars of 1890.....	2,614,000.00	General fund liabilities and balance:	
Total currency trust funds..	1,575,764,169.00	Total liabilities, as above....	160,032,760.10
General fund: Total cash assets, as above.....	286,129,330.00	Balance in general fund, as above.....	\$126,096,569.90
Gold reserve fund:		Gold reserve..... ³	150,000,000.00
Gold coin.....	100,000,000.00	Total net balances.....	276,096,569.90
Gold bullion.....	50,000,000.00		
Grand total cash assets in Treasury.....	2,011,893,499.00		2,011,893,499.00

¹ This includes \$48,118,368.02 which the Treasury has redeemed and for which it will receive payment from national banks.² The act of July 14, 1890, provides that deposits made by national banks to redeem circulating notes shall be covered into the Treasury as miscellaneous receipts and that the Treasury shall redeem from the general cash the circulating notes which come into its possession subject to redemption.³ Reserved against \$346,681,016 of United States notes and \$2,614,000 of Treasury notes of 1890.

Classification of cash in banks June 14, 1912.

Classification.	7,372 national banks.	17,823 State, etc., banks.	25,195 reporting banks.
Gold coin.....	\$149,294,417.78	\$89,094,968.96	\$238,389,386.74
Gold certificates.....	356,602,380.00	206,465,716.00	563,068,096.00
Gold clearing-house certificates.....	80,479,000.00	.....	80,479,000.00
Silver dollars.....	12,637,221.00	10,320,174.00	22,957,395.00
Silver certificates.....	138,569,628.00	55,804,541.00	194,374,169.00
Subsidiary and minor coin.....	22,555,692.68	15,182,315.61	37,738,008.29
Legal-tender notes.....	188,440,207.00	64,681,846.00	253,122,053.00
National-bank notes.....	47,564,277.00	60,717,410.00	108,281,687.00
Cash not classified.....	.....	74,543,684.40	74,543,684.40
Total.....	996,142,823.46	576,810,655.97	1,572,953,479.43

Distribution of money in the United States.

Year ended June 30—	Coin and other money in the United States.		Coin and other money in Treasury as assets. ¹		Coin and other money in reporting banks. ²		Coin and other money not in Treasury or banks.			In circulation, exclusive of coin and other money in Treasury as assets.	
	Amount.	Per cent.	Amount.	Per cent.	Amount.	Per cent.	Per capita.	Amount.	Per capita.	Amount.	Per capita.
1892.....	\$1,752.2	\$150.9	8.60	\$586.4	33.48	\$1,014.9	77.92	\$15.50	\$1,601.3	\$24.60	
1893.....	1,738.8	142.1	8.17	515.9	29.68	1,080.8	62.15	16.14	1,596.7	24.06	
1894.....	1,805.5	144.2	7.99	688.9	38.17	972.4	53.84	14.21	1,661.3	24.56	
1895.....	1,819.3	217.4	11.95	631.1	34.96	970.8	53.36	13.89	1,601.9	23.24	
1896.....	1,799.9	293.5	16.31	531.8	29.55	974.6	54.14	13.65	1,506.4	21.44	
1897.....	1,906.7	265.7	13.93	628.2	32.94	1,012.8	53.13	13.87	1,641.0	22.92	
1898.....	2,073.5	235.7	11.37	687.7	33.17	1,150.1	55.45	15.43	1,837.8	25.19	
1899.....	2,190.0	286.0	13.06	723.2	33.02	1,180.8	53.92	15.51	1,904.0	25.62	
1900.....	2,339.7	284.6	12.16	749.9	32.05	1,305.2	55.79	17.11	2,055.1	26.93	
1901.....	2,483.1	307.8	12.39	794.9	32.02	1,380.4	55.59	17.75	2,175.3	27.98	
1902.....	2,563.2	313.9	12.24	837.9	32.69	1,411.4	55.07	17.90	2,249.3	28.43	
1903.....	2,684.7	317.0	11.80	848.0	31.59	1,519.7	56.61	18.88	2,367.7	29.42	
1904.....	2,803.5	284.3	10.14	982.9	35.06	1,536.3	54.80	18.77	2,519.2	30.77	
1905.....	2,883.1	295.2	10.24	987.8	34.27	1,600.1	55.49	19.22	2,587.9	31.08	
1906.....	3,069.9	333.3	10.86	1,010.7	32.92	1,725.9	56.22	20.39	2,736.6	32.32	
1907.....	3,115.6	342.6	11.00	1,106.5	35.51	1,666.5	53.49	19.36	2,773.0	32.22	
1908.....	3,378.8	340.8	10.08	1,362.9	40.34	1,675.1	49.58	19.15	3,038.0	34.72	
1909.....	3,406.3	300.1	8.81	1,444.3	42.40	1,661.9	48.78	18.68	3,106.2	34.93	
1910.....	3,419.5	317.2	9.27	1,414.6	41.37	1,687.7	49.36	18.68	3,102.3	34.33	
1911.....	3,555.9	341.9	9.61	1,545.5	43.46	1,668.5	46.93	17.75	3,214.0	34.20	
1912.....	3,648.8	364.3	9.98	1,563.8	42.86	1,720.7	47.16	17.98	3,284.5	34.34	

¹ Public money in national-bank depositaries to the credit of the Treasurer of the United States not included.

² Money in banks of island possessions not included.

Savings banks, including postal savings banks: Number of depositors, amount of deposits, average deposits per deposit account and per inhabitant, by specified countries.

[Compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce and Labor, from the official reports of the respective countries.]

Countries.	Population. ¹	Date of report.	Form of organization.	Number of depositors.	Deposits.	Average deposit account.	Average deposit per inhabitant.
Austria.....	28,572,000	Dec. 31, 1909	Communal and private savings banks.....	4,119,295	\$1,161,149,241	\$281.88	\$40.64
		Dec. 31, 1910	Postal savings banks, savings department.....	2,205,703	46,623,889	21.14	1.63
Belgium.....	7,501,000	do.....	Postal savings banks, check department.....	102,574	79,682,452	776.83	2.79
		Dec. 31, 1911	Government savings banks.....	2,901,753	194,534,158	67.04	25.93
Bulgaria.....	4,285,000	Dec. 31, 1910	Communal and private savings banks.....	46,997	11,679,721	248.52	1.56
		do.....	Postal savings banks.....	280,775	9,129,423	32.5 ²	2.13
Chile.....	3,415,000	June 30, 1910	Caja de ahorros.....	268,731	10,543,275	39.23	3.09
Denmark.....	2,757,000	Mar. 31, 1910	Communal and corporate savings banks.....	1,166,607	174,182,302	149.28	63.18
Egypt.....	11,626,000	Dec. 31, 1910	Government savings banks.....	104,095	2,255,664	21.67	.19
		Dec. 31, 1911	Private savings banks.....	8,411,791	754,255,333	89.67	19.05
France.....	39,602,000	Dec. 31, 1910	Postal savings banks.....	5,786,035	329,974,970	57.03	8.33
		Dec. 31, 1908	Municipal savings banks.....	19,301	934,380	48.41	.18
Algeria.....	5,232,000	Dec. 31, 1908	Postal savings banks.....	5,701	1,288,268	225.97	.67
Tunis.....	1,923,000	Dec. 31, 1910	Postal savings banks.....	21,534,034	3,993,775,184	185.46	61.98
Germany.....	64,432,000	do.....	Public and corporate savings banks.....	69,202	11,863,592	171.43	48.23
		do.....	State savings bank.....	775,970	21,894,118	28.22	1.05
Luxemburg.....	246,000	do.....	Postal savings banks, savings department.....	20,716	20,075,888	969.10	.96
		do.....	Communal and corporate savings banks.....	2,294,063	472,879,910	206.13	13.63
Hungary.....	20,886,000	June 30, 1911	Postal savings banks.....	5,160,008	324,279,617	62.84	9.35
		Dec. 31, 1910	Private savings banks.....	7,500,470	73,106,674	9.75	1.42
Italy.....	34,687,000	Mar. 31, 1912	Postal savings banks.....	11,950,158	91,896,942	7.69	1.78
		Dec. 31, 1910	Private savings banks.....	6,779	121,327	17.90	.04
Japan.....	3,341,000	Mar. 31, 1911	Postal savings banks.....	100,819	955,592	9.48	.28
Formosa.....		do.....	do.....	207,195	3,098,571	14.95	.....
China and Korea.....		do.....	Private savings banks.....	433,209	41,718,485	96.30	7.02
Netherlands.....	5,945,000	Dec. 31, 1909	Postal savings banks.....	1,510,033	66,039,592	43.73	11.11
		Dec. 31, 1910	Private savings banks.....	13,228	2,887,566	218.29	.08
Dutch East Indies.....	37,717,000	Dec. 31, 1911	Postal savings banks.....	91,898	3,616,685	39.36	.10
Dutch Guiana.....	86,000	Dec. 31, 1910	do.....	9,478	337,925	35.65	3.86
Norway.....	2,393,000	do.....	Communal and private savings banks.....	1,001,310	135,886,457	135.71	56.78
Roumania ⁵	6,866,000	July 1, 1910	Government savings banks.....	218,690	11,616,820	53.12	1.69
Russia ⁶	163,779,000	June 30, 1912	State, including postal savings banks.....	8,189,734	784,117,885	95.74	4.79
Finland.....	3,120,000	Dec. 31, 1910	Private savings banks.....	291,603	44,068,779	151.13	14.12
		do.....	Postal savings banks.....	59,723	1,396,856	23.39	.45
Spain ⁷	19,588,000	Dec. 31, 1910	Private savings banks.....	495,772	46,931,094	94.66	2.40
Sweden.....	5,522,000	Dec. 31, 1910	Communal and trustees savings banks.....	1,560,317	216,755,326	138.92	39.25
		Dec. 31, 1911	Postal savings banks.....	565,759	12,645,957	22.35	2.29
Switzerland.....	3,647,000	Dec. 31, 1908	Communal and private savings banks.....	1,899,332	303,196,216	159.63	83.14

United Kingdom ¹	45,289,000	{Nov. 20, 1911 Dec. 31, 1911	Trustee savings banks.....	1,849,043	258,083,128	139.58	5.70
British India ²	244,127,000	Mar. 31, 1910	Postal savings banks.....	12,370,646	859,027,319	69.44	18.97
Australia, Commonwealth.....	4,425,000	1910-11	.....do.....	1,378,916	51,478,416	37.33	.21
New Zealand.....	1,008,000	{Dec. 31, 1910.....do.....	Government, trustee, and joint-stock savings banks.....	1,600,112	289,039,353	180.64	65.32
Canada ¹⁰	7,205,000	{June 30, 1912.....do.....	Postal savings banks.....	380,714	68,641,934	180.30	68.10
British South Africa.....	6,745,000	1909-10	Private savings banks.....	51,508	7,375,302	143.19	7.32
British West Indies.....	1,679,000	1909-10	Postal savings banks.....	146,310	42,683,232	291.73	5.92
British colonies, n. e. s.....	20,427,000	1909-10	Dominion Government savings banks.....	35,031	14,171,966	404.55	1.97
			Government, post-office, and private savings banks.....	222,772	25,103,835	112.69	3.72
			Government and post-office savings banks.....	91,881	6,301,465	68.58	3.75
			.....do.....	219,967	12,921,863	58.74	.63
Total, foreign countries.....	859,620,000			109,725,758	11,096,223,947	101.13	12.91
United States.....	95,411,000	{Nov. 30, 1912 June 14, 1912	Postal savings banks ¹¹	300,000	28,000,000	93.33	.....
Philippine Islands.....	8,460,000	June 30, 1912	Mutual and stock savings banks.....	10,010,304	4,451,818,523	444.72	46.66
			Postal savings banks.....	35,802	1,177,435	32.89	.14

¹ The figures of population are for the nearest date to which the statistics of savings banks relate.

² Exclusive of 1,809 deposits of \$173,011 in savings banks in Faroe Islands, and of data for savings departments of ordinary banks, which comprised 155,160 accounts, credited with \$31,370,748 on Mar. 31, 1910.

³ Exclusive of Brunswick.

⁴ No separate data available for private and communal savings banks in 1910. The ordinary banks savings banks, and land-credit banks of Hungary held 1,768,455 savings accounts credited with \$699,288,107 on Dec. 31, 1910.

⁵ Figures for the Casa d'Economia.

⁶ Includes 38,958 depositors in school savings depositories, credited with \$105,060. The above total is exclusive of \$162,185,345 worth of securities held by the savings banks to the credit of depositors.

⁷ The peseta has been converted at the rate of 18 cents. Data taken from "España Económica y Financiera," Oct. 21, 1911. Exclusive of data for savings departments of commercial banks, which comprised 124,657 accounts credited with \$28,588,964 on Dec. 31, 1910.

⁸ Exclusive of Government stock held for depositors, which, at the end of the year, amounted to \$120,776,096 in the postal savings banks and to \$12,934,743 in the trustee savings banks.

⁹ Exclusive of the population of the feudatory States.

¹⁰ Exclusive of data for special private savings banks, which on June 30, 1912, held deposits amounting to \$40,828,420. The above total does not include the savings deposits in chartered banks ("Deposits payable after notice or on a fixed day"), which on June 30, 1912, amounted to \$631,317,687.

¹¹ Number of offices, 12,823.

TABLE NO. 59.—*Abstract of reports of earnings and dividends of*

[Figures in boldface type indicate loss.]

Location.		Number of banks.	Capital stock.	Surplus.	Capital and surplus.	Gross earnings.
1	Maine.....	70	\$7,850,000.00	\$3,579,250.00	\$11,429,250.00	\$2,752,144.72
2	New Hampshire.....	56	5,235,000.00	3,083,800.00	8,318,800.00	1,728,723.49
3	Vermont.....	50	5,160,000.00	2,022,481.21	7,182,481.21	1,478,754.42
4	Massachusetts.....	167	30,317,500.00	17,490,750.00	47,808,250.00	9,194,782.64
5	Boston.....	20	24,950,000.00	20,630,500.00	45,580,500.00	12,140,184.26
6	Rhode Island.....	22	6,775,250.00	4,241,500.00	11,016,750.00	1,808,571.20
7	Connecticut.....	79	19,364,200.00	11,449,300.00	30,813,500.00	4,940,052.42
	New England States....	464	99,651,950.00	62,497,581.21	162,149,531.21	34,043,213.15
8	New York.....	416	46,785,100.00	32,138,689.67	78,923,789.67	21,345,497.95
9	Albany.....	3	2,100,000.00	2,200,000.00	4,300,000.00	1,811,075.13
10	Brooklyn.....	6	2,252,000.00	2,650,000.00	4,902,000.00	1,200,503.21
11	New York City.....	39	121,500,000.00	127,891,150.00	249,391,150.00	61,172,456.75
12	New Jersey.....	195	21,737,000.00	21,996,140.00	43,733,140.00	11,458,092.40
13	Philadelphia.....	772	67,074,390.00	70,224,490.98	137,298,880.98	28,539,468.04
14	Pittsburgh.....	32	22,055,000.00	43,350,000.00	65,405,000.00	12,862,741.49
15	Pittsburgh.....	24	28,700,000.00	25,217,500.00	53,917,500.00	13,300,141.60
16	Delaware.....	28	2,423,975.00	2,282,600.00	4,706,575.00	762,350.61
17	Maryland.....	90	5,292,000.00	3,741,622.96	9,033,622.96	2,285,956.34
18	Baltimore.....	17	12,290,710.00	7,720,010.00	20,010,720.00	3,832,198.30
19	District of Columbia.....	1	252,000.00	252,000.00	504,000.00	72,643.21
20	Washington.....	10	5,850,000.00	4,640,512.79	10,490,512.79	1,785,616.83
	Eastern States.....	1,633	338,312,175.00	344,304,716.40	682,616,891.40	160,428,741.86
21	Virginia.....	129	17,308,500.00	11,547,684.00	28,856,184.00	6,754,485.97
22	West Virginia.....	108	9,587,000.00	5,650,159.76	15,237,159.76	3,539,338.07
23	North Carolina.....	73	8,585,000.00	2,649,273.00	11,234,273.00	2,604,031.84
24	South Carolina.....	43	5,460,000.00	1,934,250.00	7,394,250.00	2,291,668.38
25	Georgia.....	112	14,059,500.00	8,183,230.00	22,242,730.00	5,371,016.44
26	Savannah.....	2	900,000.00	700,000.00	1,600,000.00	408,009.84
27	Florida.....	45	6,080,000.00	2,707,700.00	8,787,700.00	2,922,701.82
28	Alabama.....	84	9,675,000.00	5,233,025.00	14,908,025.00	3,509,560.39
29	Mississippi.....	31	3,255,000.00	1,582,329.74	4,837,329.74	1,323,412.72
30	Louisiana.....	28	3,145,000.00	2,245,865.83	5,390,865.83	1,542,600.94
31	New Orleans.....	5	5,200,000.00	2,980,000.00	8,180,000.00	2,124,478.19
32	Texas.....	479	32,166,000.00	16,817,846.02	48,983,846.02	12,906,934.67
33	Dallas.....	4	2,650,000.00	2,350,000.00	5,000,000.00	1,570,189.61
34	Fort Worth.....	8	2,875,000.00	1,915,000.00	4,790,000.00	1,266,294.68
35	Galveston.....	2	500,000.00	250,000.00	750,000.00	261,617.75
36	Houston.....	5	4,600,000.00	1,190,000.00	5,790,000.00	1,873,676.04
37	San Antonio.....	6	2,100,000.00	1,080,000.00	3,180,000.00	822,617.87
38	Waco.....	6	1,450,000.00	308,300.00	1,758,300.00	518,629.28
39	Arkansas.....	48	4,960,000.00	1,776,020.00	6,736,020.00	1,830,428.83
40	Kentucky.....	136	12,045,900.00	4,793,067.22	16,838,967.22	3,234,884.28
41	Louisville.....	8	5,495,000.00	2,645,000.00	8,140,000.00	1,793,484.06
42	Tennessee.....	100	12,460,000.00	5,294,961.26	17,754,961.26	4,665,333.59
	Southern States.....	1,462	164,556,900.00	83,833,711.83	248,390,611.83	63,135,395.26
43	Ohio.....	355	34,307,100.00	17,942,942.87	52,250,042.87	13,385,163.72
44	Cincinnati.....	8	13,900,000.00	6,300,000.00	20,200,000.00	3,926,987.25
45	Cleveland.....	7	9,350,000.00	4,050,000.00	13,400,000.00	3,611,365.32
46	Columbus.....	8	3,000,000.00	1,570,500.00	4,570,500.00	1,540,211.82
47	Indiana.....	250	21,133,000.00	9,305,180.54	30,438,180.54	7,989,472.97
48	Indianapolis.....	5	5,400,000.00	2,745,000.00	8,145,000.00	2,365,241.24
49	Illinois.....	432	31,235,000.00	17,450,455.84	48,685,455.84	13,238,909.21
50	Chicago.....	10	43,600,000.00	26,100,000.00	69,700,000.00	18,863,374.36
51	Michigan.....	96	10,260,000.00	5,342,300.00	15,602,300.00	5,140,553.05
52	Detroit.....	3	4,750,000.00	1,750,000.00	6,500,000.00	2,350,335.89
53	Wisconsin.....	122	11,180,000.00	4,593,400.00	15,773,400.00	5,319,816.92
54	Milwaukee.....	6	6,250,000.00	2,760,000.00	9,010,000.00	2,990,364.61
55	Minnesota.....	260	11,811,000.00	6,277,003.57	18,088,003.57	7,452,013.47
56	Minneapolis.....	5	6,800,000.00	5,880,000.00	12,680,000.00	3,308,701.77
57	St. Paul.....	6	4,100,000.00	3,450,574.34	7,550,574.34	2,140,505.80
58	Iowa.....	314	17,715,000.00	7,328,710.75	24,953,710.75	8,293,293.14
59	Cedar Rapids.....	3	400,000.00	308,000.00	708,000.00	510,755.01
60	Des Moines.....	4	2,000,000.00	600,000.00	2,600,000.00	932,581.78
61	Dubuque.....	3	600,000.00	130,000.00	730,000.00	207,782.47
62	Sioux City.....	5	950,000.00	400,000.00	1,350,000.00	606,340.30

national banks in the United States for year ended July 1, 1912.

[Figures in boldface type indicate loss.]

Charged off.		Net earnings.	Dividends.	Ratios.		
Losses and premiums.	Expenses and taxes.			Net earnings to capital and surplus.	Dividends to capital and surplus.	Dividends to capital.
				<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
\$281,220.42	\$1,660,545.53	\$810,378.77	\$598,412.50	7.09	5.24	7.62
276,888.29	713,958.28	737,876.92	497,316.68	8.87	5.98	9.50
88,898.39	828,532.41	561,323.62	436,363.00	7.82	6.08	8.46
781,424.82	5,134,246.28	3,279,111.54	2,288,353.00	6.86	4.79	7.55
1,006,905.52	8,021,795.90	3,111,482.84	2,127,000.00	6.83	4.67	8.53
105,894.29	981,480.23	721,196.68	492,115.00	6.55	4.47	7.26
441,068.33	2,345,383.47	2,153,600.62	1,540,283.00	6.99	5.00	7.95
2,982,300.06	19,685,942.10	11,374,970.99	7,979,843.18	7.02	4.92	8.01
1,858,041.83	12,463,219.69	7,024,236.43	4,493,596.50	8.90	5.69	9.60
115,073.97	1,306,953.80	389,047.36	283,061.00	9.05	6.58	13.48
131,915.16	740,511.94	328,076.11	230,400.00	6.69	4.70	10.23
3,898,298.25	33,639,088.98	23,635,069.52	25,902,500.00	9.48	10.39	21.32
852,480.87	6,389,558.03	4,216,053.50	2,744,835.00	9.64	6.28	12.63
2,830,911.57	15,770,059.47	9,938,497.00	5,921,023.60	7.24	4.31	8.83
747,236.31	8,177,177.40	3,938,327.78	2,572,500.00	6.02	3.93	11.66
2,353,452.01	7,662,420.49	3,284,269.10	2,724,000.00	6.09	5.05	9.49
51,954.15	393,343.44	317,053.02	214,221.58	6.74	4.55	8.84
104,268.48	1,435,371.19	746,316.67	473,285.00	8.26	5.24	8.94
587,171.53	2,098,099.54	1,146,927.23	1,126,656.50	5.73	5.63	9.17
692.25	37,073.42	34,877.54	30,240.00	6.92	6.00	12.00
92,342.06	844,852.41	848,422.36	636,000.00	8.09	6.06	10.87
13,623,838.44	90,957,729.80	55,847,173.62	47,352,319.18	8.18	6.94	14.00
366,650.05	3,975,828.78	2,412,007.14	1,512,390.00	8.36	5.24	8.74
330,681.13	1,999,291.62	1,209,365.32	920,019.14	7.94	6.04	9.60
80,608.37	1,421,848.40	1,101,575.07	679,550.00	9.81	6.05	7.92
165,702.58	1,383,995.37	741,970.43	501,538.00	10.03	6.78	9.19
341,584.31	2,786,709.46	2,242,722.67	1,725,650.00	10.08	7.76	12.27
78,071.77	95,213.90	234,724.17	57,500.00	14.67	3.59	6.39
222,446.54	1,667,589.98	1,032,665.30	495,050.00	11.75	.63	8.14
320,035.12	1,814,863.04	1,374,662.23	971,225.00	9.22	6.51	10.04
131,441.92	770,131.38	421,839.42	292,100.00	8.72	6.04	8.97
136,981.95	916,014.51	489,604.48	450,400.00	9.08	8.35	14.32
209,361.61	1,289,338.59	625,777.99	541,000.00	7.65	6.61	10.40
1,240,979.92	6,224,527.77	5,441,426.98	4,095,523.94	11.11	6.36	12.73
147,898.67	721,261.39	701,029.55	448,000.00	14.02	8.96	16.91
97,065.79	680,892.24	488,336.65	271,000.00	10.19	5.66	9.43
27,510.80	166,436.13	67,670.82	36,000.00	9.02	4.80	7.20
191,887.12	987,498.20	694,290.72	667,000.00	11.99	11.52	14.50
14,030.05	380,133.15	428,454.67	279,000.00	13.47	8.77	13.29
51,725.52	302,485.28	164,418.48	359,000.00	9.35	20.42	24.76
114,990.03	1,013,674.72	701,764.08	497,350.00	10.42	7.38	10.03
397,524.51	1,674,349.56	1,163,010.21	943,543.00	6.91	5.60	7.83
154,850.80	1,024,416.66	614,216.60	416,100.00	7.55	5.11	7.57
471,918.24	2,643,932.54	1,549,482.81	1,278,200.00	8.73	7.02	10.26
5,293,946.80	33,940,432.67	23,901,015.79	17,437,139.05	9.62	7.02	10.60
1,405,784.08	7,820,440.63	4,158,939.01	2,828,327.67	7.96	5.41	8.24
2,547,714.73	2,011,509.84	632,237.32	1,370,000.00	3.13	6.78	9.86
363,523.60	2,334,291.60	913,550.12	803,000.00	6.82	5.99	8.59
118,779.36	916,587.66	504,844.80	304,500.00	11.05	6.66	10.15
555,682.22	4,798,906.11	2,634,884.64	1,875,433.66	8.66	6.16	8.87
529,369.63	1,277,768.45	558,103.16	380,000.00	6.85	4.67	7.04
1,015,964.64	7,598,102.75	4,624,841.82	3,518,100.00	9.50	7.23	11.26
1,645,344.54	11,403,149.97	5,814,879.85	6,226,000.00	8.34	8.93	14.28
315,809.51	3,304,144.57	1,620,598.97	959,731.96	9.75	6.15	9.50
271,364.38	1,520,508.22	558,463.29	400,000.00	8.59	6.15	8.42
365,420.24	3,555,703.36	1,398,693.32	1,285,450.00	8.87	8.15	11.50
191,203.71	1,953,252.76	845,908.14	586,250.00	9.39	6.61	9.38
361,591.00	4,765,881.61	2,324,540.86	1,658,349.08	12.85	9.17	14.04
99,823.15	2,101,640.42	1,107,238.20	708,000.00	8.75	5.59	10.41
289,559.98	1,134,375.03	716,570.79	440,200.00	9.49	5.83	10.74
588,454.96	5,026,149.07	2,678,659.11	2,044,807.81	10.73	8.19	11.54
36,387.86	361,887.71	112,479.44	61,000.00	15.89	8.62	15.25
95,892.93	551,655.93	285,032.92	154,000.00	10.96	5.92	7.70
5,350.40	131,974.99	70,457.08	50,000.00	9.65	6.85	8.33
43,948.34	429,770.89	132,621.07	86,000.00	9.82	6.37	9.05

TABLE No. 59.—Abstract of reports of earnings and dividends of

[Figures in boldface type indicate loss.]

	Location.	Number of banks.	Capital stock.	Surplus.	Capital and surplus.	Gross earnings.
63	Missouri.....	110	\$6,665,000.00	\$2,666,916.62	\$9,331,916.62	\$2,352,095.94
64	Kansas City.....	12	7,850,000.00	3,382,000.00	11,232,000.00	4,884,019.24
65	St. Joseph.....	4	1,100,000.00	675,000.00	1,775,000.00	711,820.21
66	St. Louis.....	8	20,400,000.00	11,990,000.00	32,390,000.00	7,816,242.93
	Middle Western States.....	2,036	274,756,100.00	142,887,984.53	417,644,084.53	119,937,918.42
67	North Dakota.....	146	5,268,000.00	1,878,669.33	7,146,669.33	3,150,624.82
68	South Dakota.....	102	4,180,000.00	1,238,450.00	5,418,450.00	2,650,938.75
69	Nebraska.....	231	10,415,000.00	4,261,368.00	14,676,368.00	4,766,358.98
70	Lincoln.....	4	1,000,000.00	330,000.00	1,330,000.00	498,144.73
71	Omaha.....	7	3,700,000.00	2,810,000.00	6,510,000.00	2,515,282.42
72	South Omaha.....	3	1,100,000.00	380,000.00	1,480,000.00	548,882.27
73	Kansas.....	202	10,662,500.00	4,619,985.00	15,282,485.00	4,792,684.67
74	Kansas City.....	2	500,000.00	300,000.00	800,000.00	342,278.45
75	Topeka.....	2	300,000.00	160,000.00	460,000.00	190,871.94
76	Wichita.....	3	500,000.00	505,000.00	1,005,000.00	453,024.93
77	Montana.....	58	4,960,000.00	2,774,250.00	7,734,250.00	3,176,080.31
78	Wyoming.....	29	1,735,000.00	1,056,500.00	2,791,500.00	1,192,234.78
79	Colorado.....	118	6,690,000.00	3,079,290.74	9,769,290.74	3,350,315.87
80	Denver.....	6	3,600,000.00	3,902,000.00	7,502,000.00	2,961,449.27
81	Pueblo.....	3	650,000.00	450,000.00	1,100,000.00	463,135.21
82	New Mexico.....	39	2,090,000.00	980,350.00	3,070,350.00	1,216,074.79
83	Oklahoma.....	272	10,545,000.00	2,818,245.21	13,363,245.21	5,566,733.22
84	Muskogee.....	5	850,000.00	250,500.00	1,100,500.00	468,249.93
85	Oklahoma City.....	6	1,550,000.00	270,000.00	1,820,000.00	765,707.67
	Western States.....	1,238	70,295,500.00	32,064,608.28	102,360,108.28	39,069,043.01
86	Washington.....	66	4,075,000.00	1,985,915.99	6,060,915.99	2,310,295.02
87	Seattle.....	6	4,200,000.00	1,370,000.00	5,570,000.00	2,263,475.87
88	Spokane.....	5	3,400,000.00	765,000.00	4,165,000.00	1,427,605.47
89	Tacoma.....	2	500,000.00	850,000.00	1,350,000.00	449,184.35
90	Oregon.....	76	4,611,000.00	2,093,187.14	6,704,187.14	2,092,837.50
91	Portland.....	4	4,000,000.00	1,827,000.00	5,827,000.00	1,879,845.83
92	California.....	197	18,872,800.00	7,931,647.55	26,804,447.55	7,891,103.62
93	Los Angeles.....	9	6,100,000.00	2,826,000.00	8,926,000.00	2,987,864.93
94	San Francisco.....	9	28,250,000.00	14,805,000.00	43,055,000.00	7,308,656.18
95	Idaho.....	48	2,940,000.00	1,392,240.90	4,332,240.90	1,580,550.84
96	Utah.....	17	1,155,000.00	440,186.45	1,595,186.45	790,162.58
97	Salt Lake City.....	5	2,150,000.00	965,000.00	3,115,000.00	899,180.80
98	Nevada.....	11	1,742,000.00	474,000.00	2,216,000.00	569,941.39
99	Arizona.....	13	1,105,000.00	725,000.00	1,830,000.00	668,758.58
100	Alaska.....	2	100,000.00	53,500.00	153,500.00	157,998.81
	Pacific States.....	470	83,200,800.00	38,503,678.03	121,704,478.03	33,277,461.77
101	Hawaii.....	4	610,000.00	254,426.42	864,426.42	151,476.62
	United States.....	7,307	1,031,383,425.00	1,704,346,706.70	1,735,730,131.70	450,043,250.09

¹ Capital and surplus as shown at the close of the year.

national banks in the United States for year ended July 1, 1912—Continued.

[Figures in boldface type indicate loss.]

Charged off.		Net earnings.	Dividends.	Ratios.			
Losses and premiums.	Expenses and taxes.			Net earnings to capital and surplus.	Dividends to capital and surplus.	Dividends to capital.	
				<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	
\$155,992.87	\$1,340,457.09	\$855,645.98	\$682,625.00	9.17	7.31	10.24	63
410,245.90	3,274,933.67	1,198,839.67	625,000.00	10.67	5.56	7.96	64
61,330.60	507,648.39	142,841.22	96,500.00	8.05	5.44	8.77	65
870,386.91	5,270,111.58	1,675,744.44	2,259,000.00	5.17	6.97	11.07	66
12,344,925.54	73,390,852.30	34,202,140.58	29,402,275.18	8.19	7.04	10.70	
235,087.22	2,052,282.49	883,255.11	690,789.21	12.36	9.67	13.11	67
127,140.70	1,802,295.89	721,502.16	512,700.41	13.32	9.46	12.27	68
343,417.59	2,690,443.13	1,732,498.26	1,424,572.97	11.80	9.71	13.68	69
22,695.33	318,057.44	157,391.96	79,000.00	11.83	5.94	7.90	70
272,052.11	1,508,550.79	734,679.52	348,000.00	11.29	5.35	9.41	71
38,742.50	358,194.94	151,914.83	90,000.00	10.26	6.08	8.18	72
425,894.15	2,682,109.46	1,684,681.06	1,301,567.65	11.02	8.52	12.21	73
24,851.56	243,876.93	73,549.96	36,000.00	9.19	4.50	7.20	74
15,999.32	130,818.12	44,054.50	34,000.00	9.58	7.39	11.33	75
27,292.90	315,382.83	110,349.20	57,000.00	10.98	5.67	11.40	76
507,035.42	1,603,665.95	1,065,378.94	909,900.00	13.77	11.76	18.34	77
56,212.19	685,810.36	450,212.23	290,250.00	16.13	10.40	16.73	78
505,514.43	1,872,416.74	972,384.70	769,950.00	9.95	7.88	11.51	79
393,887.29	1,707,269.54	860,292.44	472,750.00	11.47	6.30	13.13	80
102,244.84	239,733.46	121,156.91	73,000.00	11.01	6.64	11.23	81
128,099.17	694,943.85	393,031.77	372,500.00	12.80	12.13	17.82	82
657,081.13	3,085,557.75	1,824,094.34	1,644,713.32	13.65	12.31	15.60	83
53,200.80	262,328.01	152,721.12	115,250.00	13.88	10.47	13.56	84
178,938.14	484,616.11	102,153.42	108,000.00	5.61	5.93	6.97	85
4,115,386.79	22,718,353.79	12,235,302.43	9,329,943.56	11.95	9.11	13.27	
398,499.85	1,319,033.04	592,762.13	618,575.00	9.78	10.21	15.18	86
266,136.02	1,375,774.73	621,565.12	589,000.00	11.16	10.57	14.02	87
178,767.29	874,547.24	374,290.94	356,000.00	8.99	8.55	10.47	88
87,264.09	265,822.01	96,098.25	94,000.00	7.12	6.96	18.80	89
228,490.56	1,041,513.15	822,833.79	638,936.19	12.27	9.53	13.86	90
317,441.19	949,909.26	612,495.38	448,158.20	10.51	7.69	11.20	91
684,537.27	4,264,739.74	2,941,826.61	1,769,480.00	10.98	6.60	9.38	92
342,330.68	1,529,056.66	1,116,477.59	908,250.00	12.51	10.18	14.89	93
644,953.44	3,717,668.94	2,946,033.80	2,265,000.00	6.84	5.26	8.02	94
203,558.89	915,828.57	461,163.38	375,100.00	10.64	8.66	12.76	95
50,895.88	361,120.91	378,145.79	240,332.65	23.71	15.07	20.81	96
160,822.70	626,917.77	111,440.33	166,000.00	3.58	5.33	7.72	97
128,486.44	289,174.49	152,280.46	159,020.00	6.87	7.18	9.13	98
104,815.22	347,532.61	216,410.75	127,000.00	11.83	6.94	11.49	99
95,587.46	91,541.33	29,129.98	.....	18.98	.....	.....	100
3,892,586.98	17,970,180.45	11,414,694.34	8,754,852.04	9.38	7.19	10.52	
3,145.54	67,025.60	81,305.48	44,500.00	9.41	5.15	7.30	101
42,256,130.15	258,730,516.71	149,056,603.23	120,300,872.22	8.59	6.93	11.66	

Monetary systems and approximate stocks of money, in the aggregate and

	Countries.	Monetary standard.	Monetary unit.	Population.	Stock of gold.		
					In banks and public treasuries.	In circulation.	Total.
				<i>Thousands.</i>	<i>Thousands.</i>	<i>Thousands.</i>	<i>Thousands.</i>
1	United States.....	Gold.....	Dollar.....	94,800	1,429,800	369,800	1,799,600
2	Austria-Hungary.....	do.....	Crown.....	49,400	265,700	90,600	356,300
3	Belgium.....	do.....	Franc.....	7,300	36,500		
4	British Empire:						
5	Australia.....	do.....	Pound sterling....	4,400	207,800	14,600	222,400
6	Canada.....	do.....	Dollar.....	6,200	138,200		
7	United Kingdom.....	do.....	Pound sterling....	45,000	1,375,000	335,800	1,710,800
8	India.....	do.....	Pound sterling and rupee.	295,000	244,600		
9	South Africa.....	do.....	Pound sterling....	7,800	50,400	15,000	65,400
10	Straits Settlements. ²	do.....	Dollar.....	1,600	6,800		
11	Bulgaria.....	do.....	Lev.....	4,000	7,700		
12	Cuba.....	do.....	Peseta.....	2,100			42,000
13	Denmark.....	do.....	Crown.....	2,700	19,800	18,500	38,300
14	Egypt.....	do.....	Piaster.....	11,300	8,200	174,500	182,700
15	Finland.....	do.....	Markkaa.....	2,900	6,900	3,700	10,600
16	France.....	do.....	Franc.....	39,300	635,000	565,000	1,200,000
17	Germany.....	do.....	Mark.....	64,900	205,700		
18	Greece.....	do.....	Drachma.....	2,600	2,500	1,900	4,400
19	Haiti.....	do.....	Gourde.....	1,500	1,300	2,100	3,400
20	Italy.....	do.....	Lira.....	33,900	288,500		
21	Japan.....	do.....	Yen.....	52,200	117,000	16,900	133,900
22	Mexico.....	do.....	Peso.....	15,000	31,200		
23	Netherlands.....	do.....	Florin.....	5,900	56,400	19,200	75,600
24	Norway.....	do.....	Crown.....	2,400	16,200	4,600	20,800
25	Portugal.....	do.....	Milreis.....	5,400	6,500	8,000	14,500
26	Roumania.....	do.....	Lei.....	6,800	30,600	2,100	32,700
27	Russia.....	do.....	Ruble.....	160,100	611,700	334,600	946,300
28	Servia.....	do.....	Dinar.....	2,800	6,500		
29	Siam.....	do.....	Tical.....	7,000	100		
30	South American States:						
31	Argentina.....	do.....	Peso.....	7,000	248,300		
32	Bolivia.....	do.....	Boliviano.....	2,300	7,800		
33	Brazil.....	do.....	Milreis.....	20,500	116,500		
34	Chile.....	do.....	Peso.....	3,500	500		
35	Colombia.....	do.....	Dollar.....	4,300			
36	Ecuador.....	do.....	Sucre.....	1,500	3,300	2,100	5,400
37	Guiana—						
38	British.....	do.....	Pound sterling....	300	100		
39	Dutch.....	do.....	Florin.....	100	200		
40	French.....	do.....	Franc.....	100	100		
41	Paraguay.....	do.....	Peso.....	800	15,200		
42	Peru.....	do.....	Sol.....	4,500	8,300	3,900	12,200
43	Uruguay.....	do.....	Peso.....	1,100	15,200		
44	Venezuela.....	do.....	Bollivar.....	2,600	600	2,500	3,100
45	Spain.....	do.....	Peseta.....	19,700	74,900	138,200	213,100
46	Sweden.....	do.....	Crown.....	5,400	22,800	3,200	26,000
47	Switzerland.....	do.....	Franc.....	3,300	31,000	34,700	65,700
48	Turkey.....	do.....	Piaster.....	24,000	14,900	127,500	142,400
49	Central American States.	Silver ³	Peso.....	5,300	1,300	100	1,400
	Total.....			1,040,600	5,167,600		

NOTE.—The blank spaces in this table signify that no satisfactory information is available.

¹ Estimates for the United Kingdom prior to that for 1910 were for coin only; these figures include \$100,000,000 for bullion in the Bank of England; also \$12,200,000 gold belonging to Indian gold-standard reserve.

² This is the amount in the currency reserves. Fred. J. Atkinson, accountant general of India, in 1908, estimated the active rupee circulation at 2,040,000,000 rupees; small silver coin at 140,000,000 rupees.

³ Includes Straits Settlements, the Malay States, and Johore.

⁴ This estimate is based upon a calculation made by Messrs. P. Arminjon and B. Michel in 1908, who estimated the stock of gold in the country at from 33,000,000 to 41,000,000 Egyptian pounds. The mean of these figures was adopted in this table last year. Since their estimate was made the net imports of gold into Egypt to Dec. 31, 1911, have amounted to \$28,919,061, but as there is said to be a considerable absorption of gold for ornaments, no change in the estimate of the monetary stock has been made.

per capita, in the principal countries of the world, Dec. 31, 1911.

Stock of silver.			Uncovered paper	Per capita.				
Full tender.	Limited tender.	Total.		Gold.	Silver.	Paper.	Total.	
<i>Thousands.</i>	<i>Thousands.</i>	<i>Thousands.</i>	<i>Thousands.</i>					
568,300	167,600	735,900	764,500	\$18.98	\$7.76	\$8.07	\$34.81	1
Nil.	122,900	122,900	197,600	7.21	2.49	4.00	13.70	2
8,700	2,400	11,100	139,000	5.00	1.52	19.04	25.56	3
Nil.	10,000	10,000	.....	50.54	2.27	.....	52.81	4
Nil.	7,700	7,700	79,100	22.29	1.24	12.76	36.29	5
Nil.	116,800	116,800	115,200	15.80	2.59	2.56	20.95	6
97,400	45,000	142,400	45,400	.14	.48	.16	.78	8
Nil.	20,000	20,000	.....	8.38	2.56	.....	10.94	9
Nil.	19,000	19,000	7,500	4.25	11.88	4.68	20.81	10
Nil.	4,800	4,800	9,900	1.93	1.20	2.47	5.60	11
Nil.	5,000	5,000	.....	20.00	2.38	.....	22.38	12
Nil.	7,900	7,900	17,300	14.19	2.92	6.41	23.52	13
Nil.	14,300	14,300	6,600	16.17	1.26	.58	18.01	14
Nil.	500	500	14,900	3.66	.17	5.13	8.96	15
347,400	63,700	411,100	245,900	30.53	10.46	6.26	47.25	16
Nil.	253,600	253,600	276,100	3.16	3.90	4.24	11.30	17
Nil.	3,000	3,000	27,600	1.69	1.15	10.62	13.46	18
1,000	1,500	2,500	8,200	2.26	1.67	5.47	9.40	19
22,700	1,400	24,100	182,300	8.51	.71	5.38	14.60	20
Nil.	64,200	64,200	101,700	2.57	1.23	1.95	5.55	21
52,000	4,000	56,000	51,200	2.08	3.73	3.41	9.22	22
Nil.	29,000	29,000	64,700	12.81	4.92	10.97	28.70	23
Nil.	3,700	3,700	8,700	8.67	1.54	3.62	13.83	24
Nil.	33,100	33,100	69,900	2.69	6.13	12.94	21.76	25
Nil.	12,600	12,600	43,200	4.81	1.85	6.35	13.01	26
Nil.	78,800	78,800	.....	5.91	.49	.....	6.40	27
Nil.	1,300	1,300	4,900	1.32	.46	1.75	4.53	28
Nil.	52,200	52,200	2,100	.01	7.46	.30	7.77	29
Nil.	9,400	9,400	7692,200	35.47	1.34	98.89	135.70	31
Nil.	700	700	2,000	3.39	.30	.87	4.56	32
Nil.	25,000	25,000	77,900	5.68	1.22	3.80	10.70	33
Nil.	8,500	8,500	19,000	.14	2.43	5.43	8.00	34
Nil.	.....	.....	10,000	.....	.....	2.33	2.33	35
Nil.	1,300	1,300	1,700	3.60	.87	1.13	5.60	36
Nil.	400	400	100	.33	1.34	.33	2.00	37
Nil.	300	300	300	2.00	3.00	3.00	8.00	38
Nil.	100	100	600	1.00	1.00	6.00	8.00	40
Nil.	.....	.....	42,900	19.00	.....	53.63	72.63	41
Nil.	2,400	2,400	.....	2.71	.53	.....	3.24	42
Nil.	4,300	4,300	8,000	13.82	3.90	7.28	25.00	43
Nil.	10,800	10,800	800	1.19	4.15	.31	5.65	44
Nil.	256,800	256,800	76,000	10.82	13.04	3.85	27.71	45
Nil.	8,600	8,600	34,700	4.81	1.59	6.43	12.83	46
Nil.	13,500	13,500	27,900	19.91	4.09	8.45	32.45	47
Nil.	26,400	26,400	.....	5.93	1.10	.....	7.03	48
Nil.	9,200	9,200	89,900	.26	1.74	16.96	18.96	49
1,097,500	1,523,700	2,621,200	3,567,500	.....	.....	.....	.....	.....

⁵ Estimate of A. De Foville, 1909.

⁶ German war fund and Imperial Bank of Germany. No definite information as to other holdings. The coinage of gold since the establishment of the Empire less recoinage, amounts to \$1 125,023,299 but the exports are unknown, and there has been an industrial consumption.

⁷ Gold conversion value.

⁸ This amount has been reduced to a gold basis; that is, 100 pesos equal 1 United States gold dollar. Except Costa Rica and British Honduras (gold-standard countries).

BANKING AND CURRENCY CONFERENCE.

[Suggested resolutions prepared at the request of A. B. Hepburn, of New York, chairman currency commission of the American Bankers' Association, by J. B. Forgan, of Chicago, vice chairman; presented at the morning session, Friday, Aug. 22 1913, and ordered read and referred to the conference for discussion]

Whereas the provisions of the Federal reserve act requiring all member banks, both national and State, to invest 10 per cent of their own capital in the capital stock of the proposed Federal reserve banks and to assume a liability of a further equal amount payable on demand for the purpose when necessary of paying the obligations of such Federal reserve banks, and further requiring that such member banks shall deposit 5 per cent of their own total demand liabilities in said Federal reserve banks; and

Whereas both such capital investment and such deposits are placed entirely beyond the management, control, or use of the depositing banks, except that the deposits may erroneously be counted as part of their lawful money reserve; and

Whereas the banks would prefer to keep their reserves within their own control, so that they could use them in such emergencies as reserves are intended to provide for; and

Whereas we find in the Federal reserve act no compensating benefits to induce the State banking institutions to voluntarily assume these obligations:

Resolved, That it is the opinion of this convention that notwithstanding the fact that the State banking institutions outnumber the national banks by more than two to one and control more than one-half the banking business of the country, they could not be induced to voluntarily comply with the provisions of the Federal reserve act and thus become parties to it; and be it further

Resolved, That if the opinion expressed in the previous resolution is correct the reserve bank organization committee created by the act will have to rely for the organization of the Federal reserve banks entirely on the action of the national banks under the more or less compulsory obligations imposed on them in the act, requiring them within 12 months to contribute the necessary capital and the minimum reserve deposits or accept one of the two alternatives of dissolution or of continuing their business under State charters.

(No. 2.)

Whereas the Federal reserve act stipulates that there shall be not less than 12 Federal reserve banks, with a minimum capital of \$5,000,000 each, which calls for a minimum aggregate capital subscription of \$60,000,000; and

Whereas it is evident that in the larger districts much more than the minimum capital would be necessary:

Resolved, That it is the opinion of this convention that the 12 Federal reserve banks could not be amply capitalized by a subscription amounting to 10 per cent on the aggregate capital of the existing national banks, which approximates \$105,000,000, as the—

Federal Reserve Bank of New York would require not less than.....	\$25,000,000
Federal Reserve Bank of Chicago would require not less than.....	20,000,000
Federal Reserve Bank of St. Louis would require not less than.....	15,000,000
Federal Reserve Bank of San Francisco would require not less than.....	10,000,000
Federal Reserve Bank of New Orleans would require not less than.....	10,000,000
Federal Reserve Bank of Philadelphia would require not less than.....	10,000,000
Federal Reserve Bank of Boston would require not less than.....	10,000,000
And there would have to be five others in different parts of the country at not less than \$5,000,000 each, making.....	25,000,000
	125,000,000

which would thus require \$20,000,000 more than would be provided if every national bank should become a subscriber.

(No. 3.)

Whereas, bank reserves against deposit liabilities being held for debt-paying purposes must be in the form of actual money or of obligations promptly convertible into money:

Resolved, That in the opinion of this convention the minimum credit balances which the national or other member banks are required to maintain with the Federal reserve banks, not being subject to withdrawal, are not convertible into money and therefore are not available for the purpose of paying debts; and such balances could

not be regarded by the member banks which own but can not use them as anything but a fixed capital investment similar to their contribution to the capital stock of the Federal reserve banks except that they earn nothing for the investors.

(No. 4.)

Whereas in the opinion of this convention the contraction of loans in the national banks made necessary by the payments in lawful money which they would be required to make to the Federal reserve banks within 60 days would largely exceed the loaning capacity of the Federal reserve banks:

Resolved, That we offer the following explanation of our opinion thus expressed:

The loans and bond investments of the national banks, exclusive of their Government bonds pledged as security for their note circulation, amount in round figures to \$7,336,000,000. The aggregate net deposits of the national banks on which their legal reserve is figured amount to \$7,124,000,000. (See comptroller's report of June 4, 1913.) Thus the aggregate loans, including bond investments of the national banks, are practically an offset against the amount of their aggregate net deposits. In other words, these two items represent the amount of credits exchanged between the banks and the public, the amount owed by the banks to the public being practically offset by the amount owed by the public to the banks. This exchange of credits is based on and supported by actual money in the banks. The established relation between the amount of actual money held by the banks and the fabric of credits existing between the banks and the public is therefore in the ratio of \$917,000,000 to \$7,336,000,000, or 12½ per cent of money to the amount of credits.

If from the amount of money on hand.....	\$917, 000, 000
the national banks are required to make the following payments to the Federal reserve banks, viz:	
10 per cent of their aggregate capital.....	\$105, 000, 000
3 per cent of their net deposits.....	213, 000, 000
they would have to turn over more than one-third of their entire holdings, or.....	318, 000, 000
and would have left money on hand amounting to.....	599, 000, 000
On the established basis of 12½ per cent of money to existing credits, which seems little enough, this would provide for credits between the banks and the public aggregating.....	4, 792, 000, 000
Calling for a compulsory contraction in such credits of.....	2, 544, 000, 000
From their present amount of.....	7, 336, 000, 000
The Federal reserve banks with a capital paid in of.....	105, 000, 000
And reserve deposits similarly paid in of.....	213, 000, 000
Would have in money to start with.....	318, 000, 000
Which on the basis of the 33½ per cent cash reserve they are required to carry against their total demand liabilities would enable them to expand until they had assumed total liabilities of.....	954, 000, 000
Of which they would have already assumed liability for the reserve deposits.....	213, 000, 000
Their net expansion capacity would therefore be.....	741, 000, 000
And this would be the limit of their ability to rediscount for their member banks, whose compulsory contraction of credits as shown above would be.....	2, 544, 000, 000
Showing that their ability to rediscount would fall short of the contraction of credits in their member banks by.....	1, 803, 000, 000

After 14 months when the minimum reserve deposits required are to be raised from 3 per cent to 5 per cent, this deficiency would of course be greatly increased. Such a contraction of the credits between the national banks and the public could not be accomplished without a cataclysm in business.

In order that these figures should not overstate the effect on the credits between the public and the national banks by such a diversion of money equal to one-third of all the money in the national banks from these banks into the Federal reserve banks,

the 3 per cent reserve deposit required on their "total demand liabilities" has been figured on their net and not on their gross deposits, under the assumption that the same offsets would be allowed them that are now allowed when figuring their legal reserve requirements.

These figures do not include the Government deposits which within 12 months are to be transferred to the Federal reserve banks. With the exception of the free money in the Treasury such deposits would be transferred from the national banks and would require them to part with a further amount of money equal to the amount of the Government deposits they hold, which would still further proportionately decrease their money reserve and increase the compulsory contraction of their loans. These transfers of Government deposits having to be made within 12 months would have no effect on the above transactions, all of which must occur within 60 days.

We do not wish it to be understood that these figures forecast precisely what would occur were the Federal reserve act passed and were the national banks to operate under it. We are well aware that no calculation can possibly be made to correctly forecast what would actually occur in such an event. We are satisfied, however, that the figures portray as accurately as possible the situation which would be confronted were the 12 Federal reserve banks organized and should the national banks undertake to operate under the new law.

The discrepancy between the loaning capacity of the Federal reserve banks and the contraction of credits in the national banks shown in the figures may be further elucidated as follows: It is proposed to transfer bodily from the national banks practically one-third of the actual money now lodged in their vaults and place it in the Federal reserve banks. As we have seen the money in the vaults of the national banks forms the basis of a fabric of credits existing between them and the public in the ratio of 12½ per cent of actual money to the amount of such credits outstanding. This fabric of credits must be adjusted to the reduced holdings of actual money by the banks on the established ratio of 12½ per cent of money to total credits, otherwise to a proportionate extent there will be an overexpansion of credits in the banks. The credit expansion of the Federal reserve banks is fixed on the basis of a 33½ per cent money reserve against their total liabilities. They are therefore restricted in their credit expansion to \$3 of credit against \$1 of money, while the national banks have been doing business on a 12½ per cent money basis, or \$8 of credit against \$1 of money. As a basis of credit, therefore, the one-third of the money now in the national banks when transferred to the Federal reserve banks would lose nearly two-thirds of its present expansive power.

If the Federal reserve banks could continue to use the money thus transferred to them on the same basis on which the national banks now use it, viz, \$8 of credit expansion against \$1 of money, their expansive power would be.....	\$2, 544, 000, 000
But as they are restricted in the act to \$3 of credit expansion against \$1 of money their actual expansive power is limited to.....	741, 000, 000
Which shows the same discrepancy of.....	1, 803, 000, 000
between their expansive capacity and the compulsory credit contraction in the banks.	

(No. 5.)

Whereas in the opinion of this convention there is not sufficient money in the national banks to meet the immediate requirements of the act:

Resolved, That we offer as evidence thereof the following figures compiled by Mr. A. B. Stickney, of St. Paul, which have been checked in the office of the Comptroller of the Currency and certified correct.

Immediate cash requirements of the bill.

Before the Federal reserve banks can be organized the national banks must subscribe for their capital stock to the extent of 20 per cent of their capital, \$1,056,919,792, and pay in cash 10 per cent.

Amount of this payment.....		\$105, 691, 979
On the basis of June 4, 1913, reports, the amounts of actual money required for reserves at the outset are as follows:		
Total net deposits.....	\$7, 124, 634, 372	
Less time certificates.....	525, 508, 864	
Net demand liabilities.....	6, 599, 125, 508	
3 per cent of net demand liabilities.....		197, 973, 751

Lawful money in bank:	
Country banks, \$3,610,672,858 net deposits; 5 per cent.....	\$180, 533, 642
Reserve city banks, \$1,945,874,457 net deposits; 12½ per cent.....	243, 234, 307
Central reserve city banks, \$1,568,087,056 net deposits; 25 per cent.	
Less 3 per cent on demand liabilities in Federal reserve banks.....	345, 401, 083
	\$769, 169, 032
Total cash required within 60 days after the organization.....	1, 072, 834, 762
Items possessed by the banks which the bill permits to be counted as reserve. The law permitting the 5 per cent redemption fund to count as reserve, the bill repeals:	
Fractional currency, etc.....	\$3, 580, 483
Specie.....	724, 074, 627
Legal tenders.....	189, 908, 013
	917, 563, 123
Deficit.....	155, 271, 639
If national-bank notes may be used to purchase stock in Federal reserve banks, the deficit would be decreased by.....	51, 538, 808
	103, 732, 831

This shortage of \$155,000,000 would be the deficit in the actual lawful money requirements of the national banks, leaving them without any free money for current uses. The free money required and carried by the national banks for their current uses being usually about \$150,000,000 and their having \$51,000,000 in national-bank notes on hand, the actual deficit would be, in round figures, \$250,000,000.

(No. 6.)

Whereas the currency commission of the American Bankers' Association, in its answer to question No. 13 of questions formulated by a subcommittee of the Banking and Currency Committee of the United States Senate, has expressed an opinion in regard to the requirement that there shall be organized not less than 12 Federal reserve banks,

Resolved, That we reiterate and approve such opinion, which reads as follows:

"In our opinion one central reserve association with branches would best serve our present necessities. Failing that, a small number of regional reserve associations, also with branches, might be organized to serve the purpose. The smaller the number of regional reserve associations, however, the more effective the reserve control. If there are to be a number of regional reserve associations, they should be under some kind of central control in which both the Government and the various associations should have representation.

"Three objections to the regional reserve associations occur to us:

"First. They will divide the cash reserve of the country into as many different ownerships as there are regional associations. No individual bank can now strengthen its cash reserves without at the same time and to the same extent depleting the reserve of some other bank, so with the regional reserve associations no one of them will be able to strengthen its cash reserves without drawing them from and reducing to the same extent the reserve of one of the other associations.

"Second. In connection with the shipping of reserve money from one section of the country to another. Under one central reserve association with branches this could be accomplished without change of ownership of the money shipped, as it would belong to the one association, irrespective of what branch had custody of it. In the case of independent regional reserve associations no such transfer of reserve money could be made from one region to another without a change in ownership. It would increase the reserve of the association that receives it and deplete by a similar amount the reserve of the association that ships it. In times of financial stress, when each regional reserve association would be husbanding its resources for the benefit of its own constituents, this might produce an undesirable and awkward situation, the interests of the various sections of the country being at variance. Such effect will be intensified in direct ratio to the number of regional reserve associations, and

"Third. Under one ownership and control of the reserves transfers of funds could under normal conditions be accomplished by book entries rather than by the shipment of money."

(No. 7.)

Whereas taken collectively the following provisions of the Federal reserve act are most objectionable to us:

1. The coercive feature of the act as stated in section 8, which provides that any national bank which shall not within one year after its passage become a national banking association under its provisions, or which shall fail to comply with any of its provisions applicable thereto shall be dissolved.

2. The provision that the national banks shall subscribe to the capital stock of the Federal reserve banks a sum equal to 20 per cent of their unimpaired capital, one-fourth of such subscription to be paid in cash, one-fourth in 60 days and the remainder, subject to call and payment whenever necessary to meet the obligations of the Federal reserve banks.

3. The provision that national banks within 60 days from and after the date the Secretary of the Treasury shall have officially announced the fact of the establishment of the Federal reserve banks shall deposit with the Federal reserve banks as part of their required reserve an amount not less than 3 per cent of their own total demand liabilities, exclusive of circulating notes, and at the end of 14 months from the date thus fixed by the Secretary of the Treasury shall increase the said 3 per cent to 5 per cent, such reserve deposit to at no time fall below the amounts aforesaid.

4. The requirements in connection with the reserve deposits to be made by the different classes of national banks in the Federal reserve banks. They are in any event too onerous. The proper mobilization of the cash reserves of the banks should economize their use and by concentration of them reduce the unscientific wide distribution of them which now exists.

5. The provision limiting the dividends on the capital stock to 5 per cent per annum.

6. The provision that no interest is to be paid by the Federal reserve banks upon any deposits except those of the United States and except such as the national banks may receive under the provision in connection with the division of earnings, whereby 40 per cent of the earnings in excess of 5 per cent to be paid them on their capital stock investment is to be paid to the member banks in proportion to their annual average balances with such Federal reserve banks.

7. The method of organizing the Federal reserve board, which places the management and control of the Federal reserve banks in the hands of seven men, all appointees of the President of the United States, with the advice and consent of the Senate, who would have no financial interest in the banks and who, with one exception, need not necessarily have any experience in or knowledge of the banking business. The management and control should be placed in the hands of experienced bankers and other men of business chosen jointly by the banks as proprietors and by the Government in the interests of the public because of their knowledge and experience in banking and other lines of business;

Resolved, That considering these provisions collectively we regard the measure as an attempt to force the national banks to contribute the capital and deposits in the Federal reserve banks, and we believe that the directors of the national banks, appreciating their responsibility in a fiduciary capacity to their stockholders and depositors, will not be so coerced until they have tested in the Supreme Court of the United States whether or not such coercion is a violation of the fifth amendment of the Constitution of the United States prohibiting the taking of property for public use without just compensation, and we further believe that even if it should be decided by the Supreme Court that it is not a constitutional violation the national banks of the country could not become parties to a banking system that proposes such revolutionary interference with the established credits now existing between the public and the national banks by the practical appropriation of one-third of all the actual money now in their possession, which is to be placed entirely beyond their control both as regards its management and its use as valid reserves against their deposits, except in so far as the advice of the Federal advisory council might influence the action of the Federal reserve board, which under the conditions and restrictions surrounding it could not be made effective.

(No. 8.)

Whereas the conditions and regulations under which the circulating notes are to be issued are in our opinion such as to make the note issue unscientific and impractical;

Resolved, That we offer the following in explanation of our opinion:

While the notes are to be the obligations of the United States they are in fact to be primarily the obligations of the Federal reserve banks guaranteed by the Government. Federal reserve banks are primarily charged with their redemption. As security for these primary obligations of the Federal reserve banks the notes are made a first and paramount lien on all their assets besides being collaterally secured by them by a specific pledge of commercial paper of equal amount and by the segregation of gold or lawful money equal to 33 $\frac{1}{3}$ per cent of the amount of them outstanding. While they are to be redeemable at the United States Treasury, the funds for that purpose are to be supplied by the Federal reserve banks. Unless, therefore, the Federal reserve banks default in their obligation to redeem the notes the Government will not be required to pay or redeem them with its own funds. These notes should be made the direct obligation of the banks that pay them out and that are primarily responsible for the redemption of them.

The machinery provided for their issue, circulation, and redemption seems to have been unnecessarily complicated by an attempt to embody in the plan the erroneous principle that to the Government belongs the exclusive prerogative of issuing the circulating medium. The experience of the world has been that it is better for a government to provide the paper circulating medium indirectly through properly organized banks under strict government supervision rather than put the credit of the government at issue with every note placed in circulation. Troublesome times come to every community and to every nation, and it is better to have the credit of the banks called in question than the credit of the government itself. As bank notes they will be amply secured without the superfluous government guaranty. Issued by the banks when and as needed they would more readily automatically adjust themselves in volume to the actual commercial demands for them. As obligations of the Government they are likely, as do our present Government issues and our Government bond-secured national notes, to remain too long in circulation, no active redemption of them being deemed necessary. It is active and constant redemption of a circulating medium that makes it elastic. Expansion without contraction is not elasticity, but inflation.

The provisions recently added to the bill that whenever Federal reserve notes issued through one Federal reserve bank shall be received by another Federal reserve bank they shall be returned for redemption to the Federal reserve bank through which they were originally issued, and that no Federal reserve bank shall pay out notes issued through another under a penalty of a tax of 10 per cent upon the face value of notes so paid out, are good so far as they go, but when the notes are once issued by the Federal reserve banks the National and State banks doing business directly with the public would be the principal agencies through which the notes would be kept in circulation, and the practice now prevailing of receiving and paying out national-bank notes without special reference to the location of the bank that issued them would undoubtedly be continued in connection with the Federal reserve notes.

RECAPITULATION

Whereas the general effects of the measure on the existing credit relations between the banks and the public as they have been forecast would be ruinous both to the national banks and to general business;

Whereas, unless practically all the national banks agree to participate in the provisions of the measure and subscribe for the capital stock of the Federal reserve banks, it will be impossible to organize the Federal reserve banks and the measure will prove a failure;

Whereas the measure generally is in its main features unsatisfactory to the banks of the country;

Whereas in our opinion the national banks will not agree to it without a contest as to their constitutional rights and, even if such contest should be decided against them, are most likely to withdraw from the system; and

Whereas in our opinion the State banks will not voluntarily become parties to it:
Be it

Resolved, That in view of these recapitulated considerations, which we believe to be facts, we would respectfully recommend to Congress that the attempt to pass the measure at the present special session be abandoned; and

Whereas, in view of the great importance of the subject, which is purely a business problem as far removed from politics as any problem affecting the interests of the public can be, the welfare of every citizen being affected by it, and the multitude of bank depositors in the country being specially interested in it; and

Whereas a good measure would protect the interests of all classes of citizens and a bad measure would be a universal calamity; and

Whereas we fully appreciate the necessity for early action: Therefore be it further

Resolved, That we respectfully recommend to Congress that a commission should be organized, composed of three men representing the Government, to be appointed by Congress; three men representing the commercial, industrial, and agricultural interests of the country, to be appointed by the National Chamber of Commerce; and three experienced bankers, to be appointed by the American Bankers' Association, to carefully consider the subject and prepare a bill to be submitted to the next regular session of Congress.

(Thereupon, at 6.30 p. m., the committee adjourned until Friday, September 19, 1913.)

FRIDAY, SEPTEMBER 19, 1913.

COMMITTEE ON BANKING AND CURRENCY,
UNITED STATES SENATE,
Washington, D. C.

The committee assembled at 1.30 o'clock p. m.

Present: Senators Owen (chairman), Reed, Pomerene, Shafroth, and Bristow.

The CHAIRMAN. Mr. Frame, the committee will be glad to hear you now.

STATEMENT OF ANDREW JAY FRAME, PRESIDENT OF THE
WAUKESHA NATIONAL BANK, OF WAUKESHA, WIS.

Mr. FRAME. Mr. Chairman and gentlemen of the committee, I thank you for the honor of being called before you, and will say that I have had 50 years' business experience in banking, and I have been through the panics of 1873, 1893, and 1907, and the Waukesha National Bank has never suspended cash payments.

After listening to what has been said here in the committee, as I have—

Senator REED. Pardon me for interrupting you just a moment. You are the president of the Waukesha National Bank?

Mr. FRAME. Yes, sir; president of the Waukesha National Bank.

Senator REED. What is the capital of that bank?

Mr. FRAME. \$150,000.

Senator REED. How long has that institution existed?

Mr. FRAME. Since 1865, as a national bank.

Senator REED. And how long have you been its president?

Mr. FRAME. Since 1880—33 years.

Senator REED. To what extent have you made a study of banking and currency, aside merely from your banking experience?

Mr. FRAME. All my life. I have read all the best authorities on political economy—at least the most of them—in my earliest banking experience, in the first 10 years of it. Since then I have been making a practical application of the principles of the banking business, with the experience of panics, and have been rereading the historical experiences.

Senator REED. Thank you, that is all I wanted to know at this time.

Mr. FRAME. After listening for the last two days, I am frank to say that I believe you are endeavoring to do what, in your judgment, is for the highest and best interests of the country. If we differ at all, we can not expect to be like unto a gentleman who lost his wife. The minister coming in, the man said to him, "I have lived 40 years with my wife and never have had a cross word with her." The minister replied, "Ah, man, but you must have had an awfully stupid time." I trust we will have no serious differences because of honest motives.

I believe in the mobilization of a certain amount of cash for abnormal periods—to take care of us in the day of trouble. And to my mind, it should be penalized sufficiently so far as the extra issue of currency is concerned, so that it would come out to help us during panicky periods, or previously thereto; and the penalization should be sufficient to drive it back again, so that inflation and overexpansion of credit may not result.

As a matter of relief, during panic periods—I want to illustrate it from a case that I have had in my own experience. As I say, I have been through the panics of 1873, 1893, and 1907. In 1893, during the panic, one-half of the banks in the city of Milwaukee were absolutely suspended.

Senator REED. You mean 1893, do you not?

Mr. FRAME. Yes; 1893. We live but 18 miles from Milwaukee. Naturally, the farmers, our depositors, some of them, became a little uneasy and began to withdraw their money from our bank. In order to replenish our cash on hand temporarily, until they got their second wind, I took \$100,000 of bonds and went down to the city of Chicago—

Senator REED (interposing). What kind of bonds?

Mr. FRAME. Oh, various kinds—municipal and railroad and corporation—some corporation and some public-utility bonds. I sold \$50,000 worth of those bonds for cash, costing us \$1.02, at 92 cents. We lost \$5,000.

On the other hand, I took the other \$50,000 of bonds, and I borrowed \$50,000 of money and put up those bonds as collateral security. I borrowed this for three months. I paid a rate of 8 per cent per annum therefor. That cost us 2 per cent for the \$50,000 for the three months.

Senator REED. Was that net?

Mr. FRAME. It cost \$1,000 for interest.

Senator REED. Oh, I see.

Mr. FRAME. But the bonds which we put up as collateral security were drawing 5 per cent. Therefore we received 5 per cent on our bonds, they paid 5 per cent per annum, which was, for three months, $1\frac{1}{4}$ per cent on the bonds that we received. Deducting that from the 2 per cent that we paid for the three months, we only lost three-fourths of 1 per cent in all on that \$50,000, \$375 being all that it cost us, net, to obtain that \$50,000.

The CHAIRMAN. But you took the risk of the bonds being sold to meet the debt, did you not?

Mr. FRAME. Of course, at the end of the time.

The CHAIRMAN. But, I say, you took that risk, did you not?

Mr. FRAME. Yes. Panics are generally all over in two or three months. People get their second wind, they bring their deposits back again, securities revive, and business gets back into normal condition again.

Now, the point I wish to illustrate is simply this, that, in the light of that operation, I want to see the mobilization of cash so that the banks, when panic threatens, can take good securities and go where an extra pot of cash lies; and I care not what the rate of interest is, just so that I may get the cash so as not to suspend cash payments, which is always seriously detrimental, not alone to the bank, but it is detrimental in the stopping of the wheels of commerce.

If we can get the extra cash to replace that which is withdrawn by the frightened depositors we run along in the even tenor of our way, and we do not suspend cash payments, and therefore the serious effects of a panic are avoided by keeping the wheels of commerce revolving and keeping labor employed. If we suspend cash payments disaster is the result. I wanted to give you just that as an illustration of my thought on the subject, as to what I would like to say.

The CHAIRMAN. You did not mention 1884.

Mr. FRAME. Well, that did not trouble us in our section.

The CHAIRMAN. In some parts of the country there was a panic in 1884, but in your part of the country, I do not believe there was?

Mr. FRAME. No; it did not trouble us.

I just want to add one other thing, if you will allow me: Before the repeal of the free silver bill in 1893—it was about two or three months after we had borrowed the money—our depositors had recovered their second wind, as I call it, and brought their money back again. We were then in ample funds, so I went to Chicago, with the full approval of all of the board of directors, and repurchased every single dollar of those bonds at the very same price that I had sold them for. So, fortunately, we did not lose anything on the operation.

Senator REED. As I understand, you bought back these securities and did not lose any money on the whole transaction?

Mr. FRAME. Yes; because we got in before the public got their second wind, as to buying securities. Within the week after we bought those \$50,000 back again, the bond market was up at least 5 per cent, and within another week it was up at least 2 or 3 per cent more, and in another month they were back into the normal condition.

I have prepared here a few pages of what appear to me to be illustrations of the subject before us, and, without going through the bill itself, if you will allow me to just read my views, and then if there are any questions the committee would like to ask, I will be very glad to answer them.

The CHAIRMAN. If it is agreeable to the committee, I shall be very glad to have you read them.

Mr. FRAME. It will make your record a little more methodical, it would seem to me.

The CHAIRMAN. You may proceed.

Mr. FRAME. Our battle for the world's standard of value has been practically won. Now the paramount economic question before the

American people is, How can we minimize conditions which produce panics and also ameliorate their after-paralyzing effects?

Panics undoubtedly can not be wholly prevented, because it is impossible to change human nature; because nature is unlikely to be less fickle in her gifts to man; because prosperity and adversity follow each other as surely as the tide rises and falls; because where the rising tide of prosperity appears and a few clear-visioned Napoleons of finance make quick fortunes, the masses lose their conservatism, and riotous speculation ensues, resulting often in panic. Notwithstanding this, I am a firm believer in ameliorating panic conditions, both as to their frequency and severity. But how? My answer is:

First. By studying history and profiting by the experience of the past.

Second. By passing conservative and sound banking laws and then enforcing them.

Third. By providing cash on sound lines to meet extraordinary demands and immediately retiring it as soon as the pressure for funds is over, to prevent inflation, and also to be ready for the next emergency.

That word "elasticity" is a sweet morsel to play upon the credulity of an innocent public. It has worried the political economists of all ages. Its ghost still stalks forth in this enlightened day. The disease it attempts to cure, I diagnosed in a former address as "Hard-up." A large majority of the human family have an annual attack of it, and many have it in chronic form.

Senator REED. What does that "hard-up" mean that you have just mentioned?

Mr. FRAME. Well, I call it the "hard-up disease."

Easy methods of issuing I. O. U.'s rather aggravate the disease, but liberal libations of conservatism wonderfully ameliorate severe attacks.

The Standard Dictionary epitomizes conditions leading to panics as follows:

An undue expansion of loans by banks; an unsound standard of value; over-extension of mercantile credits and widespread speculation are forerunners of panics.

Let us never forget that confidence upbuilds and distrust paralyzes. The blighting effect of distrust in our standard of value which was the main underlying cause of the panics of 1873 and 1893 has given to our people convincing object lessons more potent than pages of logic that a 100-cent dollar is indispensable to stability and prosperity. With these calamitous conditions vividly before us it would seem, to provide an elastic currency to prevent panics, that the political economists of all ages have wrestled with this knotty problem with indifferent results.

To my mind the Imperial Bank of Germany comes closer to covering the correct method of relief, as it can issue but 130,000,000 of uncovered currency, and all in excess thereof must pay a tax of 5 per cent thereon to the Government, and therein alone lies flexibility. This penalizes overexpansion of currency and credit, and is the safety valve which has kept her overstrained condition from exploding. Even this method has taxed her utmost powers to pre-

vent a cataclysm there, as is evidenced by the German banks borrowing money of the United States banks on good collateral at rates running from 5 to 6 per cent clear through 1911-12. The banks of Germany even bid 20 per cent for money in the New York market in December, 1911, and at several periods since have bid in excess of 6 per cent.

Senator POMERENE. They have bid as high as 20 per cent?

Senator SHAFROTH. That was for call loans.

Mr. FRAME. Yes; that was for call loans. But it shows that even Germany with her flexible currency is still hard up occasionally.

Senator POMERENE. You mean by that at the rate of 20 per cent per annum?

Mr. FRAME. Yes; 20 per cent per annum. Of course that is not equal to our own experience, where we have bid up to 100 per cent.

Senator SHAFROTH. 400 per cent.

Mr. FRAME. Yes; that was an extraordinary case.

Senator SHAFROTH. Yes; it happened but once.

Mr. FRAME. And if we had a mobilized currency, in a centralized institution, where relief could be had we never would have any 100 per cent experiences.

Notwithstanding her 5 per cent penalized flexible currency saved her from panic, yet Germany has bordered thereon for some time, chiefly because of overindulgence in acceptances, which are more freely granted there than elsewhere, coupled with an enthusiastic industrial development, overtaxing her surplus capital.

Without further preliminaries, let us proceed to diagnose certain features of the "proposed bill on Federal reserve banks." I prefer not to discuss the matter of control, and will therefore confine my remarks to what seems to me more vital to the success of the measure.

First permit a specific reference to the effect of the "bill" on the bank of which I am president, the Waukesha National Bank. Ten per cent of \$150,000 capital is \$15,000; 10 per cent more, of course, is subject to call; 7 per cent of our deposits, \$2,100,000, excluding savings, is \$147,000; total required by the Federal reserve bank \$162,000. This exceeds our total capital of \$150,000. We probably would be willing to part with the \$15,000 for capital and also 1 per cent of our deposits, \$21,000, a total of \$36,000, which, with like contributions of other banks, would seem to mobilize an ample quantity of cash to fulfill the true mission of a reserve bank, to wit, to prevent suspension in the day of trouble by being able to loan freely to solvent banks in any troubled section.

All other sections will then keep the even tenor of their way through confidence. But to be forced into parting with \$147,000—practically our total capital of \$150,000—which is not subject to call, and without interest, seems beyond reason.

Except in panic periods we never rediscount—I will say as to that, that I have inquired in Milwaukee of one of the great banks there, having 400 country-bank accounts; and with the close money market last fall, only 60 banks out of 400 asked for very moderate quantities of rediscount in Wisconsin.

Senator POMERENE. There is a sort of public prejudice against them, now; but assuming that the system is changed, do you not think that that prejudice would die?

Mr. FRAME. I do not think so. And probably we had better pass that, as I have some thoughts I should like to express on that subject later.

Senator POMERENE. All right. I did not want to interrupt you.

The CHAIRMAN. Will you put into the record here, Mr. Frame, the present reserves which you carry?

Mr. FRAME. The present reserves which we carry?

The CHAIRMAN. In your bank.

Mr. FRAME. Do you mean in amount of cash?

The CHAIRMAN. In percentage.

Mr. FRAME. In toto?

The CHAIRMAN. Your total present reserves.

Mr. FRAME. Of cash and due from other banks?

The CHAIRMAN. Yes.

Mr. FRAME. We average about 18 to 20 per cent.

Senator POMERENE. That would make, if your total deposits are \$2,000,000—

Mr. FRAME (interposing). \$2,100,000.

Senator POMERENE. That would make your reserve, then—

The CHAIRMAN (interposing). \$420,000.

Mr. FRAME. We keep about that as an average.

Senator POMERENE. And what were your figures which you mentioned just now as to cash reserve and subject to call?

Mr. FRAME. It would take \$162,000 under this bill, and we keep on hand about \$150,000 of cash.

Senator REED. Well, when you said you had approximately \$400,000 of reserve, you did not mean that you kept that all in your bank?

Mr. FRAME. We keep \$150,000 in cash, and the \$250,000 due from banks in Milwaukee, Chicago, and New York.

Senator REED. Yes.

Mr. FRAME. So that as to most of the banks in Wisconsin, under the suggestion which I made before, although there was a close market last fall, there were 340 out of 400 that did not ask for rediscount. I can understand that in the South they require more rediscount than we do in our well-settled section and in other well-settled sections of the country.

Most country banks do not have the kind of paper acceptable at a reserve bank, therefore the arbitrary call for 7 per cent of deposits from country banks beyond recall seems far beyond reasonable requirements and a burden that they can not afford to bear. Country national banks now hold at least 6 per cent of deposits in cash. In fact, they hold about 7 per cent in Wisconsin.

Senator POMERENE. National banks, or all banks?

Mr. FRAME. National. National banks must necessarily hold 1 or 2 per cent more, of course, than the law requires, for there are fluctuations all the time. The new bill requires 5 per cent. This is a reduction of 1 per cent. Therefore, to take 6 per cent additional from them requires withdrawals from other income-producing funds. This seems, to my mind, clearly unjust and unnecessary.

How will the bill affect all Wisconsin banks? Now, this, of course, is an extreme case, because I have included them all. But taking those who do join as against the whole the result would be proportionately the same.

Senator REED. Do you mean all national banks?

Mr. FRAME. I mean all national and State banks, as a matter of illustration.

Senator REED. Yes.

Mr. FRAME. If all joined, this bill would require 10 per cent of the total capitals of \$3,800,000. They would be subject to call for \$3,800,000 more, 7 per cent from country and 9 per cent from Milwaukee reserve city banks, barring savings deposits, \$21,000,000; total, \$24,800,000.

All banks in Wisconsin now hold in total cash $5\frac{3}{4}$ per cent of deposits, \$21,000,000.

The new law compels banks to hold at least 5 per cent, and the three-quarters of 1 per cent extra would be necessary to cover daily fluctuations of cash. Therefore to comply with this new law, other income-producing funds, all of which will come out of Wisconsin, or securities, must be parted with to the extent of, say, \$25,000,000, all of which would go out of Wisconsin into a Federal reserve bank at Chicago. Is that fair to the farmers, the merchants, and manufacturers of Wisconsin? To rediscount at the Federal reserve bank at Chicago, banks must simply part with their choicest securities, losing interest thereon, for the doubtful privilege of borrowing back their own funds which they deposited there. Will the Wisconsin banks voluntarily do it? The answer is found in my canvass of 450 country banks of Wisconsin under the former bill, which called for 5 per cent of deposits. The amended bill calls for 7 per cent, which is 2 per cent more burdensome than when the canvass was made.

I sent about 450 banks the following question:

WAUKESHA NATIONAL BANK,
Waukesha, Wis., July, 1913.

BROTHER BANKER: As the new Federal reserve bank bill (H. R. 6454 or S. 2639) is now before the country for consideration, I have tried to diagnose it, and without considering other points am anxious to secure a consensus of opinion from Wisconsin bankers on the following:

The bill provides that each national bank shall:

First. Subscribe 20 per cent of its capital stock as capital for the Federal reserve bank; 10 per cent must be paid in on joining; 10 per cent is subject to call of the reserve bank; dividends paid on capital are limited to 5 per cent per annum.

Second. Each bank must pay 5 per cent of its deposits into the Federal reserve bank, on which no interest will be paid, and such deposit is not subject to withdrawal at any time.

Third. Each bank must keep not less than 5 per cent of its deposit liabilities in cash on hand.

CONTRA.

The advantages to be derived therefrom appear to be the limited right to discount with the Federal reserve bank:

(a) Notes and bills of exchange arising out of commercial transactions, maturing within 45 days.

That was under the other bill. The bill provides for paper maturing within 60 days now.

The CHAIRMAN. Yes; and up to 120 days.

Mr. FRAME. Yes; up to 120 days. Then it was 45 days.

(b) Loans running not over four months, secured on bonds of the United States, States, counties, or municipalities.

(c) Acceptances based on imports and exports.

(d) Loans on collateral satisfactory to Federal reserve board.

Considering the advantages in contrast to the disadvantages, would your bank voluntarily join this Federal reserve association?

Sincerely, yours,

ANDREW JAY FRAME. *President.*

Out of the 450 letters sent out I have received up to this date about 320 answers. One small country national bank, with \$25,000 capital, and one small State bank, with \$25,000 capital, answered "yes," without qualification. Nine answered "yes," but expected the bill to be more or less modified.

Senator SHAFROTH. How many were there who answered that?

Mr. FRAME. There were 9. Out of 320 banks 309 answered "no."

Senator POMERENE. How many is that who answered "no.?"

Mr. FRAME. There were 309. I left out the Milwaukee city bankers, and therefore they were all country bankers.

Senator POMERENE. Did they assign any reasons?

Mr. FRAME. About 30 or 40 of them gave short or long reasons; but the general tenor of the reasons that were given was that they could not see their way clear to putting up 5 per cent of their deposits. They thought that was excessive and unprofitable to them; it seemed too much.

Senator POMERENE. Will it interfere with you if I ask a question there?

Mr. FRAME. No.

Senator POMERENE. Are you able to state what the average dividends are on your bank stocks in Wisconsin?

Mr. FRAME. No; I could not.

The CHAIRMAN. On your own bank, what would they be?

Mr. FRAME. On my own bank we make an average of about 8 per cent, I guess, of our capital and surplus.

The CHAIRMAN. What is your surplus?

Mr. FRAME. \$150,000 now.

Senator POMERENE. Well, yours must be, from your statement, one of the unusually successful banks; and yours is about the equivalent of 16 per cent on your capitalization.

Mr. FRAME. No; I said capital and surplus.

Senator POMERENE. But 8 per cent—

Mr. FRAME (interposing). On capital and surplus.

Senator POMERENE. Well, I know; 8 per cent on the two.

Mr. FRAME. Yes.

Senator POMERENE. Or 16 per cent on the capitalization.

Mr. FRAME. It would be about 16 per cent on capitalization. But we have been in business now for more than 50 years.

Senator POMERENE. Yes; I understand that.

Mr. FRAME. It has been a long accumulation; slow.

Senator POMERENE. I understand that. Is it fair to assume that the average dividends on these banks are about 6 or 7 per cent?

Mr. FRAME. I think a little bit higher than that.

Senator POMERENE. 8 per cent?

Mr. FRAME. So far as national bank dividends are concerned, since 1863—50 years—I think they would average 8½ per cent.

Senator POMERENE. Well, assuming that it was 7 per cent. I suggest that, because I do not think yours is any criterion by which we can judge any other banks, by your statement.

Mr. FRAME. I think it a fair criterion.

Senator POMERENE. So that the stockholders would only be receiving 2 per cent more of dividends on their stock in the banks as now organized than they would receive on that portion of their capital which was invested in the stock of the regional banks?

Mr. FRAME. The fund which is put in by the different banks as stock for the regional reserve banks, as far as I am concerned, I can find no special fault with that, because I would be satisfied with 5 or 6 per cent on that.

Senator POMERENE. You would be just as much satisfied as you would be with a Government bond, and even more satisfied, because the income would be better.

Mr. FRAME. I do not find any fault with that.

Senator POMERENE. No; I do not think there can be any fault found with it. Your objection goes to the amount of the reserve.

Mr. FRAME. The percentage of deposits which are called for.

Senator POMERENE. Yes.

Mr. FRAME. Two per cent even on our \$147,000 would make nearly \$3,000 a year—just that 2 per cent alone would cut off 2 per cent per annum on our dividends.

Senator POMERENE. Well, I am interrupting your statement here, and I regret having done so.

Mr. FRAME. That is all right to get it in here if it will be of any assistance, of course.

Senator REED. Mr. Frame, have you finished that point about the canvass of the banks in your State?

Mr. FRAME. Yes, sir.

Senator REED. Then, I should like to ask you now if you think that the question which you sent out, together with the explanation, was a fair presentation of the advantages of the bill?

Mr. FRAME. It seemed to me to be so.

Senator REED. Well, did you anywhere state, Mr. Frame, that it was part of this plan, that when money was needed the reserve bank could transfer to the Federal Government the securities it had on hand and receive money at a low rate of interest, the money in turn to be distributed to the member banks; did you state that proposition to them?

Mr. FRAME. I thought it was covered in the question of rediscounts. I so understand it. It has the privilege of rediscounting at any time.

Senator REED. And you think that covered it?

Mr. FRAME. I think so.

Senator REED. Now, did you send anything else than just that letter, the substance of which you have read to us?

Mr. FRAME. No, sir.

Senator REED. You made an attempt to fairly state the case and secure an expression of opinion, did you?

Mr. FRAME. That is what I tried to do.

Senator REED. Do you know whether these bankers to whom you wrote, or any considerable number of them, had really taken the bill and studied the bill?

Mr. FRAME. You have asked me a question that it would be rather difficult for me to answer.

Senator REED. Well, I would not expect you to answer it, except that you might, by conversation, or by letter, have gathered knowledge of the fact that they were familiarizing themselves with the bill, or that they were simply acting upon the statements contained in your letter.

Mr. FRAME. Well, I think that more or less of them had studied the subject somewhat, but not thoroughly.

Senator REED. Now, have they had any meetings, the bankers of your State, since you wrote this letter?

Mr. FRAME. Yes, sir.

Senator REED. Have they discussed this bill in the meetings?

Mr. FRAME. Yes, sir.

Senator REED. What has been the character of those meetings; I mean have they been general meetings of the bankers, or only small groups of bankers?

Mr. FRAME. I sent general invitations to all of the national bankers, but not to the State bankers, because it is voluntary with them whether they come in under the bill or not.

Senator REED. You sent out invitations to a meeting?

Mr. FRAME. Yes, sir.

Senator REED. Did you have that meeting?

Mr. FRAME. We did; and nearly 30 of them attended, from different sections of the State.

Senator REED. Where did you hold that meeting?

Mr. FRAME. At Milwaukee.

Senator REED. And you got in about 10 per cent, then, of the national bankers?

Mr. FRAME. No; we got in more than 20 per cent.

Senator REED. You got in more than 20 per cent?

Mr. FRAME. Yes, sir.

Senator REED. The meeting was pretty generally attended from all parts of the State?

Mr. FRAME. They came from the West, clear across to La Crosse, Oshkosh, Fond du Lac, and other sections of the State.

Senator REED. So that you would say that the meeting would be fairly representative of the State at large, and not of a particular section of the State?

Mr. FRAME. Yes, sir.

Senator REED. Mr. Frame, did you adopt any resolutions, or do anything at that meeting?

Mr. FRAME. We did; and the resolutions are here.

Senator REED. Ah, well, I did not know that. So that you have a later expression of opinion than that contained in your letter?

Mr. FRAME. Yes, sir.

Senator REED. Can you tell us, without putting your record in at this time what that expression of opinion was as to the banks coming in or staying out of this plan?

Mr. FRAME. We passed resolutions; and if you wish I can read them.

Senator REED. Well, I would like to have them read into the record here, because it is on the same topic. Are they long?

Mr. FRAME. No; just one page.

Senator REED. Well, could you read the part in which they express their opinion as to coming in or staying out?

Mr. FRAME. Yes, sir.

Resolutions as passed by the country national banks of Wisconsin.

Whereas a conference under the auspices of the currency committee of the American Bankers' Association was recently held in Chicago which conference failed to adopt suggestions made by country bankers to reduce Federal reserve bank deposits required of country banks from 5 to 1 per cent of their deposits; at the same time this conference recommended material reductions as to reserve city banks' reserve requirements, which recommendation has since been incorporated in the bill. Further, such a reduction of reserves by the central reserve city banks is no burden to them as against a severe burden as placed upon the country banks, which the latter can not afford to bear, because their cash reserves are proportionately smaller; and

Whereas the bill as drawn has many admirable features, yet we as country bankers believe several amendments are very essential: Therefore,

Resolved, That we urge upon Congress the following essential principal changes, viz:

(a) So amend the bill that country banks not in reserve cities be compelled to contribute not exceeding 2 per cent instead of 5 per cent plus 2 per cent at end of three years of deposit liabilities for the reserve of Federal reserve banks.

(b) As section 27 of the bill (creating savings departments) provides for a segregation not only of securities covering the savings deposits but a segregation of capital to an amount equal to 20 per cent of capital and surplus; but capital can not be less than \$25,000, and, requiring investment of such demand deposits in long-term securities, which we believe wrong in principle, and not offering such security as is now offered savings depositors, we urge this section be eliminated from the bill.

(c) That the term of real estate loans be increased from one year to five years.

(d) That dividends allowed reserve bank stockholders be increased from 5 to 6 per cent.

(e) That the 40 per cent of excess earnings allotted to banks be divided among them on the basis of capital stock in reserve banks instead of on average deposits therein.

(f) That banks be allowed the same interest on deposits as is allowed upon Government deposits."

That concludes the resolutions.

Senator REED. Well, I think that concludes the topic you were on, and I do not wish to interrupt you any more than is necessary.

Mr. FRAME. I just wanted to explain that point as to this savings-bank question. As you understand, country banks, of course, only have one of two employees in their office, and it is exceedingly difficult to segregate and keep two sets of books, and two banks really—and there is the double capitalization. That was one of the most serious objections to the bill; of course, I mean as far as country banks are concerned. I can, of course, understand that a segregation of the large banks in cities is all right, but as far as country banks are concerned, it is rather a troublesome proposition. Then, because national banks have capitalization, Government regulation, limitations on loans, and all that kind of thing, which is proof that we have got a wonderfully fine banking system, so far as safety is concerned, we thought that was ample security for savings-bank deposits.

But let us broaden into all United States national banks. Ten per cent of \$1,050,000,000 approximate capital calls for \$105,000,000. They are subject to calls for \$105,000,000 more. Four and one-half per cent from central reserve city banks' aggregate deposits, say,

\$2,000,000,000, is \$90,000,000. Nine per cent from general reserve city banks' deposits of \$2,250,000,000 is \$202,500,000. Seven per cent from country banks' deposits of \$3,750,000,000, aggregate, is \$262,500,000. Total called from the three different kinds of banks, \$660,000,000.

I allow off from this, for deductions as against requirements on savings-banks deposits, say, \$60,000,000, leaving a net call on all the banks of \$600,000,000 from national banks alone, not counting United States deposits, nor from a single State bank in the country.

To loan two-thirds of this \$600,000,000, which the bill permits in normal times even, is simply competing for choice loans which all banks are now clamoring for, and with the very banks that furnish the funds without interest therefor. When so loaned the reserve is gone. Such colossal demands are not paralleled in the world's history on banking.

To take away from the national banks alone more than one-half of their total capital seems beyond the pale of reason. With over 25,000 independent banks in the United States, we now have the most democratic banking system in the world. The national banking system has proved the safest for the depositors the world ever knew. The State systems, under improved laws in most States, in the past 15 years have made wonderful strides upward.

If I may stop a moment on that question of the national banking system being the safest for depositors ever known, I will say that within the last 50 years, with the immense business of the national banking system, the total losses to all the depositors in the half century of business does not exceed \$40,000,000. The City of Glasgow Bank, in Great Britain, failed in 1878, with 131 branches. It had \$70,000,000 of deposits and its losses were about \$35,000,000—almost the total losses to all the depositors in all the national banks of the United States from 1863 to the present.

Senator BRISTOW. What per cent of the deposits do the losses represent in that 50 years? Have you figured that out?

Senator SHAFROTH. It is said to be less than one-tenth of 1 per cent.

Senator BRISTOW. Is it not about one-fortieth of 1 per cent?

Mr. FRAME. I can not answer that offhand. I used to be a kind of walking encyclopedia on this subject; but I am getting along in years, so that the figures slip my memory.

Senator BRISTOW. I think it is less than one-twentieth of 1 per cent.

Mr. FRAME. But it is a healthful condition, all said.

Senator REED. Well, you do not seem to think that we have got the poorest banking system in the world, then?

Mr. FRAME. That is a broad statement that can not be verified. I am willing to stand up and debate it with any man on the face of the earth. I think I have proof in my papers, for I have been on platforms delivering addresses for 25 years. I have addressed nearly half the State bankers' associations of the United States, the American Bankers' Association, bankers' clubs, and business men's clubs all over the country, and therefore I have given the matter quite careful study, not only of our own system, but of the rest of the world—at least the progressive world. I have not gone into the unprogressive nations.

Again, in 1893, I think it was, in Australia they had 28 central banks with 1,700 or 1,800 branches. In that year, within six months, 13 of those 28 principal banks failed and, with 800 or 900 branches, closed their doors. The Government of Australia permitted them to take from one to five years in which to settle with their depositors. They did recover, but with quite a few of them it was a number of years before any dividends were paid. So that there is a branch-bank system in Australia that was far more disadvantageous than the splendid system which we have had, if we can only cover that one point—to prevent the suspension of cash payments. It is the only serious defect in our system, in my judgment.

I say, as to our banking system, that both State and national systems have done more for the farmer, the merchant, and the manufacturer in upbuilding this wonderful Nation than any monopolistic, branch-banking, cream-skimming system ever did for any Nation.

Senator REED. What kind of system?

Mr. FRAME. Cream skimming. I would like to illustrate, if you will permit me.

Senator REED. I thought you had given a phrase that I understood.

Mr. FRAME. I should like to give an illustration as to the Canadian banking system. Perhaps, however, I had better pass that for the present, and, if you will allow me, to explain what I mean by the cream-skimming system, I will do so later.

Senator REED. Yes; I wish you would.

Mr. FRAME. The only thing we need is a moderate mobilization of a part of our scattered cash reserves, which should be held like a full reservoir to put out a fire in its incipient stage whenever it appears.

As panics are bred only in great cities care for them once in 10 or 20 years, and the country will care for itself in normal times.

As to the fallacy that all other nations are free from panics, I respectfully refer to my late Oklahoma address, entitled "Facts *v.* Fallacies in Banking Reform," pages 4 to 7, and I am impressed that the most skeptical will accept the evidence as conclusive.

Senator REED. Now, you are referring to something that may be interesting. Have you that here with you?

Mr. FRAME. I have it here.

Senator REED. If you are going to refer to it, I suggest that you put it in the record.

The CHAIRMAN. Yes; I think that would be well. Let it go in.

Mr. FRAME. Well, then, if I give an explanation of it, perhaps there is no occasion for me to make any further record of it.

Senator REED. If you are going to read it in, why not do so, and let us hear it while you are upon the subject? How long is it?

Mr. FRAME. It is perhaps 8 or 10 pages.

Senator SHAFROTH. You could read that without quoting all of it, could you not?

The CHAIRMAN. Just a part of it.

Senator REED. The part that you have referred to, Mr. Frame.

Senator SHAFROTH. Well, I think he had better get through with this statement of his first.

Senator REED. Well, you have referred to a document as proof of the fact.

Mr. FRAME. As proof both as to this question of panics and as to the Canadian banking business. They are both in the pamphlet. I think it would be better to put both in.

The CHAIRMAN. What is the pleasure of the committee?

Mr. FRAME. It also covers the banks abroad.

Senator REED. Well, if you have got two different subjects there, I did not understand that. It seemed to me that it should be put in the record differently. I supposed that you had some documentary evidence of the assertion you have just made as to panics.

The CHAIRMAN. The statement to which he has referred is an argument previously made by him.

Mr. FRAME. The part in reference to panics is covered in pages 4 to 7.

Senator REED. Well, is there not a table in that book showing the different panics?

Mr. FRAME. Yes, sir; the panics in this country and abroad.

Senator REED. Suppose you put that table in and then you can put the whole thing in, possibly.

The CHAIRMAN. Whatever is agreeable to the committee is agreeable to the Chair.

Senator SHAFROTH. I think we had better let Mr. Frame put in that pamphlet wherever he wishes it to go.

Mr. FRAME. There is little in the paper outside of those two subjects which I have already touched upon.

Senator SHAFROTH. Do you want it to go in right now or do you want it at the end of your statement?

Mr. FRAME. It had probably better go in as an addenda to my statement.

The CHAIRMAN. Very well; it will be inserted in the record.

(The paper directed to be incorporated into the record appears at the close of Mr. Frame's statement.)

Mr. FRAME. I now refer to national-bank reserves, approximately, at the end of three years, as required. I wish you to note what appears to me to be an unjust discrimination toward country national banks. First the three central reserve city banks must contribute 10 per cent of capitals on, say, \$180,000,000, which is \$18,000,000, subject to assessment of \$18,000,000 more; $4\frac{1}{2}$ per cent of aggregate deposits—say, \$2,000,000,000, which would be \$90,000,000, making the total required of three central reserve city banks \$108,000,000.

As these banks are now required to hold in cash 25 per cent of deposits, and the new bill reduces it to 18 per cent, that releases in cash 7 per cent of deposits from the central reserve city banks, or \$140,000,000. This costs them not \$1 and leaves \$32,000,000 toward liquidating any reduction of other reserve-bank deposits, the burden of which is problematical.

The fact is that it really relieves them about \$50,000,000 because the \$18,000,000 that they contribute to capital they get dividends on. It is a mere transfer of their funds of \$18,000,000 of ordinary loans for which they would receive 5 per cent dividends on stock in the Federal reserve banks. It would be a fair exchange. Transferred in that way into capital stock, it would pay them about the same, except that it takes \$18,000,000 out of their funds, which they ordinarily might use in other lines. That, however, is a small matter.

Second. The general reserve city banks must contribute 10 per cent of capitals on, say, \$270,000,000, which is \$27,000,000; subject to assessment of \$27,000,000 more; 9 per cent of aggregate deposits, say, \$2,250,000,000, which is \$202,500,000; making a total required \$229,500,000.

The present law requires 12½ per cent cash reserves. The new bill requires 9 per cent. That releases in cash 3¼ per cent of deposits, or \$78,750,000. This takes from them over \$150,000,000, in addition to the country bank deposits they will lose, from those joining the Federal reserve bank. This burden is a serious one and probably will precipitate trouble.

Third. The country banks must contribute 10 per cent of capitals on, say, \$600,000,000, which is \$60,000,000; subject to assessment of \$60,000,000 more; 7 per cent of aggregate deposits, say \$3,750,000,000, which is \$262,500,000. This makes the total from country banks \$322,500,000. Cash reserves now required is 6 per cent; in the new bill 5 per cent. This releases 1 per cent of deposits, or \$37,500,000. This means the country banks must contribute, net, \$285,000,000 from their assets, in addition to \$37,500,000 cash, for the use of the Federal reserve bank. The balance of cash on hand is required under the new bill for reserves. The only deduction I can see is to cover savings bank deposits of, say, one-tenth of the total.

Now, can any statesman justify such calls, especially from the country and general reserve city banks? This transfers immense sums to the great cities and impoverishes the country banks' loaning powers. Is it constitutional to arbitrarily take such colossal sums from the banks? Stock subscriptions and deposits in European central banks, I believe, are entirely voluntary. Why not do likewise here?

I am with you, except only I think that it is excessive. I believe in the underlying principles of the bill.

We all desire a reasonable mobilization of cash to the end that cash suspension of banks may be avoided, but such calls seem far beyond reason to accomplish the object sought. Reason must reign, or a continual warfare for a repeal of the bill will bring a second Andrew Jackson to destroy these banks.

What we want to do is to work in harmony together. We want it so reasonable that we can afford to go into it even if it should cost a little to go into it. I am willing that it should; I believe all banks are willing that it should; but I believe you should do what seems fair and not oppressive.

From my canvass of 450 country banks of Wisconsin, the result of which is herewith submitted, I am confident if country national banks contribute 10 per cent of capitals and 1 per cent of deposits, approximating \$100,000,000, it is all that should be required of them. To demand more, I believe, will seriously injure if not wreck the system, and State banks will not join.

I respectfully submit herewith a tentative compromise plan, which should be acceptable to the Government, as it covers the underlying principle of the bill, and probably would be acceptable to the banks. The object sought would also be attained. Let us get together and preserve our splendid independent banking system.

I now come to the tentative suggested amendments to House bill 7837 on Federal reserve banks.

The reserves: National banks are now compelled to hold in cash as reserves, in three central reserve cities 25 per cent of deposits, in general reserve cities $12\frac{1}{2}$ per cent of deposits, and in country banks 6 per cent of deposits. I would amend as follows, in order to mobilize cash for troublous periods:

Take 5 per cent of deposits from the 25 per cent held by three central reserve cities, say, \$85,000,000; take $2\frac{1}{2}$ per cent of deposits from the $12\frac{1}{2}$ per cent held by general reserve cities, say, \$50,000,000; take 1 per cent from the 6 per cent held by country banks, say, \$35,000,000.

I may be low on my estimate there.

This will mobilize in cash about \$170,000,000. This is not counting a percentage of deposits of banks with reserve banks. I do not make any compilation on that, but the new bill requires these percentages on aggregate deposits; so that it will require not only on individual deposits but on banks with banks. I am sure I am right about that; so that it will increase this probably to \$200,000,000. This is taking just one-fifth, approximately, of the cash now held by each of the different kinds of banks—three central reserve cities, general reserve cities, and the country banks.

If 5 per cent and $2\frac{1}{2}$ per cent, respectively, of these were included, it would increase the mobilized reserve of cash to, say, \$200,000,000.

The 5 per cent, $2\frac{1}{2}$ per cent, and 1 per cent cash taken from present reserves should be still counted by depositing banks as reserves while it is in the Federal reserve bank, and would leave ample cash in all banks for ordinary times. The country banks can not afford to part with 7 per cent of their deposits for use of the Federal reserve bank.

It seems reasonable that the banks would accede to this, as it is not seriously burdensome to part with, say, one-fifth of their cash, as they would have the assurance that the cash mobilized in the Federal reserve bank would assist any section of the country when trouble threatens. This would inspire confidence. State banks in well-developed sections would be inclined to join under these conditions, and, if done in great centers, the \$200,000,000 reserve would be materially enlarged. If capitals paid in and Government deposits were added, the reserve funds would probably exceed \$350,000,000, which is ample for all reasonable requirements.

I think I am materially within the mark, as I want to be careful of my statements.

As a secondary relief for emergencies, permit State as well as national bank members to borrow from the Federal reserve bank, secured by ample high-class collateral from a fund of Federal reserve bank notes held for that purpose. Such currency should be loaned on a plan similar to the 5 per cent taxed currency issued by the Imperial Bank of Germany, which gives true flexibility there.

I will say that in the past 35 years the Imperial Bank of Germany has loaned its 5 per cent taxed currency to the other banks on rediscounts some 200 times. It comes out when there is a pressure for funds, rises sometimes higher or lower, as the case may be, and just the moment the rate of interest drops a little below or down to normal the 5 per cent taxed currency is retired.

Senator REED. When it touches 5 per cent it comes back pretty fast.

Mr. FRAME. That is what brings flexibility to it. Flexibility means expansion and contraction. If you do not have expansion and contraction, you will never have flexibility. You must have contraction which comes with it. That is the experience of Germany.

As to capital, say 10 per cent subscribed and 5 per cent paid in, that would add \$50,000,000. As to banks generally subscribing 20 per cent and at once paying in 10 per cent of their capitals, as capital for the Federal reserve bank, and receive dividends limited to 5 per cent per annum paid on capital, it is doubtful about country banks in undeveloped sections joining, as interest rates would naturally prevent.

Banks where surplus capital is not abundant and their own home demands require it—and at higher rates than the 5 per cent—would think it quite hard to have to part with it simply for the purpose of getting the rediscounts for relief in panic periods once in 10 or 20 years. If the present centralized institutions could obtain relief when needed, all other banks would get all accommodations and relief necessary through the present system of central reserve depositories. If our credit is good with the banks with which we do business in Chicago, Milwaukee, and New York, we can always get a rediscount, and if we had a Federal reserve bank with a mobilized lot of cash ready to take care of them, we would never have a suspension of cash payments.

If we had had a Federal reserve bank in New York in 1907 when the depositors were pulling funds out of the trust companies that first got into trouble, and then it spread to other banks through distrust and generally cash began to be lowered, all the banks got together for fear they were going to lose all their cash. They decided to suspend cash payments and wired to all the banks throughout the country, "No cash going out of New York Monday morning on balances." Those banks in New York which were perfectly good, like the National City Bank, the First National, the Chase National, held limited reserves. If they could have had a pot where they could have got rediscounts on securities from some extra cash reservoir they never would have sent such a telegram throughout the country and we would have gone along the even tenor of our way about the business of the country.

Senator POMERENE. That is, they kept the money for their own use and let the country bankers outside take care of themselves?

Mr. FRAME. Well, I think that was justifiable. They only had limited reserves. If they could have had a pot where they could have gone to; if they could have had a pot like the Aldrich-Vreeland Act now upon the statute books provides for—

Senator POMERENE. That fact alone indicates the necessity for some change in what you call the beautiful independent banking system.

Mr. FRAME. It is all right, except for that one feature, a rigid currency. I said that in the beginning; but as far as the general banking system itself is concerned I think it is all right.

Senator REED. You think it is not necessary for a man to surrender his liberty as a citizen in order that he may have some special advantage conferred upon him once in a while by the Government?

Mr. FRAME. That is the thought; but I think the scope of the bill is too large and more than is really necessary to accomplish the

object sought. That is the important thought. I believe in the underlying principles of the bill, as we want relief so that we need not have cash suspension; but I do not believe in such generous, large contributions; I do not believe that is necessary to accomplish the object sought.

Senator BRISTOW. Now, suppose that bank in trouble in 1907 could have gone to the Government with approved securities and got currency for them as it needed it without any of this supervising machinery to lie dormant here for so many years?

Mr. FRAME. You mean to have gone direct?

Senator BRISTOW. Yes; to have gone direct. Why would not that have answered the purpose just as well?

Mr. FRAME. From a fund that the Government held? Is that your idea?

Senator BRISTOW. Yes.

Mr. FRAME. And how would that fund be accumulated or loaned?

Senator BRISTOW. It would be divided just as the money we have now under the Aldrich-Vreeland Act.

Mr. FRAME. You would have a large fund of cash in some reservoir, retaining it and loaning it when panic or trouble ensued?

Senator BRISTOW. Well, we would have it if it is needed.

Mr. FRAME. I believe in that; but I would penalize it by a tax sufficiently high, because if you do not do that, as long as you can issue currency at will, without a tax, and loan it at high rates of interest you tend to overstrain credit.

Senator BRISTOW. Yes; that is true, of course. That is a question of the amount of the tax.

Mr. FRAME. That is a question as to how high the tax should be.

Senator BRISTOW. The Aldrich-Vreeland Act provides for taxation, and the objection to it, as I understand it, is that it is not made available with sufficient ease. The objection is not so much against the interest as to the methods by which it may be utilized.

Mr. FRAME. I agree with you perfectly on that; yet, at the same time, before a bank would suspend I think it would put up the bonds as collateral security. We hold \$100,000 of bonds to-day; we have held them since that bill was enacted into law. Eighty banks in the State of Wisconsin hold bonds they purchased for the purpose of getting additional currency under the Aldrich-Vreeland Act should occasion require. They hold it as a kind of secondary reserve, and if it came to the point that it was absolutely necessary to do so to prevent cash suspension we would put up our bonds and get our currency. There has been, as Prof. Sprague said, a sentimental protest against it because of its publication. If it could be done, and done quietly, without making a noise about it through the public press—if you can arrange in some way so that that can be done I think it will be availed of. Other rediscounts with present central organizations, in normal times, are ample.

Senator BRISTOW. So that the public would not get the impression that the bank had had financial trouble?

Mr. FRAME. Exactly.

Senator BRISTOW. So that no other view of this could be taken except that it was simply a business move and not an indication of danger?

Mr. FRAME. That is right exactly. You were not here when I commenced my statement and spoke of how I got relief in 1893. I regret that you were not.

Senator BRISTOW. I will be glad to read it when it is printed in the hearings.

Senator REED. Now, about the money which was provided for by Aldrich-Vreeland bill. It has never been used, but since 1907 we have never had any very bad times, have we?

Mr. FRAME. It has been a little close this fall but not to the extreme that it has compelled banks to take advantage of it. I believe that nearly \$300,000,000 of capitalization of the banks of the United States, principally in the great cities, have organized under the Aldrich-Vreeland Act to take advantage of it in case of necessity, and the kindness and goodness of our Secretary of the Treasury in saying that he proposed to issue that if it became necessary and his disposition of the extra funds that he has distributed throughout the country has restored a condition of confidence, and loss of confidence is what produces panic. Confidence upbuilds, distrust pulls us down.

Again, country banks rarely have the kind of prime paper discountable at the contemplated reserve bank.

Take care of the big centers in trouble, and the country will never be seriously agitated.

A Federal reserve bank on above lines in New York, Chicago, and San Francisco, will fully accomplish the end sought without vast expense.

If my suggested tentative amendments as to reserves as hereinbefore noted were adopted, to my mind you will fully accomplish the objects sought and without material expense, as it could be done through present subtreasuries. A large number of Federal reserve banks would be very expensive in outfits, managements, employees, etc. Therefore three subtreasuries now doing business would limit the cost. In ordinary times the present central reserve banks will take care of us all right, just as they do now, but occasionally in a hard money market these three subtreasuries would assist any section of the United States without any trouble whatever. The First National Bank of Chicago has its correspondents scattered from one end of the Northwest to the other, clear over to Washington, Oregon, and California. If that bank is asked for a rediscount, it knows whether to make it or not. Therefore there is no difficulty in a few centralized organizations taking care of our vast country as a panic panacea.

Senator REED. You hold that the banks of to-day have intimate knowledge of the business of banking and the solvency of their correspondents?

Mr. FRAME. Central reserve banks keep credit bureaus so that they keep tab on country correspondents.

Senator REED. So that they are able to determine what paper they shall take, and they do that without assistance from the Government in the way of governmental inspection of the paper?

Mr. FRAME. Yes.

Senator REED. I do not mean of the banks.

Mr. FRAME. Yes, sir; I think so; without any trouble.

I would like to speak just a moment or two upon the gold standard under the bill.

Great Britain, since 1816, unequivocally maintained it, and London is the world's clearing house.

We have fought the good fight for the gold standard for 40 years and won.

Our coin and currency holdings are now plethoric. As we have in gold about \$1,800,000,000, soft money, national-bank notes, silver dollars, legal-tender notes, and subsidiary coin; about \$1,800,000,000, total, say, \$3,600,000,000.

About one-half of our total circulation is "flat money." Far in advance of all Europe combined.

This "bill" permits an unlimited issue of currency above that now outstanding. The bill also provides for Federal bank reserves, either "gold or lawful (credit) money."

Dr. Adam Smith says:

The cry of all ages is for more money. Money, like wine, is always scarce with those who have neither the credit or wherewithal to buy it.

Christ said:

A wise man builded his house upon a rock, but the foolish man upon the sand. When the rain descended and the floods came and the winds blew the wise man's house fell not, but as to the foolish man's house great was the fall thereof.

Is not this a perfect simile to apply to the building up of the superstructure of our great credit system upon a sound metallic currency for a foundation as against the sands of a credit currency? The pages of history are strewn with proofs that when the great instrument of exchange is deranged all trade, all industry, is stricken as with a palsy. That instrument of exchange recognized by the world as the solid foundation that does not totter when the storm rages in its severest intensity, is the only foundation for a prosperous people to rest upon and to-day our coffers hold over a billion of dollars of it. This is a billion-dollar country and we need it. This gold has come to us since 1873 in the natural course of trade in response to the well-known principles of the Gresham law and monetary science as expounded by Dr. Adam Smith, Ricardo, Jevons, Sumner, and many other eminent economists, and as also clearly set forth in what Prof. Sumner dubs the most important document in financial literature, "The celebrated bullion report of 1810 to the House of Commons." I have quoted these maxims before, but deep-seated error requires repetition of them again and again. Summed up these principles are:

1. That rich countries will have all the coin they need, providing no impolitic act of legislation interferes to force it out of circulation by the injection of inferior currencies.

2. When the coin in any country exceeds the effectual demand no vigilance of government can prevent its exportation.

3. It is the province of Government to settle the quality question of money, and the needs of commerce will settle the quantity.

In proof of the above maxims, history says, Chinese walls, jails, shotguns, or hanging did not prevent exportation of coin, and in these modern days the object lesson of the exportation of millions of gold in the past three months in the face of the plea for "more money in the United States" is more potent than pages of logic. Let us fix the "quality" question and stop tinkering with the "quantity," as the needs of commerce will settle that.

All issues, not gold, are "inferior currencies." If we inject more I. O. U.'s as a product of the printing press than we have now, we drive gold out under the Gresham law.

Prof. Jevons says:

Many well-intentioned people have disbelieved in the Gresham law, to the great cost of States and the perplexity of statesmen who have not studied the principles of monetary science.

I firmly believe this bill to hold as reserves for liabilities of the Federal reserve bank either "gold or lawful money" is a menace to the gold standard, and will postpone the day when New York City will become the world's clearing house, thus supplanting London.

The House of Representatives is to be commended for its noble stand yesterday to maintain the gold standard, but I am strongly impressed the foregoing will add strength to our onward progress toward the world's financial supremacy.

Senator REED. What is it that they did in the House of Representatives yesterday that you specifically refer to?

Mr. FRAME. They indorsed the gold-standard bill of March 14, 1900; that is the thing I commend.

In this bill the 33 $\frac{1}{3}$ per cent against liabilities should be gold, and gold alone.

Senator REED. You think what ought to be gold?

Mr. FRAME. The reserve. I think that the Federal reserve bank must hold on outstanding liabilities gold instead of lawful money.

Senator REED. Have you finished referring to your manuscript?

Mr. FRAME. Yes, sir.

Senator REED. You have already touched upon the matter, but I want to ask you a question or two about it. We have been frequently told that this banking system of ours is the poorest in the world. You say that it is one of the best. Is there any banking system anywhere in the world that you know of that, taken all in all, is as good as our banking system in your opinion?

Mr. FRAME. I think there is not one in the world equal to it.

Senator POMERENE. There is not, you say?

Mr. FRAME. I say there is not—and most State banking institutions to-day are materially better than they were 15 years ago. They are improving continuously.

Senator REED. Speaking of panics, we have heard a good deal in these hearings about the wonderful system in England, conducted by the Bank of England, and while you have, by reference, incorporated this report of yours on the Bank of England into the record, I want to ask this question about it. On page 6 of this document which you attached as an exhibit is a statement of panics and of losses.

In Great Britain, from 1836 to 1839, we have reported panics with no record of the losses.

Mr. FRAME. I was unable to find any.

Senator REED. And the same years a panic in the United States with no record of losses?

Mr. FRAME. I was unable to find any also.

Senator REED. In 1847 you have recorded in England a panic and a loss of £15,000,000 and no corresponding panic for that year in the United States.

Mr. FRAME. That is correct, except liabilities were £15,000,000 sterling, not losses.

Senator REED. Where did you get your figures for that statement? That was £15,000,000 loss in England.

Mr. FRAME. That is on page 5.

Senator REED. That is quoted from McLeod's History of Banking. Is that a standard work?

Mr. FRAME. I think there is no doubt of it.

Senator REED. In 1857 you have recorded another panic in Great Britain with the statement "no record except far greater than 1847." In that same year there was a panic in the United States. So that again it transpires that we had a panic the same year Great Britain did and there was no record preserved of losses.

Mr. FRAME. I was unable to find any.

Senator REED. In 1866 we have reported in England a panic with a loss of £50,000,000.

Mr. FRAME. Yes, sir; 1866, with liabilities of £50,000,000 sterling, not losses.

Senator REED. And a panic for the same year is not recorded in the United States.

Mr. FRAME. There was none then.

Senator REED. Where do you get your authority for your statement that there was £50,000,000 loss by the panic in England—from McLeod's History of Banking?

Mr. FRAME. Yes, as to McLeod; but the liabilities of the failed banks were £50,000,000.

Senator REED. These figures represent the liabilities?

Mr. FRAME. Yes, sir.

Senator REED. But they do not then, of course, represent the losses?

Mr. FRAME. No, sir.

Senator REED. Have you anywhere any figures showing what actually was lost?

Mr. FRAME. I was unable to find any record of that.

Senator REED. In 1873, according to this report, we appear to have had a panic, whereas they did not have in England a panic that year; and you have here a record of £2,200,000—our money being reduced to pounds—in the national banks of our country.

Mr. FRAME. The banks that failed in 1873—national banks—had liabilities of £2,200,000.

Senator REED. There would not appear to be any relationship between that panic in this country and the panic in England.

Mr. FRAME. No, sir.

Senator REED. In 1878 a panic is recorded in Great Britain with liabilities of over £20,000,000.

Mr. FRAME. Yes; £20,000,000.

Senator REED. And we had no panic in this country that year?

Mr. FRAME. No, sir.

Senator REED. In 1900 they had another panic in England.

Mr. FRAME. That was in 1890.

Senator REED. That is right—with liabilities of £21,000,000.

Mr. FRAME. Baring Bros. failed for £21,000,000.

Senator REED. That was the Baring failure?

Mr. FRAME. Yes, sir.

Senator REED. And we had then in 1893 the panic recorded here, with liabilities of national banks at £6,000,000 and of all other banks £14,800,000. Do you get all those figures from McLeod?

Mr. FRAME. No; those figures of 1893 are taken from one of the reports of the Comptroller of the Currency.

Senator REED. In this country?

Mr. FRAME. Yes, sir.

Senator REED. Now, I want to ask you this question if you can tell me. Take this panic of 1836 to 1839 and the same period of years the panic in this country. Is it your opinion that those panics had any relation to each other or just happened to occur at the same period of time?

Mr. FRAME. Well, I think not, except in 1856 and 1857. I think those panics seemed to be world-wide, or at least happened abroad and in the United States, too.

Senator POMERENE. What years do you refer to?

Mr. FRAME. 1856 and 1857.

Senator REED. Do you know where the panics first started—whether it started in Great Britain or in this country in 1857?

Mr. FRAME. I could not say.

Senator REED. Let us go to 1890 in England. The Baring Bros. failure in 1890. In 1893 we had a panic in this country. Is it not a fact that the Baring Bros. failure in England produced or was followed almost immediately by great stringency in this country, and did that not continue until 1893, when it culminated in the panic in this country in that year?

Mr. FRAME. That undoubtedly added to our troubles. I do not think there is any question about that. I was in the banking business at that time and I felt it myself.

Senator REED. So that, if your figures are correct here, they have had panics in England notwithstanding the Bank of England and this magnificent banking system over there, and they have had panics just as bad as we have had them.

Mr. FRAME. The facts seem conclusive, more than we have had, notwithstanding the air is surcharged to the contrary.

Senator REED. I want to ask you now in regard to the character of security which you think could be accepted safely by the Government when it is called upon to issue money to either of these regional reserve banks, or if that plan is not adopted to groups of banks or to individual banks. What character of security should the Government safely take?

Mr. FRAME. I should say that it ought not to take anything except the very highest class of securities for ordinary times, and when we require it for extraordinary periods the standard ought to be kept exceedingly high. Allow me to explain a little bit there. Perhaps I might go beyond what you desire.

Senator REED. Go as far as you like.

Mr. FRAME. I was through the early days of wild catting. I have bought currency which was depreciated and currency which was based upon all kinds of securities, commercial paper, State bonds, mortgages, and one thing or another issued by State banks all over the United States. I have bought currency over the Waukesha County Bank counter, starting at 9 o'clock in the morning, buying

that depreciated currency at from 2 to 50 per cent discount, and at 4 o'clock in the afternoon I would not have currency enough to do business with the next day. I would take that discredited currency to Milwaukee. They would wait after banking hours for me to exchange it for current money that I could take home and do business with the next day.

Senator REED. When you bought it how did you pay for it?

Mr. FRAME. New York currency was good. Some States were good. With this we bought the discredited currency of Wisconsin and Minnesota, Iowa, Michigan, Indiana, Illinois, the great bulk of which was discredited and fluctuated in value day after day, according to the confidence of the human family in its final redemption.

Farmers in my section would start at 4 o'clock in the morning to carry their grain to Milwaukee, get their checks, draw the money, and then they would come to the Waukesha County Bank and deposit that money, because they felt great concern about its stability.

Those experiences have impressed upon my mind the absolute necessity of issuing no currency except that which is unquestionably secured, and I suppose I will go to my grave with that impression. Since 1863, when the national-bank law went into effect and Government bonds were put up as collateral security, no man has pulled out of his pocket a national-bank note and said to himself, "Will that be redeemed; can I get good money for that?" It is good beyond question. Therefore you can see that the trend of my talk is that if we issue any currency at all it must be a currency in which the people must have confidence. If it is to be done at all, the security should be unquestioned, so that no man will ever pull the money out of his pocket and say, "I am a little doubtful about that, and I guess I will go and get gold for it." I want it so he will never want to do that.

Senator REED. That is very good as a generalization, but of course I think we all agree on the fundamentals.

Mr. FRAME. Yes, sir.

Senator REED. But I am trying to get a more concrete statement. It is contemplated in this bill, and it is contemplated in any scheme which proposes to have money issued to meet the extraordinary conditions which arise in the country, either of emergency or of unusual demand, that the Government shall issue money, either permanent or temporary, and of course both theories have their advocates. Now, what I am inquiring about is, what kind of security should the Government have; not merely whether it is good or bad, but must it be short-time paper of individuals indorsed by banks, must it be Government bonds, or may it be other classes of security?

Mr. FRAME. For permanent issues I think that it ought to be Government bonds. For a temporary emergency currency it might be State, municipal, or county securities that are unquestionable. You know we have the limitation on indebtedness, and indebtedness of municipalities should be down to 5 per cent, or not to exceed 10 per cent, as in New York.

Senator REED. That is within the statutes of legal limitations in the States?

Mr. FRAME. Yes. Then, if we have a Federal reserve bank, the management must have some discretionary powers as to what securi-

ties it will take. As far as the issuance of that kind of currency is concerned it will not be distrusted on the part of the holder of the notes providing there is ample capitalization of the bank that issues it.

Senator REED. I want to ask the attention of the committee for about five minutes now to the questions that I am going to ask Mr. Frame, because, if I am right about this thing, we have been wrong about a theory, or some of us have been wrong.

I do not care now whether it comes through the medium of the reserve banks which may be established, or whether it comes through individual banks. You say that when the Government is required to issue a million dollars that a Government bond is an ideal thing to put up with the Federal Government upon which to issue that money. Now you say, in addition to that, you think that first-class industrial securities and State bonds might be received also?

Mr. FRAME. Not industrial, but State, municipal, and other high-class bonds for extraordinary occasions.

Senator REED. Very well.

Now, the claim has been made that if such bonds are long-time securities, not maturing rapidly, they can not be used, and that the only thing upon which money can be quickly issued, particularly emergency money, is short-time paper, which readily matures and consequently pays itself off. What have you to say about that?

Mr. FRAME. I simply say that the proof of the pudding is in eating it—in a practical application of it. In the introduction to my statement I said I took \$50,000 of bonds and went to Chicago and borrowed \$50,000 on it. I got the cash.

Senator REED. But you went and borrowed from somebody else and you happened to find a man able to lend that amount of money.

Mr. FRAME. Yes, sir; but if the Federal reserve banks were opened, or even under the Aldrich-Vreeland Act, we now hold \$100,000 of bonds that we can walk into the Treasury with to-day and get the money on those bonds.

Senator REED. But I am dealing with this question of liquid securities. I have heard that until I think it has begun to vaguely filter through my mind. At first I did not know whether it referred to mortgages or what it was; but I am beginning to understand that a liquid security, as the term is used, is a note that matures quickly, so that, for instance, you go to a Federal reserve bank and want money and you have \$100,000 of notes, all maturing within 45 days, and you put them up with the bank and you get your \$100,000. In 45 days, if those securities are all good, the bank that lends the \$100,000 has collected from the country on those notes \$100,000 and is therefore whole.

Mr. FRAME. Yes.

Senator REED. Now, it is urged here by many very eminent financiers that you must have a short-time note in order to have this quick return of the money, and therefore, you can not use the farm mortgage and you can not use a State bond because they run for a long period of time. What do you say about that?

Mr. FRAME. I do not think it is necessary.

Senator REED. Why not?

Mr. FRAME. For the very reason I just pointed out.

Senator REED. That is where you took it and sold it. This bank did not want to sell.

Mr. FRAME. I did not sell the bonds; I simply put them up as collateral security and got the money.

Senator REED. You went to somebody who had it?

Mr. FRAME. Yes.

Senator REED. Your man had to wait until he either sold the bond again or you paid the loan to get his money? He had to be able to carry it himself.

Mr. FRAME. I paid the money within 90 days. If I did not pay the money within that time of course he could have sold my securities and got the money back.

Senator REED. Mr. Frame, I have this thought as to this question of liquidity, if I may use that sort of a word. I might as well make a word as anybody else. I want to follow this transaction: A man takes \$100,000—you take \$100,000 and go to Senator Owen, who is president of one of these reserve banks, with \$100,000 of notes, maturing within 45 days. You put up those notes with Senator Owen and he gives you \$100,000, and he goes to the Government of the United States and gets \$100,000 of money issued to him and puts these notes up with the Government of the United States, or he puts them up with the reserve agent, and in 45 days those notes are all paid off and he is able, because they are paid off, to liquidate his debt with the Government and take up \$100,000 of paper. I see that transaction very clearly.

Now, suppose that you bring to him instead of that a State bond for \$100,000, which is due in 20 years. You deposit that with him. He goes to the Government of the United States and gets \$100,000. Does not that fact make that bond liquid? The fact that you can cash a long-time security or get the Government's money upon a long-time security makes it as liquid as any possible security for the time being? You get the money on it?

Mr. FRAME. That is, accepted as collateral.

Senator REED. We are assuming that the Government takes it as acceptable.

Mr. FRAME. Yes, sir:

Senator REED. He has let you have \$100,000, and with that \$100,000 you are able to keep your bank open and you begin to collect on the short-time paper you have in order to pay him back, and you have \$100,000 of this short-time paper in your bank and you collect it in; and when you have it in 45 days you go and pay him off. Why is not that just as liquid an arrangement as it would be if you took the short-time paper in the first instance? I want to know if I am sound in my reasoning?

Mr. FRAME. I think the Aldrich-Vreeland Act really covers both of those points.

Senator REED. I am not speaking of the Aldrich-Vreeland Act, I am not speaking of this or any other bill, I am trying to find out whether this is an insuperable objection which has been so often raised; namely, that we can not take long-time paper because it is not liquid.

Mr. FRAME. I do not think it is an insuperable objection.

Senator REED. Of course, long-time paper is not instantly liquid. The moment, however, you provide a place where you could always get the cash on the farm or the Government bonds, or the State bonds,

the moment you provide a place where you can always get the money on it, does it not then immediately become liquid?

Mr. FRAME. In putting up mortgages on country farms the difficulty would be that the central bank or even the Federal reserve bank officials could not know as to the reliability of this security.

Senator REED. I am not talking about the reliability; I am not talking about the length of the term of the obligation. I am simply discussing the one question of whether they are liquid or not, and the point I have in mind is this—I will state it and see if you agree with me: We will take, for instance, a State bond running for 20 years. It can not be collected until the end of 20 years, and therefore it is a very rigid thing in itself; but if by law you make a provision whereby that bond can be cashed at any time, it then becomes the most liquid security in the world, does it not?

Mr. FRAME. Yes, and would be a secondary reserve, you might say, for a bank to hold.

Senator REED. The answer, then, would be that the Government would have these things loaded upon it, and the Government has to carry it for all those years; but assume that you put that bond up with the reserve banks and the reserve banks went and got the money from the Treasury. Suppose they got \$100,000 and gave it to you, and you took it and put it in your bank vaults. Then, having that \$100,000 to do business with, but having an obligation to this central bank to return the money within a given time or to pay a heavy rate of interest, which would compel you to take it up, you would proceed to collect on your short-time paper yourself and pay it, would you not?

Mr. FRAME. Yes.

Senator REED. Why, therefore, can we not use long-time paper as well as short-time paper as the basis for the issuance of money?

Mr. FRAME. We can. But in fact, currency is issued on the credit of the issuer. The issuer simply discounts time paper. It is a fallacy to say currency is issued secured by commercial paper.

Senator REED. That is the point I asked the committee to consider, and I wish they would think about it, because it seems to me perfectly patent that all this theory that you can not possibly take anything but short-time paper is a mistake. I will put it that way, using a gentle method of speech.

Senator BRISTOW. Senator, before you leave that question, I would like to ask Mr. Frame a question or two. It is right on this point. I would like to ask you, Mr. Frame, in respect to the farm mortgage. You said the reserve bank which was discounting the paper might not have knowledge as to the value of those mortgages in the community. Knowledge as to the value of those mortgages would be just as reliable as the knowledge as to the value of any short-time paper that might be given in that community, might it not?

Mr. FRAME. Oh, yes, if it was local paper; but of course this bill requires really more than local paper.

Now, on that question of taking local paper, if we should take a piece of paper from our customers and rediscount that and send it away, when that paper is returned and paid by the borrower the question would be raised—

Senator BRISTOW. You think it would not be a practical thing to do?

Mr. FRAME. I think not on general country loans. Of course your bill does not really cover that. What you want to do is largely on bills of lading and great commercial and manufacturing corporations, etc. That is all right when you hold up the standard to an extremely high scale.

Senator BRISTOW. It is not contemplated to use local paper, but commercial paper of a different kind. Would that include the paper of concerns like the Armour Packing Co., John Wanamaker & Co., and concerns of that character?

Mr. FRAME. I should say yes.

Senator BRISTOW. The bills of lading paper, then, would refer to a paper that has the bill of lading attached, so that the money is paid before the article, whatever it is, is delivered?

Mr. FRAME. Suppose the shipment is of cotton; a draft is drawn upon Great Britain, with that bill of lading attached to it. The holder has no trouble in going to the bank and getting the money on it. That paper is the highest class of paper of commercial character that we have in the country.

Senator BRISTOW. How many country banks handle that class of paper?

Mr. FRAME. Oh, they are so few that they are inconsequential.

Senator BRISTOW. What other kind of this prime paper is there except this that has a bill of lading attached, say, for a shipment of cotton?

Mr. FRAME. Well, you might term prime paper such as that of Swift & Co., of Chicago, and others you named. Of course, more or less country banks hold moderate quantities of such paper at times.

Senator BRISTOW. Do they hold Armour's also?

Mr. FRAME. Armour's do not sell very much paper.

Senator BRISTOW. They have done it, though, have they not? We have had it in our country a good deal, I know.

Mr. FRAME. They do not make a practice of selling it openly.

Senator BRISTOW. They do not?

Mr. FRAME. No, sir; not as I understand it.

Senator BRISTOW. This prime paper is the paper of these commercial concerns in these great centers?

Mr. FRAME. Yes. The small country bankers take care of their own customers at home without much difficulty.

Senator BRISTOW. I thought there was something behind this commercial paper that we have been hearing so much about here from these great financiers.

Senator POMERENE. In connection with what Senator Bristow brought out a moment ago, you made the statement that your customers would enter a protest if they found, for instance, that you had rediscounted their paper in a reserve city?

Mr. FRAME. Yes; or elsewhere.

Senator BRISTOW. Is not that because of the fact that under the present banking system rediscounts are in disrepute, and it is one of the defects of this so-called independent banking system? Suppose, on the other hand, that this method is adopted provided for in this bill. You have your regional banks, and perhaps their greatest function, at least one of their greatest functions, is with the funds they have to rediscount paper. Here is a governmental

organization made up by interdependent banks for a particular purpose, and would it not to a large extent do away with that prejudice which the customer might have against his paper being rediscounted, when he knew that a large part of your funds were in this one reservoir?

Mr. FRAME. No; I think not. I don't think it would make any material difference.

Senator REED. There are two objections, as I take it, to the matter of rediscounting. One is that when a bank goes to heavily discounting it is a sort of notice that it is short of money, and that in a way hurts the bank. That is one objection, is it not?

Mr. FRAME. Yes; when done moderately the general public do not pay any special attention to it.

Senator REED. There is an objection of an entirely different character on the part of the man who borrows the money through a bank. He rather resents the idea that his note has been "hocked" about?

Mr. FRAME. That is it exactly.

Senator REED. And his note has been exposed?

Mr. FRAME. Yes, sir.

Senator REED. And in addition to that, when that note is in your hands, if he does not meet it on the exact date, he rather looks to you to be kind of nice about it, but if it gets—

Mr. FRAME. He looks for renewal.

Senator REED. Or an extension or some concession. But if it gets into the hands of a bank 300 miles away, then he knows that when he gets his notice that the spot cash has got to be there?

Mr. FRAME. That is what he knows.

Senator REED. And that is an objection the customer would raise?

Mr. FRAME. Yes, sir.

Senator REED. And dealing with the man in your community, where I suppose you know everybody by name, etc., the personal equation enters very largely into your transactions?

Mr. FRAME. It certainly does.

Senator REED. On both sides of the counter.

Senator POMERENE. Some of these borrowers are very proud of the fact that their notes will be received around over the country?

Mr. FRAME. I do not think they are to a great extent.

Senator REED. I never knew of their having much pride in that.

Senator POMERENE. I have known some of them.

Senator REED. Mr. Frame, when a bank keeps a reserve, whatever its reserve is, it loses all interest upon it. It is lying there idle?

Mr. FRAME. If in cash.

Senator REED. If in cash, and if it is not in cash it is not a reserve within a meaning we have heretofore attached to it—a reserve is supposed to be cash on hand, is it not?

Mr. FRAME. Or due from banks.

Senator REED. Due from banks. I want to leave that out, because I am going to speak about the real reserves. Of course when money is due from banks, if there is trouble in the country that is widespread, your reserves that you have got in another bank are liable to be hard to get just at the very time that you actually require it. That is true, is it not?

Mr. FRAME. Yes, sir. I think the funds they have to rediscount paper. Here is a governmental

Mr. FRAME. That is what we want to doctor.

Senator REED. Upon the reserve that you have in the other bank you get very small interest, do you not?

Mr. FRAME. We get 2 per cent.

Senator REED. If you could make that 5 per cent, and have it absolutely safe, it would be a very profitable thing for the bank and very pleasing, would it not?

Mr. FRAME. We would be 3 per cent ahead.

Senator REED. If it could get 4 per cent, the same thing would be true, only not to the same extent?

Mr. FRAME. Yes.

Senator REED. If you could, instead of putting it in another bank and getting 2 per cent, buy a bond of the State of Wisconsin drawing 4 per cent interest and put that in your vault as a reserve, with the absolute assurance that you could go to a Federal reserve bank and turn that into cash in a few hours' time, you would not want to be depositing so much money in the other banks, would you?

Mr. FRAME. That is exactly what we do now, as a secondary reserve. As I say, we have \$100,000 of bonds drawing a fair rate of interest—5 per cent—that is a secondary reserve. We are holding them as an investment.

Senator REED. While you are throwing light upon the question, you are not quite answering my question, which was, if you could, instead of being forced to deposit this money in another bank in order to get anything upon it in the way of interest in return, take it and invest it in a State bond of the State of Wisconsin that drew 4 per cent and put that in your bank, that would enable you to use that much more of your bank capital and get a better return on it, would it not?

Mr. FRAME. Allow me to explain that.

Senator REED. You would like to do that, would you not?

Mr. FRAME. Allow me to explain that.

Senator REED. Yes.

Mr. FRAME. We keep, say, \$250,000 now in Milwaukee, Chicago, and New York banks as balances, against which we draw drafts every day.

Senator REED. You would still have to do that?

Mr. FRAME. We would still have to do that; and therefore that amount of money must be kept there to accommodate our customers in selling exchange. I had my cashier make an examination of how often that \$250,000 was turned over, and, to my surprise, it was turned over every 10 days. We sell \$250,000 of drafts on Milwaukee, Chicago, and New York every 10 days, so that it is necessary in the ordinary transaction of business to keep that there for that purpose.

Senator REED. Then, what you put in there and count as part of your reserve has another utility besides the earning of interest, to wit, you are able to draw drafts upon it and thus utilize it in your general business?

Mr. FRAME. Further; we should be able to get it if we want it, which we sometimes can not do.

Senator REED. What I am getting at is whether you could, by putting in your vaults as a reserve, in lieu of a portion of the cash,

long-time, gilt-edged securities, provided there was a means by which you could go and cash that security on the instant.

Mr. FRAME. To a small extent—to the extent in which I have pointed out here, I should say we could.

Senator REED. What is that extent?

Mr. FRAME. I said to the extent of, say, \$36,000, which cash we could spare; \$15,000 for capitalization, of the Federal reserve bank, and 1 per cent of deposits. The balance of the cash on hand we must keep under the law.

Senator REED. I am talking about changing the law.

Mr. FRAME. Changing the law so that we could have less cash on hand?

Senator REED. Yes; but having security of the character that I speak of.

Mr. FRAME. Then even reducing it lower than 5 per cent?

Senator REED. Yes.

Mr. FRAME. Well, just how far to go on a matter of that kind is problematical. In the United States, in a developing country—all developing countries—we must keep larger reserves than they do in old settled sections, like Great Britain, France, and Germany, which have been thoroughly developed for hundreds of years. I think that is a common principle that all practical bankers will accede to. Therefore, as to just exactly what each bank should hold is a pretty difficult proposition, because you take western bankers—they hold larger cash reserves than we do.

Senator REED. Let me put it to you in another way. I do not limit this to your bank, but to the banking system generally. In addition to the moneys which bankers keep in their vaults by way of reserves, and which they put into other banks, not only to represent a portion of their reserves, but for the purpose of keeping a deposit there against which they can draw drafts and obtain banking accommodations, is it not true that banks very frequently have money which they can not loan out on short-time paper, and they send it to these big centers?

Mr. FRAME. They do.

Senator REED. Where they receive a small rate of interest?

Mr. FRAME. Yes.

Senator REED. They send it to the bank because they can get a small rate of interest, and because they are supposed to be able to get it back whenever they need it?

Mr. FRAME. That is right.

Senator REED. As to that part of the money we are now speaking of, if they could invest it in long-time gilt-edge securities which drew a rate of interest of 4 or 5 per cent, and were able to cash those securities on the instant, would that not be a good thing for the banks?

Mr. FRAME. It probably would release some of the cash.

Senator REED. It would probably stave the congestion to some extent, would it not—reduce the congestion to some extent which we now have in the big centers?

Mr. FRAME. I think that would probably assist it somewhat.

Senator REED. So that the bank in the country would not be so dependent in a time of stringency upon the ability of the bank in the city to make good?

Mr. FRAME. Yes.

There is one point I want to call your attention to, Senator; that as far as our deposits are concerned they do not fluctuate much from January until December. We are in a State where our products are diversified. Sections like that where products are diversified, the deposits do not fluctuate up and down as widely as they do down South or in the undeveloped West. I know certain sections where deposits vary 100 per cent in the course of the year. Such a thing as that does not occur with us. In that case, you see, there would be the more difficulty about carrying out your proposition to the same extent that we might do.

Senator REED. You mean that in the case of these places where there is fluctuation?

Mr. FRAME. Wide fluctuation.

Senator REED. Why, if you can take this security and turn it into money?

Mr. FRAME. Providing if there was any profit in the operation. Of course, generally, there is a little margin of cost in all such transactions.

Senator REED. Either losing or gaining. I am speaking now about going to a Government bank.

Mr. FRAME. In that case there would not be any charge except for expressage.

Senator REED. Getting the face of it, paying, of course, an interest charge, if you had to borrow money upon it?

Mr. FRAME. That is rather a broad problem and quite difficult.

Senator REED. You spoke of a secondary reserve which you hold now in the shape of bonds?

Mr. FRAME. Yes, sir.

Senator REED. What do you mean by that, Mr. Frame?

Mr. FRAME. State and municipal bonds.

Senator REED. Why do you call it a secondary reserve?

Mr. FRAME. Simply because we can utilize it for just the purposes you are talking about.

Senator REED. In other words, you do now keep a part of your deposits invested in this class of securities?

Mr. FRAME. Yes, sir.

Senator REED. Because in the case of emergency you can go and get the money on them somewhere?

Mr. FRAME. Yes; 80 other national banks in Wisconsin do the same thing.

Senator REED. And you select them now without any aid from the Government?

Mr. FRAME. As a matter of prudence.

Senator REED. So that in the hour of trouble you are able to get money upon them?

Mr. FRAME. Yes, sir.

Senator REED. If the Government at this regional bank or at a sub-treasury or any other plan that is devised would take those securities at their face, you would be all the more inclined to carry some of them, would you not?

Mr. FRAME. Sure.

Senator REED. And it would be a perfectly fine thing for the banking system, would it not?

Mr. FRAME. Perfectly natural that it would.

Senator REED. I want to ask a word or two more about this so-called high-class commercial paper that is supposed to be deposited under the provisions of this bill that we are now considering. I think perhaps we left that in an unfortunate situation. I do not think that you meant to say that the bill was so wrong, that the paper of large concerns, like Swift's, would be taken, and that alone would be considered as prime paper to the exclusion of giving it an advantage over other paper?

Mr. FRAME. Oh, no. I did not mean to exclude other paper. I give that as an illustration, merely.

Senator REED. A bill of lading with the draft attached or an acceptance attached is a very high-class security, and you nearly all get cash out of it?

Mr. FRAME. Yes, sir.

Senator REED. And you think that there would be accepted as high-class paper the paper of such large institutions as Swift's, because they are engaged in heavy commercial transactions, have a large amount of money flowing, I suppose, into their treasury every day?

Mr. FRAME. They have large capitalization.

Senator REED. But outside now of the bill of lading, money loaned upon bill of lading, and such institutions as Swift's, would you class as prime commercial paper—

Mr. FRAME. Notes of large merchants and manufacturers in the big cities. You could hardly call country paper "prime paper."

Senator REED. So that you think that under the terms of this bill, those assets which the country banks, particularly that class of country banks that are in the smaller places, would hardly be acceptable as prime paper?

Mr. FRAME. I do not.

Senator REED. Do you think that it is excluded by the terms of the bill, or do you think that the financial conditions are such that they simply could not avail themselves of it?

Mr. FRAME. I think that it is not necessary that they should. Our present central reserve banks can take care of us amply and they do take care of us.

Senator REED. That is to say, if there was a means provided by which the central reserve bank of St. Louis and of Chicago and of New York could take their securities in the hour of trouble and get money, they would be able to accommodate you as one of their customers?

Mr. FRAME. Yes, sir.

Senator REED. And therefore that there is no necessity of dealing with that bank at all?

Mr. FRAME. I do not think there is—not in the least, even not in emergencies, if the present reserve banks were cared for then.

Senator REED. You have spoken of an independent banking system. Does not the thing that you have just now outlined, while it might mean an independent banking system, using the term "system" with some emphasis, does it not mean, after all, a lack of independence by the individual members, because they would be dependent upon the reserve banks?

Mr. FRAME. That is just exactly one of the points that seems to me objectionable, to be compelled to put \$147,000 into the Federal

reserve bank, not subject to call, not subject to use in any way, shape, or manner.

The CHAIRMAN. It is subject to call, however.

Mr. FRAME. Only through rediscounting. Now, if we have it in one bank and that bank is not willing to accommodate us, if the business is unsatisfactory to us we transfer it to another one. That is democratic. We are not compelled to do business anywhere, at one bank, if it is unkind and if it is unfair to us in any way. We simply transfer our account to some other bank.

Senator POMERENE. By reason of that very fact, in 1893, you had to take your securities down to Chicago and sell a part of them?

Mr. FRAME. Yes, sir; and that is just exactly what I want to provide against. If you will provide some measure of relief for present reserve banks they will not be compelled to suspend cash payments. Our balances will always be at our command.

Senator REED. Let me get you right, because that is what we want. You say that we have got three central reserve cities, and if there was a scheme devised by which in the hour of stringency those banks of the three central reserve cities could take their reserves and go to the Government and get more money, they would then have enough money to supply you as their customers?

Mr. FRAME. Yes, sir.

Senator REED. And if you did not like to do business with the First National Bank of Chicago, you could go right over to the Second National Bank of Chicago, if there is such a bank?

Mr. FRAME. The Continental.

Senator REED. The Third National Bank or the Continental National Bank and get your money there?

Mr. FRAME. That is right.

Senator REED. Is not that giving special and peculiar advantage to the banks of these large cities?

Mr. FRAME. In what respect?

Senator REED. Well, they alone of all the banks in the country have the privilege of going to the Government and getting this aid. Why should not that be extended out, so that the banker of Milwaukee and even of Waukesha might go and get that aid directly without having—you used the term “skimming” a while ago, and I am familiar with that—without having the skimming process applied to them?

Mr. FRAME. That is what I called the “branch system” or “skimming process,” which I have not referred to yet. I do not object to it at all, because if there is competition between those banks as to getting accommodations, or if one bank does not serve me satisfactorily I will go to another one. That is the free and independent banking system. Under the branch banking system or the Scotch and other foreign banking systems—take Canada, for instance, which has 25 great centralized banks and has nearly 3,000 branches. All the branches do business with its parent bank. Every one of the branches does business with the parent institution.

Senator REED. Is that centralized institution Government controlled?

Mr. FRAME. No, sir.

Senator REED. Is it privately owned and privately controlled?

Mr. FRAME. It does as it pleases—plays just as it pleases, without any Government jurisdiction at all. The report of the Monetary Commission shows that there has been \$5 of losses, comparatively, to depositors in Canadian banks as against \$1 loss in the United States.

Senator REED. It takes into consideration volume in each instance?

Mr. FRAME. It takes into consideration the volume, of course.

Senator SHAFROTH. Do they include all banks, both national and State, or only national?

Mr. FRAME. Just national.

Senator REED. Let me understand that. There is a great bank and it has numerous branches.

Mr. FRAME. Yes, sir.

Senator REED. Those numerous branches are owned by it or are simply in alliance with it?

Mr. FRAME. They are all owned by the banks in Quebec, Montreal, and Toronto. I think the headquarters are all in those three cities.

Senator REED. And no other banks exist?

Mr. FRAME. Practically no others.

Senator REED. So that if a man wants to borrow money now he has got just one bank to get it from?

Mr. FRAME. Canada has 25 central banks which have, say, 3,000 branches, therefore these 25 banks are practically a great monopoly.

Senator REED. In cities where there is a branch of each one of these different banks?

Mr. FRAME. Yes.

Senator REED. Do they engage in some rivalry?

Mr. FRAME. More or less.

Senator REED. Instead of having 3,000 or 4,000 independent banks, each acting for itself, it results in your having in the Dominion of Canada 25?

Mr. FRAME. Just 25.

Senator REED. And, of course, they are widely separated, or at least their branches must be?

Mr. FRAME. Oh, they are scattered all over the country.

Senator REED. The branches are scattered all over the country, but the 25 banks must be remote from most parts of the country?

Mr. FRAME. There are not as many banks in Canada by far as there are in the United States. There are eight banks in the United States where there is one over there, as far as territory is concerned, because the territory of Canada is just about equal to that of the United States. We have over 25,000 banks, and they have only about 3,000. No bank can start there with less than half a million dollars capital.

I made an address before the State Bankers' Association of Oklahoma last May, and I gave an illustration of what the branch banking business of Canada would do to Muskogee if they had the branch banking system there. The capitalization of all the banks in Muskogee is about a million and a half dollars. The profit on that, at 6 per cent, is about \$90,000. Those banks pay out about \$30,000 a year taxes to the city; total, \$120,000. Under a branch banking system such as they have in Canada there would be three or four branches of centralized banks in New York, Boston, Philadelphia, or Chicago, and every dollar of the profits that were made in the city of Muskogee will be turned into those centralized institutions and Muskogee would

lose every dollar of it. As Canadian branches pay no taxes on stock, the city would lose that also.

Senator REED. That is what you call "skimming"?

Mr. FRAME. I call that "skimming the cream" from the country.

Senator POMERENE. Stockholders do not live in Muskogee?

Mr. FRAME. That is just where they do not live. In Canada the great bulk of the 25 banks are owned and controlled in London, Liverpool, Glasgow, of course including Quebec, Montreal, and Toronto.

The CHAIRMAN. Moreover, these 25 banks can have a gentleman's agreement about the conduct of business, and most of them do?

Mr. FRAME. I think they do, more or less.

Senator REED. What is to hinder the 12 reserve banks or the 1 reserve bank that we propose to establish, which embraces some 600 or 700 independent national banks within its jurisdiction, effectuating a gentleman's agreement through that very organization which will fix the interest rates and practically settle whether certain lines of securities can be accepted within the vast domain in which that bank is situated?

Mr. FRAME. I think there is a probability of a thing of that kind with supervision as provided. We have ample supervision now, under present conditions. That is why I say we have the best banking system in the world, notwithstanding it has some defects. A great big centralized organization having general care over all of them seems monopolistic. I have fought against what I believed to be a kind of a monopolistic management under the Monetary Commission bill. I have not believed in that, because I think if the great big centralized banks of the United States, to quite a material extent, wanted, under that bill, to so conduct things that they could regulate us and do just about what they pleased with us. I prefer to stay just as we are now with the general supervision of the Comptroller of the Currency.

Senator POMERENE. You mean the Aldrich banking bill?

Mr. FRAME. The Monetary Commission bill.

Senator REED. What I want to get at is this, and I want to get at it just as it is in your opinion. Let us say that there is a regional reserve bank organized at Chicago, and that your State is put into that reserve district, along with two or three other States, and you bankers meet to elect the three directors that the bankers select, and then you select the three outsiders who are not bankers, but who may be stockholders, and now you have got a board of directors of six elected by the bank, and three selected by the Federal Government, making nine, but a two-thirds majority are bankers' men. Then, there is a president selected by this board of directors. Do you think that the big banks or the little banks are going to control in the selection of those members of the board of directors, which will be selected by the banks?

Mr. FRAME. I think those little fellows will have little to say.

Senator REED. You think the big fellows would get it?

Mr. FRAME. Almost certainly.

Senator REED. Let us see why they would get it. Have they any such power recognized to-day by virtue of their financial ability and strength to enable them to control or influence the votes of the member banks when they come to have an election?

Mr. FRAME. They would more or less. The little bank would not spend the money to look after matters of that kind, but the big banks would.

Senator REED. So you think the big fellow would get the six directors?

Mr. FRAME. I think he would.

Senator REED. Of course, the man who gets the board of directors gets the presidency?

Mr. FRAME. It would be natural.

Senator REED. I want to know if, in your opinion, this sort of thing would be likely to happen. Of course that president and that management of that central bank would naturally want to make banking profitable and safe, would it not?

Mr. FRAME. It naturally would result that way; that is human nature.

Senator REED. Do you think that by reason of this bringing of the banks together in this way and under this scheme there is any danger of the same thing happening as happens when there is what is called "a gentleman's agreement" between insurance companies, for instance, or railroad companies? That is to say, a result worked out by which there would be a regulation to some extent of interest charges, charges for its exchange, of interest paid upon deposit, etc.?

Mr. FRAME. I think when you go down into details of it it is a pretty clear proposition. Interest rates are different in different sections of the country, and that question of fixing a rate of interest which is uniform or for any section of the country, that is a practical impossibility, except for the concern that the board of directors are in control of. The law of supply and demand for money regulates the rate of interest.

Senator REED. What I want to get at, Mr. Frame, is this: You are a practical banker, have seen these things in operation; that is, you have seen the system in operation. I want to know if there is any danger, for instance, if I was elected president of this central bank, of my being able by virtue of that position to influence the conduct of the member banks so that they might do business in a way that would be more profitable to them and a little harder upon their communities?

Mr. FRAME. The trend would be in that direction.

Senator REED. Would it tend, in your opinion, to strike down or lessen competition between the banks?

Mr. FRAME. I think it would. I think that would be a natural result.

Senator REED. If we had a control, great or small, exercised by each president of these 12 regional banks, tell me whether you think there is any danger of the same kind of control being exercised over all of the regions by the great financial institutions?

Mr. FRAME. I think the trend would be in that direction.

Senator REED. At the present time is it or is it not true that the very wealthy concerns of the country, the great bankers of the country, have interests in large numbers of banks scattered over the country? I will put it in plain language. It has been asserted to me that the Rockefeller interests control, have potential influence in, a chain of banks across the country. I do not know whether it is true or not. It has been asserted to me that the Morgan interests—

the Morgan banks, speaking of them in that broad way—are not limited to New York City, but that they have a potential influence in chains of banks extending out into the country.

Senator SHAFROTH. By owning stock in the same?

Senator REED. In one form or another. What about that?

Mr. FRAME. So far as my own experience of 50 years is concerned, we have run the Waukesha National Bank without any dictation or suggestion on the part of anybody.

Senator REED. You run your own bank?

Mr. FRAME. Yes.

Senator REED. I am speaking about whether they do have in the large cities—whether there is already in existence in the country—a sort of chain tying together certain banks out in the country, and that chain ending for its control with these large institutions in New York.

Mr. FRAME. As to what extent that may go, I could not say, but I think if we had a kind of combined organization instead of the independent mechanism that it would be worse; that is all.

Senator REED. The thought I had in mind was this: Whether now these great institutions of the East, assuming that they do have their branches or institutions in which they have some capital invested so that they have a control—

Mr. FRAME. As stockholders.

Senator REED. As stockholders or otherwise—would be able to possibly influence the selection of the directors of these regional banks?

Mr. FRAME. I think they would, to a certain extent. Just to what extent I could not say. It would be perfectly natural.

Senator REED. I have been told, for instance—a sort of general talk—that in my State there are several large institutions in which New York money is invested.

Mr. FRAME. Which dominates largely.

Senator REED. And to some extent dominates; and because of their relations with New York they are able to exercise some advantage over other banks. Those banks have been named to me. I am not naming them here. But I am perfectly sure that the prominence of those bankers is such to-day and their dominating influence is such to-day in my State and in the surrounding States that if there was a regional reserve bank established to-morrow in that country and Missouri was in it some one of those gentlemen would be a director, if not president.

Mr. FRAME. Yes, sir.

Senator REED. I speak of it that way not to get from you a certain answer, but I want to know to what extent you think a danger of that kind possibly exists, if at all.

Mr. FRAME. I think that would be the natural trend. I do not think there are any banks in Wisconsin that are dominated by Wall Street.

Senator REED. As far as Wisconsin is concerned, it is an old settled State, and as a matter of fact you have got in a pretty independent position financially, speaking of the State as a whole; is that true?

Mr. FRAME. That is correct.

Senator STONE. It is practically a lending State?

Mr. FRAME. Yes.

Senator REED. More than a borrowing State?

Mr. FRAME. Yes, sir; the people of the State of Wisconsin have surplus funds, and are lending them in outside sections.

Senator REED. I do not care to take more time now.

The CHAIRMAN. Mr. Frame, I want to ask you one or two questions.

Mr. FRAME. Yes, sir.

The CHAIRMAN. Did you see the book that was sent out by the National City Bank of New York with Mr. Vanderlip's letter or Mr. Talbot's letter, etc.?

Mr. FRAME. I do not remember to have seen it.

The CHAIRMAN. Do you know whether or not that book was sent to each of the banks in Wisconsin or to any considerable number of them?

Mr. FRAME. Well, I can not remember to have seen it myself, but I have been exceedingly busy, and possibly it may have come and I did not see it.

The CHAIRMAN. Have you not heard anything about that publication being distributed in Wisconsin?

Mr. FRAME. Just what do you refer to particularly?

The CHAIRMAN. A book issued by the National City Bank in opposition to this bill, containing a letter of Frank Vanderlip and Mr. Talbot and others.

Mr. FRAME. I do not remember to have seen it.

The CHAIRMAN. You do not know anything about it?

Mr. FRAME. No; I do not. I can not recall that I have seen it.

The CHAIRMAN. You spoke of the earnings of the banks of Wisconsin, and I call attention to the report of the Comptroller of the Currency, Table No. 59—

Senator POMERENE. What year, please?

The CHAIRMAN. Ending July 1, 1912; in which he gives the earnings of the banks of Wisconsin upon their capital and surplus of 8.87 per cent, and of the banks of Milwaukee 9.39 per cent, and the actual dividends on the capital paid 11.50 per cent.

Senator POMERENE. In the State?

The CHAIRMAN. In the entire State of Wisconsin; and 9.39 per cent of dividends paid on the stock of the banks of Milwaukee.

Mr. FRAME. Total in the State, 8.87?

The CHAIRMAN. 8.87 was the earnings on the capital and surplus.

Mr. FRAME. Capital and surplus.

The CHAIRMAN. But the capital of the Wisconsin banks was \$11,000,000 and the surplus \$4,500,000, so that it would be a much higher percentage on the capitalization?

Mr. FRAME. Yes.

The CHAIRMAN. The banking system of the United States shows a dividend on the capital of national banks of the entire United States of 11.66 per cent for 1912.

Mr. FRAME. On capital?

The CHAIRMAN. On capital; yes.

Mr. FRAME. But you see the surplus is nearly equal to the capital.

Senator REED. One other phase of this matter occurs to me, which is not clear in my mind. I am referring now to your paper. You told us that under this bill the banks of the central reserve cities would be required to keep less reserve than now, and as I under-

stood you that reduction in the amount they are required to keep at the present time would more than equal the amount they are obliged to contribute to the central banks. Is that correct?

Mr. FRAME. I understand that to be the case.

Senator REED. But when you get to the ordinary reserve banks does the same condition exist?

Mr. FRAME. The ordinary reserve bank, general reserve banks, must put up \$150,000,000 in excess.

Senator REED. Of that amount?

Mr. FRAME. Of the amount that the reduction of the reserve would save them.

Senator REED. But when you get to the country banks, what is the condition there?

Mr. FRAME. Well, it costs us \$285,000,000.

Senator REED. Of course you give it to me now in figures. Can you give it to me in percentages—that is, the percentage of cost?

Mr. FRAME. Percentage on what?

Senator REED. Well, it is a little difficult for me to state that, Mr. Frame. What I mean is this: I want to get a comparison of the inequalities, if such there be, in percentages, instead of in the aggregate, because the country banks having more capital than the—

Mr. FRAME. General reserve banks, and also the central reserve banks.

Senator REED. Reserve bank, that is right, or the central banks. Of course, when you say that it costs them so much money to go into this, it does not mean anything unless I know the percentage. To start with, the central reserve banks are relieved, according to your opinion, of any burden by reason of this bill. In fact, they are relieved from some burdens that they now have by virtue of the circumstance that the amount of their reserves required to be kept under the bill is so much less than it is now that they can take from that saving enough money to help capitalize—do their share toward capitalizing—the regional reserve bank, and then have something left in addition, that is released to them?

Mr. FRAME. The three central reserve banks are allowed to hold 7 per cent less of their deposits. That gives them a loaning power that can be realized of \$140,000,000.

Senator REED. You mean 7 per cent after they have contributed to the organization?

Mr. FRAME. No; they have got to contribute \$108,000,000 to the organization.

Senator REED. How much per cent does this leave them?

Mr. FRAME. It leaves them \$32,000,000.

Senator REED. That would be a small per cent.

Mr. FRAME. Per cent on capitalization or percentage on deposits?

Senator REED. On deposits.

Mr. FRAME. On deposits, a little over $1\frac{1}{2}$ per cent.

Senator REED. So that they actually come out $1\frac{1}{2}$ per cent net to the good.

Mr. FRAME. Ahead, except what may be called from country and other banks out of them for deposits which are now held by them which would have to go to the Federal reserve bank, and that I do not know.

Senator REED. You do not know how much that would call?

Mr. FRAME. I do not know what that would be.

Senator REED. When you come to general reserve banks, how much percentage do they have to contribute over and above what they are now required to keep?

Mr. FRAME. On deposits, about 7 per cent.

Senator REED. Over and above what they are required to keep now?

Mr. FRAME. It would take out about 7 per cent of their deposits—on \$2,250,000,000, say, \$150,000,000.

Senator REED. That is to say, when they put this money into this regional reserve bank, although there has been some reduction in the reserves they are required to keep, still they are 7 per cent—

Mr. FRAME. Short.

Senator REED. Worse off as far as the actual good of their own money is concerned.

Mr. FRAME. Yes, sir.

Senator REED. They have got to contribute that much.

Mr. FRAME. And then, in addition to that, they may be called upon by banks like ourselves, for instance, to withdraw out of Milwaukee and Chicago.

Senator REED. Coming to the country bank, what is the situation there in percentages?

Mr. FRAME. The net \$285,000,000, something over $7\frac{1}{2}$ per cent deposits.

Senator REED. So that if I get you right now, this bill as it is now drawn will actually release to the central reserve banks—

Mr. FRAME. One and one-half per cent.

Senator REED. It is no burden to them at all, but is an advantage in that one respect that we are now talking of?

Mr. FRAME. Yes.

Senator REED. Whereas when you come to the other classes of banks they have to put in from 7 per cent over and above.

Mr. FRAME. From the general reserve banks 7 per cent, and $7\frac{1}{2}$ from the country banks.

Senator REED. In other words, those banks outside of the central reserve cities have to capitalize this regional reserve system?

Mr. FRAME. Really, that would be the case; that is the way I figure it.

The CHAIRMAN. Mr. Frame, the report of the Comptroller of the Currency of June 4, 1913, shows net deposits of the 52 banks in the central reserve cities, upon which they are required to keep reserves, of only \$1,568,000,000, and required reserve of \$392,000,000, with legal tender and gold coin of \$405,000,000.

Under the new bill 9 per cent would be kept in their vaults, or 140 millions. Four and one-half per cent must be kept in the Federal reserve bank, or 70 millions, and $4\frac{1}{2}$ optional, which may be kept in their own vaults or in the Federal reserve banks, at their pleasure?

Mr. FRAME. Yes, sir.

The CHAIRMAN. Therefore, would it not be true that with the cash kept in their own vaults of 140 millions, and assuming that this $4\frac{1}{2}$ per cent option would be divided, one-half being 70 millions, which would mean 35 millions going into their own vaults, and you would make a maximum of 175 millions in their own vaults and 70 millions, plus the 35 millions, or 105 millions, in the Federal reserve

bank. Would not that be a correct calculation? Or can you not easily follow that?

Mr. FRAME. I have lost a little of the chain, Mr. Chairman.

The CHAIRMAN. Perhaps it would be better for me to make a mere statement of this matter for the use of the committee, because that is really all I want to do; that is the best way to get at it and to ascertain the real facts in regard to it.

In the record will be found a table showing the exact requirement of this bill, following the statement of Mr. Berry of yesterday, showing that the total requirement of the 52 banks in the central reserve cities would be 216 millions, against 405 millions, leaving a surplus available of 189 millions of cash, in legal tender or gold, every dollar of which is due to the country banks if they choose to call upon it for their use; and therefore the theory that the city banks would get an extraordinary advantage over the country banks is not really tenable. The country banks, by this statement of June 4, 1913, had 3,610 millions of net deposits subject to the reserve requirement, and the further requirement of 541 millions, and they had in specie and legal tender 266 millions. With the reserve cities they had 446 millions of dollars subject to their check. Therefore they could take, if they desired, every dollar of this 189 millions for use; but under the terms of this bill there is only required a maximum of 103 millions. So that they can not really require gold upon this open account which they have with the central reserve cities for so large a sum.

This statement proceeds upon the theory of this bill that the funds which are placed in these Federal reserve banks are loaned to the extent of two-thirds, and presumably would be loaned to the extent of 50 per cent, keeping 50 per cent average reserve for conservative management, with these alternatives open, and remembering that the Government of the United States will place a large amount of current funds in gold coin and legal tender and actual money in those banks, also subject to be loaned out up to two-thirds.

Mr. FRAME. In the Federal reserve banks?

The CHAIRMAN. In the Federal reserve banks. It would afford a surplus of actual cash for the country of an approximate total of over 200 millions, which would be loanable, if this money was in the reserve cities, on a basis of 18 per cent, which needs an expansion of credits of 4.55 per cent upon that amount. If it was in the country banks, where the maximum requirement is only 12 per cent, it would then multiply itself by seven times, and the expansion of credits would be very important; and of those expansions of credits the country bankers would get their proportionate part, and it would appear first as loans, then as deposits, so that the country banks would have a very substantial increase of deposits and of current loans of which they would be the immediate beneficiaries.

That answers your conclusion, and I do not care to cross-question you, because it is a mere matter of mathematical calculation that is so obvious a matter of mathematics that no human opinion will affect it one way or the other. It is a matter for an actuary to pass on.

Senator REED. Do I understand you, Mr. Chairman, to say that, speaking now of the central reserve cities, there is not such a reduction in the amount of their reserves required to be kept that it more than equals their contribution to the regional reserve banks?

The CHAIRMAN. No. What I said was that the actual calculation, under this bill, would free in the 52 banks of the central reserve cities \$189,000,000, every dollar of which could be used by the country banks, because they have on deposit subject to their check a very much larger sum.

Senator REED. Yes; but they use that money that they have subject to their check, as stated by Mr. Frame, constantly in their business.

The CHAIRMAN. Oh, yes; they get 2 per cent on it. The amount which they actually have is \$496,000,000 on open account, which is far more than any possible demand for exchange purposes that you have in mind.

Senator REED. I understood Mr. Frame to say that his bank has a quarter of a million of dollars in these large cities, and that you actually use it to such an extent that you turn it over every 10 days.

Mr. FRAME. Yes, sir.

Senator REED. Could you reduce that without interference with your business?

Mr. FRAME. I should think only to a moderate extent. One banker of Milwaukee told me that his bank sometimes drew drafts for its whole balance in one day from its New York correspondent.

The CHAIRMAN. Of course, these exchanges are turned over every day in these large cities.

Mr. FRAME. They are turned over much more rapidly than in the country.

Senator REED. The point I had in mind was this: It is a fair presumption that banks do not take their money and put it off in another bank unless there is a corresponding advantage. Of course, they get 2 per cent, or something like that, but they do not put that money in there to get 2 per cent.

Mr. FRAME. We keep it there because it is convenient to transact our business.

Senator REED. If your bank loaned a quarter of a million of dollars—you are not a very large bank, speaking in comparison with some banks—the question in my mind is whether all this money that is now in New York, Chicago, and St. Louis, the three reserve cities, is there because of the exigencies of business, and required to be kept there and if withdrawn will unsettle to some extent the business conditions. What about that?

Mr. FRAME. I do not think there is any reasonable doubt about it. Take the transfer of loans that are now made by Milwaukee bankers to customers, for instance. If country banks withdraw funds from the Milwaukee banks during the present condition of the money market in large sums as this bill requires I think it would bring distress to Milwaukee.

Senator REED. Could not the banks borrow it right back again?

Mr. FRAME. The Milwaukee banks might have the kind of paper that would be acceptable at the Federal reserve bank, but the country banks would have but little. Shifting of loans would bring trouble. Why should banks borrow back their own money?

Senator REED. You really think, now, that the country bank would not be able to produce the kind of paper that would be acceptable at the regional reserve bank under this bill, and thus get its money back?

Mr. FRAME. The trend of my answers would go to show that. Very few of the banks hold it.

Senator POMERENE. Your answers were rather categorical, yes or no, were they not?

Mr. FRAME. The most of them; but I enlarged upon them enough so as to show the trend of the general thought.

Senator POMERENE. I want to ask you a question or two, unless you had something else to say on that subject.

Mr. FRAME. I have a letter here which I would like to put in, sir.

Senator POMERENE. Do you desire to read it as a part of your answer?

Mr. FRAME. Yes. [Reading:]

FARMERS & MERCHANTS' UNION BANK,
Columbus, Wis., August 1, 1913.

Replying to your favor of recent date with regard to the Federal reserve bank bill (H. R. 6454):

We would not become a stockholder of the bank because we would have nothing to gain, and we do not believe the organization of a bank in accordance with the proposed bill would be of advantage to the country. We would have to carry at least \$5,000 more cash in our vaults (and what we have been carrying we have found, over a period of 50 years, has been sufficient), which would virtually take that much out of circulation and upon which we would receive no interest. We would also have to deposit approximately \$25,000 with the reserve bank without interest, and the total loss to us, at the rate of 2 per cent, would be \$600.

Of course he keeps below the 5 per cent reserve.

The CHAIRMAN. That is very surprising, in view of the fact that he is required to carry less, and he now says he will have to carry more. As a witness I think he has—

Mr. FRAME. Spoiled his case?

The CHAIRMAN. Well, go ahead.

Mr. FRAME (reading):

Banks located in agricultural communities like ours do not in the usual course of business receive notes and bills of exchange rising out of commercial transactions or make loans on United States, State, county, or municipal bonds. Neither do they have the opportunity of buying acceptances.

Our city bank friends claim they would not be benefited by the reserve bank, and we think they would suffer with us a proportionate loss of business and profits.

Very truly, yours,

J. R. WHEELER, *Cashier.*

Senator POMERENE. Mr. Frame, I think I am safe in saying that the purpose of establishing the amount of the reserves provided here is to have a conservative amount. There may be some difference of opinion as to what that shall be.

Mr. FRAME. Yes, sir.

Senator POMERENE. Under the provisions of the bill as it passed the House—and, as I understand it, you have not read the whole of it—in country banks it is to be 12 per cent and in the city banks it is to be 18 per cent?

Mr. FRAME. Yes.

Senator POMERENE. Your position seems to be, briefly stated, that these reserves are higher than they should be. Do I correctly state that, or not?

Mr. FRAME. Higher?

Senator POMERENE. Yes.

Mr. FRAME. Those reserves of 12 and 18 per cent?

Senator POMERENE. Yes.

Mr. FRAME. No; I should think not.

Senator POMERENE. Are they too high?

Mr. FRAME. No; I do not think they ought to be any less. I think they ought to be at least that, because it gives generally better stability to the country—more confidence.

Senator POMERENE. I will make my point clear a little later. Do you think they should be higher than is provided for here?

Mr. FRAME. No; not unless it may be for the country banks. I think the 5 per cent is all right, but I think, as far as the city banks are concerned, it ought not to be less than 20.

Senator POMERENE. Everyone, I take it, will concede that during the transition period the reserves possibly ought to be fixed a little bit higher than what they would be after the system was finally established and in working order?

Mr. FRAME. Well, we keep now, although we are required to keep 15—all country banks keep an average of about 20. We keep more than the required amount. We naturally would keep more than the required amount under this bill.

Senator POMERENE. This is what I had in mind. Some bankers may be of the opinion that this reserve is too low. Others may be of the opinion that it is too high. The aggregate amount of the reserve will be determined, I take it, by actual demonstration later. Would there be any objection to giving to the Federal reserve board the power, in its sound discretion, to lower or to increase the amount of these reserves as the exigencies of the situation might seem to suggest?

Mr. FRAME. I think the bill now provides that if it runs below that there is a tax on it; and I think that is a very good proposition.

Senator POMERENE. That is only temporary. But suppose that in your judgment it ought to be permanently increased or permanently decreased, do you think there would be any objection to giving them that power?

Mr. FRAME. That is a pretty hard question to answer. If the board of control thought credit expansion was needed they might be inclined to cut it down a little too low. On the other hand, if it was a little over conservative they might raise it.

Senator POMERENE. I think we have a right to presume that this board, when appointed, will be just as well qualified and just as conservative in the transaction of the business of that board and can be relied upon as much as we rely on the judgment of the Supreme Court.

Mr. FRAME. I will not question that point.

Senator POMERENE. I would not have it otherwise.

Mr. FRAME. What I mean to say is that I do not think that all of the human family would think exactly alike on it. That is the only point I wanted to make.

Senator POMERENE. Some of us, particularly when we are defeated in a lawsuit, go out and swear at the Supreme Court of the United States.

Senator REED. And frequently are fully justified. [Laughter.]

Senator POMERENE. We feel so; yes.

Senator BRISTOW. One question, please. Do you think that the duty of passing upon the question of the business judgment like this is at all similar to the duty of a court in undertaking to interpret a statute?

Senator POMERENE. They are very much the same.

Senator BRISTOW. One is a question of judgment of business conditions; the other is interpretation of language.

Senator POMERENE. Not always. It is a question of fact, often.

Mr. FRAME. If you will allow me just one moment to explain Mr. Wheeler's low cash reserves. Country banks in the State of Wisconsin are allowed to loan money on mortgages. Their business is more rural than that of national banks. Therefore national banks have more of the commercial business and ought to keep larger reserves than the State banks.

Senator POMERENE. I think that is right.

Different views have been expressed here in the last few days upon the subject as to whether these reserve notes which are issued would be the obligation of the bank or the obligation of the Government. What is your thought on that subject?

Mr. FRAME. I think it is better if it is the obligation of the bank than of the Government.

Senator POMERENE. Why?

Mr. FRAME. Because popular clamor sometimes calls for expansion of a paper currency, and it is more difficult in that case to stop the calls than it would be if it was regulated by the board. I think the board, in regulating that business, would be more apt to be right about it than it would be under general clamor for more money. I would prefer to leave it with the board of control. I believe their judgment would be better than popular clamor.

Senator POMERENE. That does not answer the question.

Senator SHAFROTH. The question is whether it should be the note of the Government or the note of the banks?

Mr. FRAME. I think it ought to be the note of the banks and not of the Government.

Senator POMERENE. Then, you would have the bank the maker and the Government the guarantor?

Mr. FRAME. Perhaps that might be the case.

Senator REED. That does not make much difference, does it, between the Government making it and guaranteeing it?

Senator POMERENE. I am open to conviction; but I do not see any serious objection to making it the obligation of the Government, under the terms of this bill.

Mr. FRAME. I can not say that I would raise any material objection to it.

Senator REED. What I meant was that there was no difference in his answers, Senator.

Senator POMERENE. Oh. Another question that I would like your view upon: The success of this system, if adopted, is going to depend very largely upon the extent to which it will be adopted by the bankers throughout the country. That being so, do you see any objection to the provisions of the bill requiring the national banks to accept its provisions and to subscribe to the stock in the reserve banks?

Mr. FRAME. Yes.

Senator POMERENE. What is it?

Mr. FRAME. Because the bill requires, to my mind, more than the banks would be willing to subscribe to.

Senator POMERENE. That does not answer my question, as I understand it. I meant, assuming in my mind that the amount of stock which the law would require the bankers to take was a reasonable amount. Of course there is a difference of opinion; but assuming that to be so, is there any objection to the compulsory provision of the bill?

Mr. FRAME. Not within what might be termed reasonable limits; that is right.

Senator POMERENE. And would you not make it compulsory under those circumstances?

Mr. FRAME. If it was made reasonable there is no objection to it whatever.

Senator POMERENE. By so doing you would be more likely to insure the success of the system.

Mr. FRAME. If it is within reasonable bounds.

Senator POMERENE. So that the only question, then, that would be raised on that score, in your judgment, is as to whether or not the 20 per cent is a reasonable amount?

Mr. FRAME. I have not raised the question as far as the capitalization is concerned.

Senator POMERENE. I know you have not, but I have in mind objections which have been raised here by other witnesses.

Mr. FRAME. I see. No, as far as I am concerned, on that point I do not want to raise the question.

Senator POMERENE. Under the provisions of this act the only stockholders in the regional banks are the member banks. Do you see any objection, and if so, what, to the opening up of these banks so as to permit the public to take a portion of this stock in the regional banks?

Mr. FRAME. I do not see any objection to it whatever.

Senator POMERENE. Would there be any advantage to be derived from it?

Mr. FRAME. I can not see that it would make any material difference.

Senator REED. It would add more capital, would it not?

Mr. FRAME. Oh, it would in that case, if it was compulsory.

Senator POMERENE. But would it not be an advantage?

Mr. FRAME. I can not see that it would be objectionable. I would not object to it at all.

Senator POMERENE. That does not quite answer my question. You say it is not objectionable. But affirmatively, would there be any advantage so far as the public is concerned?

Mr. FRAME. No. If you will just cover the one point about taking care of us when trouble ensued, I think the banking system of the United States would take care of itself.

Senator POMERENE. We are trying to do that.

Do you think there is enough banking capital in this country now?

Mr. FRAME. I think it is ample. I think the expansion of credit to-day is ample, too. If you will allow me I will give you my reasons.

Senator POMERENE. I will be very glad to have them.

Mr. FRAME. The total wealth of the United States in 1890 was about 65,000 million dollars. If we leave off the word "millions" we will easier grasp it—65,000 millions.

Senator REED. How many billions is that?

Mr. FRAME. Sixty-five. In 1912 the total wealth had about doubled—130,000 millions.

Senator POMERENE. In 1910?

Mr. FRAME. No; 1912. That is a close estimate. In 1890 the banking power of the United States was 5,150 millions; about 5,000 millions. In 1912 it is five times as great, or 25,000 million dollars. While our wealth has doubled, the expansion of bank credits has quintupled. Therefore I think that we have expanded as far as is within reason and as far as our surplus capital will naturally permit. We are in a strained condition to a certain extent. As Sumner puts it, in his History of American Currency.

Over speculation is speculation which outstrips the capital of the country. When we lose our heads in the intoxication of our own achievements, look on currency anticipations, which are only fictitious capital, as if they were real, use them as already earned, build other expansions upon them, then we bring a convulsion and a downfall; sometime or other a liquidation must come * * * then credit breaks down and there must be a settlement, a liquidation, a dividend, a new start.

As far as the question of the overexpansion of credit is concerned, I think the foregoing statements prove that almost conclusively.

I have quoted Sumner. I do not know whether I can lay my hands on it or not, but Paul Le Roy Beaulieu, of Paris, France, lately declared that—

The whole world's pyramid of credit was overexpanded.

He is considered the greatest authority in the world on economics. Senator SHAFROTH. I would like to ask you a few questions.

Mr. FRAME. Just one moment, if you will allow me, on that question of loans. From the report of the Comptroller of the Currency for 1912 the loans and discounts, including discounts of all the banks of the United States, are about as follows:

Various classes of bonds (not Government), 4,500 millions; loans on real estate, 3,500 millions; general loans not quickly liquidated, 6,000 millions; prime paper, including bills of lading, 4,500 millions; total, 18,500 millions.

Prime paper, according to the report of the Comptroller of the Currency, is covered in about one-quarter of the total loans, and the other loans are in what might be termed, in the general acceptation of the term, not quickly liquidable. Therefore that indicates that we are in an expanded condition and not having a full amount of quick liquidable paper in the banks of the United States to-day equal to loaning powers. As far as Great Britain, France, and Germany are concerned, those banks have larger quantities of what might be termed quickly liquidable paper, because in those three nations they have exports and imports annually to the extent of about 10,500 millions of dollars a year; that is, to simplify it a little bit, nearly 1,000 millions of dollars a month of imports and exports from those three countries.

Senator POMERENE. Exports and imports combined?

Mr. FRAME. Yes; practically all of this bill of lading paper is discounted in those nations. This paper covers generally nations with

which they do business, because they have their tentacles scattered all over the world.

The sun never sets on Great Britain's flag, you know, and they have ramifications in all their different possessions. That being the case these nations have about 1,000 millions of dollars a month of paper that is quickly liquidable paper and paid when it is due. That paper we can not hold while interest rates abroad are lower than here. These nations have been building up surplus capital for centuries. Their surplus capital exceeds ours. Their rate of interest is therefore lower than it is here. The bills of lading that are issued in the United States for imports and exports almost invariably go over there because the rate of interest is a little bit lower than it is over here. When we become a creditor Nation, we can then turn the tide, but not before.

The question was asked of a gentleman yesterday about the rise and fall of the rate of interest of the Bank of England, and to my mind his answer was not what it should be. He said that it stopped progress. I do not think it does. When the bank of England raises the rate of interest a little above the normal rate in Great Britain, even one-half per cent above what obtains in France, Germany, or Amsterdam, this paper for export and import, with the bills of lading attached, instead of going into the English banks for discount will go over to those other nations, because they can get it for a half a cent less. The paper that is falling due in Great Britain is paid in cash, and the flow of gold will start from France, Germany, and Amsterdam over into London. It eases the money market just as automatically as water running down hill. When they have sufficient of that gold paid in on their bills that are due and payable they lower the rate again and get back into normal condition. France does the same thing; Germany does the same thing; and it is just simply transferring a little of their liquidable bills of lading—quick paper—into the other nations.

Senator SHAFROTH. Does not that, however, while it affects the gold one way or the other by raising the rate of interest, discourage enterprise in the country that is raising the rate of interest?

Mr. FRAME. No; not to any perceptible extent, because it is only temporary.

Senator SHAFROTH. It would depend on how long it is maintained?

Mr. FRAME. Of course, for the last year or two, while the war has been going on, it has had that effect to slow progress.

Senator REED. That does not stop it as much as it would to have a financial smash and have the bottom fall out of the whole currency system?

Mr. FRAME. No, sir. As far as currency expansion is concerned, in Great Britain, you know, the Bank of England can not issue a dollar of notes in excess of 90 millions of dollars, except if you deposit £5 in gold they will give you a five-pound note.

Senator REED. They are payable in gold or silver.

Mr. FRAME. They are practically a gold certificate. But 25 years ago, if you will remember it, the Bank of France had more than one-half of its total holdings in silver instead of gold. To-day more than three-fourths of its holdings are gold. The bank has been gradually slipping out, little by little, its silver, because it has depreciated in value.

Senator REED. In regard to this condition that you have described, that the currency is expanded as far as it is safe to do it, there are only two remedies in that event, and that is either to contract credit or else expand the medium upon which it is based. Is it not one of those two?

Mr. FRAME. Or just hold steady. If pace is accelerated, we might meet the fate of the *Titanic*.

Senator REED. It would not do to destroy any of that circulating medium upon which this credit is built, would it?

Mr. FRAME. It ought to be done with extreme caution, if it is done, and done very slowly. If it is done rapidly, it will produce a panic.

Senator REED. In your judgment, does this bill contemplate the retirement and cancellation of the bank currency without the substitution of any currency in its place?

Mr. FRAME. No, sir.

Senator REED. In other words, it means the retirement of \$37,500,000 in the cancellation of that much paper every year?

Mr. FRAME. Five per cent per annum, unless the Federal reserve bank increased to the same quantity.

Senator REED. Do you believe that a permanent currency, such as the national-bank currency has been amounting to—750 millions of dollars—would be supplanted by this 30, 60, or 90 day paper and enough money issued on it to take its place?

Mr. FRAME. That is a hard question to answer. I think that my statements show that it is in direct competition with all of the banks in the United States for this class of paper. We want that class of paper if we can get it. The banks want the quick, liquidable paper first before they take other loans.

Senator REED. Yes; but do you believe that there would be a sufficient quantity of that kind of paper that would be taken and recalled every 60 or 90 days to keep permanently in existence 750 millions of paper to take the place of these bank notes?

The CHAIRMAN. It would enter into competition with the existing order of banks in doing it, for that very kind of paper.

Senator REED. Have you not shown by the present figures that you have just read that there is only 450 millions of that out now?

Mr. FRAME. Forty-five hundred millions.

Senator REED. There would be only a little more than half enough?

Mr. FRAME. There is only one quarter enough to go around now, for the banks of the United States to cover total loans and discounts.

Senator SHAFROTH. I would like to ask you whether you think there should be any more than 33½ per cent of gold back of these notes that are issued, the Treasury notes, under this bill?

Mr. FRAME. I should think it would be better if they held 50 per cent even. Of course that is a limitation not necessarily incumbent upon the managers to keep it that way.

Senator SHAFROTH. Do you think that this is as good a currency as the currency issued by the National Government upon a 50 per cent reserve with the power given to the Secretary of the Treasury and a direction given to him to maintain that parity at all times in gold and to sell bonds, if necessary, to keep it at a parity?

Mr. FRAME. I think my answer would be covered in the answer to Senator Pomerone, that it does not seem to me the province of a

government as a prudent political thing to issue currency, because public clamor sometimes calls for more than ought to come out. Look at it in France. If any of you have read Andrew D. White's *Fiat Money* in France, of experiences about a century ago, it will make that clear. I regret exceedingly, gentlemen, that I could not find that publication in New York. It is out of print. I wrote the Appleton Co. in regard to it. I wanted to have a copy, because I think it is a very elucidating pamphlet by a man whom you must all revere and honor—Hon. Andrew D. White. He illustrates the clamor of the people for more money until they had actually issued, in France, a little over 100 years ago 8,000 millions of dollars of currency. It was just simply because when they got into a little depressed condition of affairs they said, "Give us some more money. Let us run the printing press and get some more." That kept up until they increased from 400 millions to start with until they got 40,000 millions of francs—8,000 millions of dollars outstanding. They confiscated the estates of the nobles of France, and the estates belonging to the church, aggregating in value about 1,400 millions of dollars, and they said that they would hold those as collateral security also; and with one fell swoop France repudiated the whole debt.

The point about it is I wanted to illustrate that popular clamor sometimes carry good people off their feet.

Senator SHAFROTH. But as a matter of fact, if a 50 per cent reserve is made and declared and held to, it is a sufficient reserve for any currency?

Mr. FRAME. It is better than 33 $\frac{1}{3}$. Of course Great Britain—take the Bank of England. It always has more gold on hand than notes outstanding.

Senator SHAFROTH. Belgium money, though, is only 19 per cent.

Mr. FRAME. The Bank of Belgium?

Senator SHAFROTH. Yes. The most of these banks have not any maximum reserve which they have got to maintain at all, but they maintain a higher rate. The Bank of Germany is 33 $\frac{1}{3}$, but they maintain often a higher reserve than that.

Senator POMERENE. What is France?

Senator SHAFROTH. France is now down to nothing, if they want to; but they have got a very fair reserve.

Mr. FRAME. They keep an average of about 80 per cent on hand.

Senator SHAFROTH. It is very large at the present time.

The CHAIRMAN. It includes silver, but it is mostly gold.

Mr. FRAME. They have been gradually substituting gold for silver.

Senator SHAFROTH. Were you going to look up something?

Mr. FRAME. What country was it you asked about?

Senator SHAFROTH. Belgium.

Mr. FRAME. The national-bank circulation is 136 millions; deposits, 16 millions; total specie, 24 millions; that is a little less than 20 per cent.

Senator SHAFROTH. Yes; about 19 per cent.

The CHAIRMAN. Are you speaking in francs?

Mr. FRAME. This is the Bank of Belgium.

The CHAIRMAN. No; I say you are speaking in francs?

Mr. FRAME. No; I have reduced it to dollars.

The CHAIRMAN. What did you say their specie was?

Mr. FRAME. When this pamphlet was written a number of years ago—it is dated 1906—it was 24 millions. From this table all European banks is shown, thus enlightening the whole subject.

TABLE No. 1.—*Capital, specie, circulation, etc., of the great European single banks of issue on or about June 30, 1906.*

[Amounts are expressed in millions.]

	Capital.	Circulation.	Deposits.	Total specie.	Loans.
Imperial Bank of Germany.....	\$28.9	\$412.0	\$149.9	\$211.1	\$245.7
Bank of Austria-Hungary.....	41.9	376.5	31.6	299.2	189.8
National Bank of Belgium.....	9.6	136.5	16.3	24.1	124.8
National Bank of Bulgaria.....	1.8	8.6	17.0	7.6	11.9
National Bank of Denmark.....	6.8	34.9	.8	27.2	13.7
Bank of Spain.....	28.9	305.7	134.2	200.2	154.4
Bank of Finland.....	1.9	18.2	4.2	5.2	11.7
Bank of France.....	35.2	908.8	189.1	803.4	255.3
National Bank of Greece.....	3.9	23.1	23.4	4	21.6
Bank of Italy.....	28.9	213.3	90.6	152.7	91.6
Bank of Naples.....	11.6	66.6	16.1	32.8	34.5
Bank of Sicily.....	.....	14.8	10.6	9.1	10.9
Bank of Norway.....	3.5	21.4	1.9	8.0	12.0
Bank of Netherlands.....	8.0	113.0	2.5	57.1	59.8
Bank of Portugal.....	14.6	74.5	29.3	13.7	26.5
National Bank of Roumania.....	2.9	43.1	.....	15.0	25.2
Imperial Bank of Russia.....	28.3	591.0	109.8	455.9	208.3
Bank of England.....	70.8	146.8	280.3	187.8	156.8
National Bank of Servia.....	1.1	6.6	.6	4.5	2.3
Royal Bank of Sweden.....	11.9	52.2	12.2	20.6	37.0
Total (20 banks).....	340.5	3,567.6	1,120.4	2,525.6	1,793.8

The foregoing, practically banks of issue and not of deposit, show demand liabilities versus coin reserves, as compared to the national banks of issue in the United States, as follows (amounts being expressed in millions):

	20 European banks.	6,137 United States national banks.
Circulation outstanding.....	\$3,567.6	\$517.9
Deposits.....	1,120.4	5,898.0
Total.....	4,688.0	6,415.9
Coin reserves held.....	2,525.0	464.4

Mark the fact that the great issuing banks of Europe hold 54 per cent of demand liabilities in coin, as against only 7 per cent in the United States.

Senator SHAFROTH. Do you think that the national-bank currency should be retired in this country under present conditions, either gradually or all at once? Of course all at once would be absurd.

Mr. FRAME. We would have a panic very quickly.

Senator SHAFROTH. But even gradually, with the substitution of another currency or another system?

Mr. FRAME. I think we ought to have the national banks issue a currency, or we ought to have some centralized organization do it. I believe largely in the methods of the issuance of currency abroad. Practically, as far as small banks are concerned, there are none in

Europe that have the power to issue currency to-day, except in Great Britain. There are a number of them there that have the privilege, whose charters have not expired, when they were issued previous to 1844. Any bank that has been chartered since 1844 has no power to issue currency at all. The amount of those who have the privilege of issuing it is very limited to-day.

Senator SHAFROTH. It only amounts, I think, to about £2,000,000 outside of the Bank of England?

Mr. FRAME. I think that in Scotland it amounts to £2,600,000, or about \$13,000,000. But it is infinitesimal as a whole.

Senator BRISTOW. I would like to ask a question there.

Senator REED. You were on the question of bank circulation—bank notes—and I have a question pertinent to that. I understand that it is a rule of finance, which you bankers recognize, that an inferior currency is always kept in circulation more than a superior currency.

Mr. FRAME. As an illustration of that, we keep on hand gold certificates, because we like to have the gold in the department at Washington here to save abrasion, because it is weighty to carry, etc., and we pay out other issues in preference to that. The human family is built the same way the world over. We always keep the best. That is the Gresham law.

Senator POMERENE. You would pay out a dollar with a hole in it rather than a sound one.

Mr. FRAME. If you have two calves, as Adam Smith says, to pay a debt, the leanest one does it, if both are legal tender.

Senator REED. This national-bank note is not a full legal tender, is it?

Mr. FRAME. No, sir.

Senator REED. Therefore it can not be used to pay customs dues, one of the great sources of revenue of our Government. The result, therefore, is that the money which flows into the Federal Treasury from that source comes in in something else than bank notes. That is true, is it not?

Mr. FRAME. Yes.

Senator REED. And yet the bank note stays out and performs the function of money for ordinary business transactions?

Mr. FRAME. Yes.

Senator REED. Is not the result of that that the Government gets more gold at its ports of entry, its customhouses, than it would if we were to make the bank note full legal tender?

Mr. FRAME. And acceptable for customs?

Senator REED. Yes.

Mr. FRAME. I think that is just the point I wanted to raise about this question of reserves for these Federal reserve banks—that they be compelled to hold gold. The law should say so. If done, then when trouble ensues we have the gold to do business with.

Senator REED. I am talking about the proposition of whether, if we were to retire the national bank note and issue in lieu of it a full legal-tender note, it would cut off our source of gold supply to some extent?

Mr. FRAME. Not unless it was done to an extreme beyond what is already outstanding.

Senator REED. There are \$750,000,000 of bank notes circulating in the country. They are not receivable at the customhouses. They perform the ordinary functions of money.

Senator SHAFROTH. I think they are receivable there now. I think the duties are paid in bank notes or any currency of the United States. Since the provision of 1900 I think every form of note in the United States is received in the customhouses. During the war it was not, but during the time up to that time my information has been that they are received.

Senator REED. They may be received, but they are not legally receivable.

Senator SHAFROTH. Oh, no; they could shut down on it at any time.

Senator REED. If we were now to transform that \$750,000,000 into a full legal tender, receivable for customs and everything else, then the money that would come into the Treasury would be just like the money that goes into the pockets of all the people, and we would be getting \$750,000,000 of bank notes on the money that we substitute for them instead of giving gold. Would not that interfere with the Government being able to collect a currency and put aside gold in its Treasury?

Mr. FRAME. The law to compel payment in gold always keeps the Government in condition where it can maintain its supply.

Senator REED. Of course, that would be true, but if we were to make the bank note to-day a full legal tender, or were to substitute for it another form of money as a full legal tender, and it flowed through the customhouses, it would take the place in part of gold that now goes through, would it not?

Mr. FRAME. Yes, sir.

Senator REED. And our opportunity to get gold and to put it away into the vaults, pile it up in the form of these gold reserves, would be lessened, would it not?

Mr. FRAME. It undoubtedly would.

Senator REED. Then, is it not a serious question whether that national-bank currency is not now performing a very useful function to the Government?

Mr. FRAME. It, perhaps, performs a useful function in holding the gold in the country, because gold for reserves is now held by the banks largely. Over \$712,000,000, I believe, at the last report, was in gold or gold certificates.

Senator REED. Those are all the questions I wanted to ask.

Mr. FRAME. On that question of the gold certificates, that does not cost the United States Government anything more than the printing and the storage. The people of the United States voluntarily put that gold in there. They have the gold certificates. They are the very best possible kind of a money that we could possibly have. We never think but what they are good beyond question. It is just like my friend here pulling out of his pocket, yesterday, gold certificates.

Senator SHAFROTH. Yes; I paid my check and it was cashed in gold certificates.

Mr. FRAME. It is keeping the gold in the country, and it is not costing the people anything. It is a foundation which is a steadier

for our great superstructure of credit, which is far better than it would be if it was simply an I. O. U. or a credit currency.

Senator SHAFROTH. They told me, over at the Treasury, that the tendency of the Treasury Department is that the money comes in there and is deposited and dropped into the vaults in order to get rid of the abrasion, and in order to get rid of a great many inconveniences, and that the tendency now of the department is to shove out the gold certificates. The national-bank note is subordinate currency, so far as it is concerned. It seems that they wished to shove out these gold certificates, and they are doing it, as I understand it.

Mr. FRAME. That is the exact illustration of what I have done over my counter hundreds of times. We tried to pay gold over the counter years ago, over and over and over again. The currency of the United States is so unquestioned that no man ever takes it out of his pocket to see whether it is good, bad, or indifferent. People often say, "I do not want that gold. Give me some of your good currency; that is good enough for me." They would rather have that in their pockets than gold, except on the Pacific coast.

Senator SHAFROTH. And they will take any form of currency?

Mr. FRAME. Any form of currency, because they have not had the experience that I had in my early days.

Senator POMERENE. Why the exception on the coast?

Mr. FRAME. I do not know. They must be a little bit like the Englishmen. They seem to hold to their pounds, shillings, and pence.

The CHAIRMAN. I would like to ask you one question. Would you think it advisable to make these Federal reserve notes legal tender, or not? If not, why not?

Mr. FRAME. As it would have a tendency to drive gold out of the country, I would not make them a legal tender.

Senator POMERENE. Why?

Mr. FRAME. The so-called Gresham law would come into play.

The CHAIRMAN. If it is made redeemable in gold why should it drive out the gold?

Mr. FRAME. Well, if it is kept redeemable in gold it would always be good in gold, as long as the confidence of the American people was such that they said, "We can get it if we want it." But in the experience we had when President Cleveland sold a large amount of 4 per cent bonds it caused a loss of confidence in the ability of the Government to maintain its power to redeem in gold.

Senator REED. But there is another thing. There was not any money in the Treasury.

Mr. FRAME. That is why I say keep reserves in gold.

Senator SHAFROTH. The appropriations exceeded the income.

Senator REED. They did not have enough money to run 60 days.

Mr. FRAME. That is exactly the reason why I think it is the proper thing to do to keep our final reserve money in the coin of the world. That is the idea.

The CHAIRMAN. Mr. Flannagan, of New Jersey, is here. Is it the wish of the committee to begin his testimony to-night or to-morrow?

Senator REED. I am rather tired, Mr. Chairman. I do not mean to say that you made me tired, Mr. Frame, except you made me think, and it makes me tired to think.

Mr. FRAME. There is just one part I would like to refer to in the bill before closing.

I would like to call your attention to page 11, because I presume it is an oversight on the part of the other House, as a matter of strict justice:

In case a subscribing bank reduces its capital it shall surrender a proportionate amount of its holdings in the capital of said Federal reserve bank, and in case a bank goes into voluntary liquidation it shall surrender all of its holdings of the capital of said Federal reserve bank.

Senator SHAFROTH. That has been changed a little as it has passed. The CHAIRMAN. What is the point?

Mr. FRAME (reading):

In either case the shares surrendered shall be canceled and the bank shall receive in payment therefor a sum equal to its cash paid subscriptions on the shares surrendered.

Senator SHAFROTH. That has also been modified.

The CHAIRMAN. Do you mean that the earnings on the stock is ignored?

Mr. FRAME. Yes. The point I want to bring out is that the face only is paid back. Now, suppose that during a term of six or eight years an accumulation of 20 per cent of capital was added to it. It would seem perfectly fair if the banks of the United States should turn in that capitalization of \$100,000,000 and you had \$20,000,000 of surplus that was accumulated from profits, that the bank when it surrenders it should receive its proportionate share of surplus.

The CHAIRMAN. You mean the book value?

Mr. FRAME. The book value.

Senator REED. Then, in addition to that, this relates only to those banks which voluntarily reduce their stock and go into voluntary liquidation. What is the provision, if anyone here knows, when it is involuntary? Of course, in that case some rule ought to be made that the creditors would get the full book value of their stock. They ought not to lose it and let it be added to the profits.

Mr. FRAME. Would not that cover the point that I make?

Senator SHAFROTH. Yes.

Senator REED. The point you make refers to one thing, but I wondered whether it covers the involuntary liquidations.

Senator SHAFROTH. If not, probably it ought to be made to cover it?

Mr. FRAME. Oh, yes; it ought to cover both; if it does in one case it certainly ought to be in another.

Senator REED. It reads:

That if any shareholder of a Federal reserve bank shall become insolvent and a receiver be appointed, the stock held by it in said Federal reserve bank shall be canceled and the balance, after deducting from the amount of its cash-paid subscriptions all debts due by such insolvent bank to said Federal reserve bank, shall be paid to the receiver of the insolvent bank.

Senator SHAFROTH. You can just put in there, "and accumulations."

Mr. FRAME. Or "book values."

Senator SHAFROTH. That will cover it.

Mr. FRAME. That is certainly equitable. In case a bank closed voluntarily or through a receivership there is no provision that I can see made for the care of the 2 per cent bonds. Of course, if there is a public market for them so they can sell them without any difficulty, that would be all right; but if there did not happen to be,

it would seem as though at least a provision should be in there that if they did fail or if they went into voluntary liquidation that at least a 3 per cent bond might be given to them in exchange for their twos.

Senator REED. That is, if we issued a 3 per cent bond.

Mr. FRAME. Well, you have provided in there for that, have you not?

Senator SHAFROTH. He means if the bill passes.

The CHAIRMAN. They have not actually been issued yet. [Laughter.]

Mr. FRAME. No; but they ought to be.

Senator SHAFROTH. That is one of the great stumbling blocks, you know.

Mr. FRAME. Well, I am speaking about the question of the justice of it.

Senator REED. You mean that bond ought to be cashed in some way?

Mr. FRAME. Ought to be cashed in some way; taken care of by the Government in some way instead of being thrown on the helpless bank. If it involuntarily suspended, or if the bank wanted to go out of business, it ought to be provided for. Really, a 2 per cent bond ought never to have been sold. I think it was a great misfortune that it was sold. It ought to have been a 3 per cent bond, with a higher tax.

I thank the committee for their kindness in hearing me, and I appreciate it very thoroughly.

The CHAIRMAN. We are glad to have you here with us, Mr. Frame.

Mr. FRAME. And I do hope that you will give to the country something that will live in history, equally with the Bullion Report of 1810, made to the House of Commons.

(The document referred to by the witness follows:)

SOME FACTS VERSUS FALLACIES IN BANKING REFORM.

[Address by Andrew Jay Frame, president of the Waukesha National Bank, Waukesha, Wis., delivered before the State Bankers' Association, at Muskogee, Okla., May 9, 1913.]

Great Britain, in her campaign of education on currency reform, was agitated by widespread discussion for 25 years previous to 1816 when Parliament indorsed the celebrated Bullion Report of 1810 to the House of Commons.

Prof. William G. Sumner in his History of American Currency dubs this report "The most important document in financial literature."

As to ameliorating panic conditions, the paramount enunciation in that document probably was "in the presence of a panic, it is the duty of the bank to discount freely to all solvent parties. I can not find in searching the records that this document advocates the necessity of discounting too freely in normal times. That question must necessarily be governed automatically by the law of supply and demand for money. Abnormally high interest rates are the true barometer that credit expansion has outstripped capital and in normal times, even in advancing prosperity, should be a warning that extra currency issues, which Prof. Sumner calls "fictitious capital," should not be greatly encouraged. The late *Titanic* disaster is a fair illustration of my meaning. Dr. Adam Smith said: "The cry of all ages is for more money." The cry of the present age is more speed in every way. The overbuoyant American needs a check rein to insure a conservatism which gives more permanent prosperity to all, thus limiting the evils of too frequent panic periods as well as their severity.

I declare that no live, progressive nation can be entirely free from panics. Only those nations where commerce and progress are dead can enjoy the doubtful legacy. Panics will forever be with those nations enjoying great progress, expanded credit and unbounded energy. These reign here. I plead for conservatism as a safety valve to true permanent progress and relief when panic threatens.

Under Sir Robert Peel's Act of 1844, Great Britain has a very limited per capita circulation, and it is far more rigid than ours. Nevertheless, in 1847, 1857, and 1866, when panics were raging, and banks and business houses were falling like snow in a winter's storm, on Government assurance that the rigid currency limitation would not be enforced, the governor of the Bank of England publicly announced that all good, solvent bankers and merchants could obtain at high rates discounts for cash or credit at the bank, the banking department merely obtaining extra cash from the issue department on deposit with it of ample securities. The mere knowledge that relief was at hand, history says, broke the back of the panic almost in the twinkling of an eye, and little "extra cash" was required to restore confidence. Mark the fact, relief came with "extra cash" at high interest rates, and such cash was almost immediately retired and normal conditions prevailed thereafter.

As our general banking functions in most material respects under the beneficent, independent banking systems of the United States, barring a few States without good laws, now fulfill their true mission toward the people in our phenomenal progress, it seems the only needful requirement is some flexibility to our currency issues when panic threatens, to the end that general paralysis of trade and commerce may be avoided.

To accomplish this great end we need no monopolistic, branch banking system that even threatens to revolutionize present conditions; we need in normal times no further inflation of our present excessive currency issues; we need no additional easy methods of expanding credit by acceptances or otherwise, but as I have often said before, we do need some method of obtaining rediscounts in abnormal periods from some reservoir of extra cash at high interest rates, purely as a relief measure to prevent the calamitous conditions of general cash suspension by banks. The citation from experience, not theory, of the Bank of England covers the point at issue, except that the barometer of a high interest rate for extra cash should be an automatic regulator of flexibility, and the bank should not be obliged to ask the Government not to prosecute for infringement of law for relief in time of trouble. The chairman of the Monetary Commission told me he asked the governor of the Bank of England why the Government did not give this extraordinary power to the bank for relief in troublous times, and his answer was, "We fear overexpansion of credit." My study of the subject, however, convinces me that a middle ground between the rigid English currency system on one hand and on the other hand the demands of the banking reform advocates for almost unlimited, untaxed currency issues, even in normal times; also for monopolistic, revolutionary, complex, and compound remedies at all times which are not germane to relief under pressure, holds the true solution for our troubles. Doping patients with sweetened quack medicine when they are not ill undermines a sound constitution. Encouraging pyramiding of credit by opening up easy methods for expansion leads to bubble blowing. It is a panic breeder and not a preventer. The Imperial Bank of Germany comes closer to covering the correct method of relief, as it can issue but one hundred and thirty millions of uncovered currency, and all in excess thereof must pay a tax of 5 per cent thereon to the Government. This penalizes overexpansion of currency and is the safety valve which has kept her overstrained condition from exploding. Even this method has taxed her utmost powers to prevent a cataclysm there, as is evidenced by the German banks borrowing money of the United States banks on good collateral at rates running from 5 to 6 per cent clear through 1911-12, and even up to date. The banks of Germany even bid 20 per cent for money in the New York market in December, 1911, and at several periods since have bid in excess of 6 per cent. Notwithstanding her 5 per cent penalized flexible currency saved her from panic, yet Germany has bordered thereon for some time, chiefly because of overindulgence in acceptances, which are more freely granted there than elsewhere, coupled with an enthusiastic industrial development, overtaxing her surplus capital.

HANDWRITING UPON THE WALL.

Just a few more words of warning on overexpansion of credit before I leave it:

	Millions.
In 1890 the total wealth of the United States was about.....	65,000
In 1913 the total wealth has about doubled, or.....	130,000
The banking power of the United States:	
In 1890 was.....	5,150
In 1913 it is five times as great, or.....	25,000

therefore, while our wealth doubled, our pyramid of bank credits increased fivefold.

Again, the 1912 Report of the Comptroller of the Currency shows "Loans and discounts," including bonds, of all the banks in the United States about as follows:

	Millions.
In various classes of bonds (not Government).....	4,500
Loans on real estate, say.....	3,500
General loans, not quickly liquidated.....	6,000
Prime paper, including bills of lading.....	4,500
Total.....	18,500

This indicates that only one-fourth of the total is prime paper, and the other three-fourths is in other securities, because all live paper is now promptly cared for first. The heretical demand by the banking-reform advocates for 7,400 national banks to be allowed to loan their credit to their customers on acceptances, which is clearly a complication and not a relief of banks in panic periods, is condemned by 12 bankers from 12 States in a signed brief which I filed at Washington with the Banking and Currency Committee. These 12 bankers declare that if their city correspondents enter the field of accepting customers' drafts they will transfer their balances to more conservative banks. They declare this function is the field for acceptance or discount houses, and not for banks of deposit.

It is gratifying to note that although a year ago when, under the title of "Diagnosis of the monetary commission bill" I addressed the bankers and business men's clubs of Memphis, Tenn., Little Rock, Ark., and elsewhere, and therein condemned general bank acceptances as unsafe, lately the chairman of the Business Men's League of the United States reiterated my expression that "it was a dangerous proposition." Let there be more light and the whole question may be soundly solved yet without breaking all the crockery.

In face of the fact that the world's production of gold from 1490 to 1890 (400 years) was 7,350 millions, and from 1890 to 1913 (23 years) was 7,000 millions, in face of the fact that the pages of history are strewn with proofs, as recorded by all the great authorities on political economy, warning us against over-indulgence in credit expansion; in face of the fact that practically all our conservative banking journals and economic writers on the great dailies are continually sounding their notes of warning (time forbids quoting from a mass of evidence); in face of the fact that the world's greatest political economist, Paul LeRoy Beaulieu, of Paris, France, lately declared "that the whole world's pyramid of credit was overexpanded," I ask in all seriousness is not the "hand-writing upon the wall" a sufficient warning to us that conservatism—not further easy methods of expanding our currency or credit—should reign supreme? I challenge any banker or statesman for disproof of these facts.

Without further pursuit of this subject, and as the new political power is wrestling with the generally supposed knotty problem, let us await the findings in hope of a sound solution.

Permit, therefore, a few logical, general statements of fact—good in any event—followed by a few of the many reasons why the independent banking system of the United States is not the worst but the best in the world—barring only relief in times of pressure—in the hope that it may help enlighten our pathway.

PANICS ABROAD AND HERE.

First, permit, regretfully, a reference to statements that have periodically been sent broadcast throughout the land, which are so seriously misleading that they ought not to pass without comment.

Within two years I have heard Hon. Robert W. Bonyng, a member of the monetary commission, in public addresses reiterate the following:

"It may be several years yet before the country will be ready for a full and scientific remodeling of our antiquated banking system. Our faulty banking system is responsible for the many bank panics that have disgraced us in the past, and from which all other great commercial nations have been exempt for practically half a century."

David R. Forgan, president National City Bank of Chicago, before the New York Credit Men's Association, January 23, 1913 (see p. 4, pamphlet, How to avoid panics), said: "I say it is nothing short of a national disgrace that this is the only country in the civilized world that has had panics (and it has had about half a dozen) causing general suspension of the banks within the memory of living man."

The Chamber of Commerce of the United States of America, at Washington, D. C., January 21, 22, 23, 1913, adopted the following resolutions:

"Our present banking and currency system, based upon laws enacted 50 years ago, is entirely inadequate for the present needs of the people and the business interests of the country, on which the welfare of our people depends.

"That there is no necessity for the continuance of this condition in the United States, and for the recurring financial panics it tends to induce, is evidenced by the absence of such frequent financial disturbances in other countries."

These with others of a like character seem to have imbued the masses with the idea that panics do not occur abroad. Some stress is laid upon a fine distinction between the words "bank" and "commercial" panic. The Standard Dictionary indicates a distinction like unto tweedledum and tweedledee. As to the business men of the chamber of commerce falling into error on the subject it may be excusable, because it is not to be expected that they are familiar with the world's history on banking.

As a partial answer to these fallacious statements permit me to quote from my address of 1902 before the State Bankers' Association of Michigan.

Panic of 1836 to 1839.—Sumner's History of American Currency says: "In 1836 the Agricultural Bank of Ireland and the Northern and Central Bank of Manchester failed." They had 70 or 80 branches. "This was the first blow of the crisis which convulsed Europe and America." According to McLeod failures continued through 1839 before equilibrium was restored.

Panic of 1847.—McLeod, in The History of Banking in All Nations, quotes many great bank failures in 1847 all over Britain and sums up by saying the liabilities were over £15,000,000. Further, it says: "A complete cessation of private discounts followed." Doubtless branch banks went down, but no distinction is noted.

Panic of 1857.—Again McLeod quotes a long list of terrible bank failures in 1857, and then says: "As the failures in London became more tremendous discounts became more and more contracted. The stunning news of the stoppage of so many banks created a banking panic. Private banks stopped discounting altogether. When universal ruin was at last impending, etc." "This great crisis far exceeded in intensity that of 1847." The aggregate liabilities must have been appalling, but are not stated. Mr. Stickney, in his American Bankers' Association address, stated that "in 1837 and 1838, also in 1856, there was a great commercial crisis in Great Britain, but not a bank in England or Scotland failed." As I can find no record of a crisis in 1856, must we not conclude that this date is erroneous and comment as to failures would be uncharitable?

Panic of 1866.—In 1866, according to McLeod, at the time Overend, Gurney & Co. failed for £10,000,000, the bank failures of Great Britain aggregated the stupendous sum of £50,000,000. This sum exceeds the total liabilities of all the failed national banks of the United States since their inception, 40 years ago, to this date by over £13,000,000.

Panic of 1878.—In 1878 the West of England & South Wales Banking Co. failed for £5,000,000, with 40 or 50 branches. In the same year the City of Glasgow Bank failed for £14,000,000, with 131 branches. These, with other bank failures, carried the liabilities to over £20,000,000. The American Encyclopedia says: "The year 1878 was marked by deepening financial gloom in England, aggravated by disastrous financial failures, and the City of Glasgow Bank failure amounted to almost a national disaster."

Panic of 1890.—McLeod quotes the failure of the Barings in 1890 for £21,000,000, but for fear of a general upheaval the great banks of Britain joined together and liquidated the Barings, thus limiting the disaster materially, although other failures occurred.

Hearers, are you tired? I wonder sometimes what "standard authorities" Mr. Stickney studied when at the American Bankers' Association last fall he drew such a lovely picture of the magnificent banking system of Great Britain, which we, with "no system," ought to adopt to prevent panics and to become the creditor nation of the world.

Let us look for a moment at the panics in the United States.

Panic of 1836.—From 1836 to 1839 history would indicate that we, in consequence of the bank war, speculation, etc., were in bad straits as well as Britain.

Panic of 1857.—In 1857, on account of wildcat banking enjoying its widest freedom, we have no cause for claiming more than parallel conditions compared with those of Britain.

Panic of 1873.—In 1873, on account of return to normal values after the inflated prices produced by cheap money during the suspension of specie payments on account of the Civil War, we had a panic, but as to severity it did not compare with the cyclonic conditions that struck terror to Great Britain in 1866.

Panic of 1893.—In 1893 we had a panic in the United States. Not because of any special unsoundness in the banks of this country, but because the very foundation of the superstructure of our whole credit system was being undermined in an effort on the part of repudiators—thank God, not bankers—to pay off depositors and all other creditors in 50-cent dollars and to liquidate our foreign debts by the same dishonorable method, thus aggravating panic conditions by the withdrawal by creditors abroad on account of fright in the first five months of the year of \$70,000,000 from our stock of gold. If business paralysis is not certain on an occasion when general repudiation and dishonor is rampant, then history falsifies the record. Confidence builds up, distrust paralyzes.

Let us sum up the panic records as to liabilities of failed banks:

Great Britain:

1836 to 1839	-----	(¹)
1847 (over)	-----	£15,000,000
1857	-----	(²)
1866	-----	50,000,000
1878 (over)	-----	20,000,000
1890 (over)	-----	21,000,000

In less than 60 years aggregate recorded (1836 and 1857 not recorded)----- 106,000,000

United States (in pounds sterling):

1836 to 1839	-----	(¹)
1857 (call conditions parallel to those of Great Britain)	-----	(¹)
1873—		
National banks	-----	2,200,000
All other banks	-----	(¹)
1893—		
National banks	-----	6,000,000
All banks	-----	14,800,000

It will readily be seen that Britain has 6 recorded panic dates as against 4 in the United States in the past 60 years, and that the recorded liabilities are over £106,000,000 in Britain and but a small fraction of that sum in the United States.

According to the 1901 report of the Comptroller of the Currency, the total liabilities 1863 to 1901 of failed national banks was £37,000,000; 1863 to 1896 of all other banks in United States, £44,000,000; making a total of £81,000,000.

This is £10,000,000 short of the liabilities of the banks of Great Britain in the panics of 1866, 1878, and 1890 alone, not counting a single intermediate failure in the past 40 years. When we come to compare historical facts with unsupported assertion, the banking system of the United States looms up so grandly that every American should feel proud. I know you will pardon me if I refer to one more bit of history, the Australian, which is an offshoot of Great Britain's branch banking system. The American Encyclopedia for 1893 says, "Out of 28 banks with 1,700 branches, 13 of them with 800 or 900 branches failed in six months ending May, 1893, for the stupendous sum of £90,000,000," which sum in that single swoop exceeds the total liabilities of all the failed banks in

¹ No record.

² No record, except "far greater than in 1847."

the United States in the past 40 years, although the banking power of the United States was six times that of Australia at that time. What is the cause of the financial distress in Germany for the past few years? She has had a branch banking system, too.

I say, "Why do these people insist on reiterating such fallacies?" I leave the answer to my hearers.

Here is another that makes a country banker smile. An eminent branch-bank advocate openly declared in public lately, "It is the country banker that causes a panic, and only the country banker."

As an answer I will simply ask, "Did the panic of 1907 originate in New York City? If not, where did it incubate?"

"Did 'the country banker' cause it?"

"Would the banks of the country, as a whole, have suspended cash payments if the New York City banks in 1907 had not suddenly wired all banks, city and country alike, that 'No cash will be paid on balances on Monday morning'?"

"Are panics born in the country or in the city, where great promotions flourish?"

"Did not the 'cause' in New York produce the 'effect' throughout the country as to cash that 'You no got 'em, I want 'em'? The effect simply aggravated the cause."

One other point and I am through.

BRANCH V. INDEPENDENT BANKING.

As Canadian branch banking is so often lauded as a model for us, permit a brief comparison of the two systems:

First. It requires a capitalization of not less than \$500,000 to start a bank in Canada. There are now in the chief cities of Canada 27 great central banks. These own and control over 2,500 branches scattered throughout the Dominion. The number of central banks has been materially reduced in the past 30 years, and it is a scandalous fact, widely admitted, that the powers controlling make it about as difficult to get into the select coterie as to get into a safe with a jimmy. The system evidently borders on a pure monopoly.

Second. The stock of these central banks—no stock being issued by the branches—is held largely in London, Liverpool, Quebec, Montreal, Toronto, etc., and only a small percentage throughout the Dominion. Of course, dividends follow the stockholders' residence.

Third. I understand the stock is assessed where the holder resides and branches pay a license fee to do business, also taxes on the buildings owned by the bank, but the owner of such buildings would likewise pay the tax if rented by the bank.

Fourth. The branches in the country towns and smaller cities have no president or cashier and no board of directors, but are managed practically by figure-heads. One man has general supervision over 10 to 20 branches in separate localities, and the so-called local managers take orders from him.

Fifth. They take the deposits from one locality and send to others where interest rates are higher. Canadian banks, I am informed, have millions of dollars invested in Mexican and South American public utilities, to the detriment of home demands.

Let us compare conditions in Muskogee and the country generally with like cities in Canada.

Muskogee has 11 banks and trust companies, with capital and surplus of about \$1,500,000, the bulk of which is owned at home. The presidents, cashiers, and boards of directors are strong, influential, public-spirited citizens. The local stockholders are all on the alert to upbuild Muskogee and bring profits on their stock holdings.

Under the Canadian branch-banking system the Muskogee presidents and cashiers would be set aside and the directors abolished. There would be comparatively no stockholders, even of the central banks, and assistant cashiers would be the managers of the branches. As self-interest is the first law of nature, this wrecking of the powerful influence for good of all these elements would breed indifference.

Again, as taxes are paid in Oklahoma on capital and surplus, Muskogee would get filched out of over \$30,000 per year in bank taxes. If the stock is not all held now in Muskogee, it soon will be under your thrifty conditions. Then, if stockholders get but 6 per cent per annum on their investment of

\$1,500,000, that would mean \$90,000 less per annum for distribution in Muskogee, plus any undivided profits, all of which, if the Canadian system were adopted in the United States, would go to 100 or 200 great central banks of New York, Boston, Philadelphia, Chicago, etc., which would have the 25,000 present independent banks as tails to their big kites. A beautiful and enticing picture for Muskogee and the country generally. I appeal to you, gentlemen, is it not a fact that those allied to the ownership and management of the independent banks of the country have been wonderfully instrumental in the onward and upward progress of your farm sections, your hamlets, and your cities? If we upbuild these, do we not upbuild the great cities and the Nation as a whole?

Contrast these facts with the further ones that Canada, with splendid resources, has a territory about equal to the United States, with a population of but seven and a half millions; that her whole banking power is not equal to that of Massachusetts alone; that the Monetary Commission reports and other authorities show that the comparative losses to depositors and stockholders of Canadian banks, as compared to our national banking system, is as 3 to 1 in our favor; that interest rates are neither uniform nor are they lower than in the United States; that these same reports, as testified to by the general manager of the Bank of Nova Scotia, showed comparatively five banks failed in Canada to one national bank in the United States since 1880; that according to the same general manager in 1880 there were in Canada 41 banks; incorporated since (to 1906), 7 banks; total, 48 banks; that of this number 12 have failed and some others saved themselves by amalgamation (to-day but 27 are left); that Canada, notwithstanding she is bolstered up with great floods of British capital, invested in her railways, banks, etc., yet she is practically asleep compared to the wonderful energy of our people—and then ask yourselves if I am not justified in declaring “the Canadian branch-banking system skims the cream from the country to enrich the exchequers of the monopolists in the great cities, while the independent banking system of the United States helps wonderfully to upbuild the Nation as a whole.”

In an address at Wausau, Wis., last March I made these statements, merely in a comparative way, and it seems to have hit the branch-bank advocates in the solar plexus, as they grew hysterical over it. If it is a dead issue, why should they get excited? The country better nail up the coffin if the issue is dead.

Perhaps a little Canadian testimony will not detract from my contentions. Therefore permit a short quotation from a 1912 weekly edition of the Toronto Star, which has a daily circulation largely in excess of any of the other six dailies there.

Preceding a well-written, logical four-column article, the following strong headlines appear in the Star: “Monster banking monopoly a leech at Canada’s throat, killing local industry, depopulating rural districts—Centralization of almost entire financial power of Dominion in the hands of a few capitalists has resulted from our much-vaunted banking system—Almost total extermination of local banks.”

I quote but two extracts therefrom, to wit:

“While large capital insures slow, steady transmission of deposits to ‘branches’ for control and use of head offices in smart alien centers, local credit based on local savings is transferred to parasites on whom rests neither responsibility, object, nor desire to exercise banking functions in support of local enterprises. With such credit basis lost, not only does the collapse or absorption of local bank institutions become inevitable, but local aspirations and confidence which had sustained local industry are wiped out or made dependent on the will and nod of competitive enterprise. So secretly, so gradually, does this sequestration of savings proceed, so insidiously are local enterprises undermined, that planting of a ‘branch’ to suck out local earnings, to extirpation of even the last local industry or institution, is embraced by ‘slow-going’ people with the same artless innocence as a 3-year child fondles a viper.

“To this accursed system of concentration of credit and destruction of local industry the Dominion of Canada stands indebted for a contracted population of 7,000,000 in place of 25,000,000 rightfully due it under decentralized systems of banks designed to sustain, to breathe the breath of economic life through the remotest as well as the most insulated of its parts.”

This indictment from a Canadian rather outstrips mine.

Permit one other point not brought out heretofore.

As all ordinary banking functions are carried on in the banks of the United States at least as well as in Canada—I should say better, because our State

banks loan on real estate, and Canadian chartered banks do not—I suppose the oft-repeated assertion as to the wonderful elasticity of Canadian bank currency ought to be referred to. It probably is not generally known, but the fact remains that document No. 583 clearly shows that a hard-money market obtained in Canada in 1907. The Canadian banks, with large New York City deposits and demand loans, reduced both and shipped all the cash they could get to Canada, and to further aggravate the New York situation these Canadian banks transferred large amounts of their New York balances to London. Deposits in Canada declined \$30,000,000 and the loans \$25,000,000 in the last two months of 1907. The Dominion suspended the limitation on issues of currency and \$5,115,000 of “emergency currency” was issued. I cite these facts to show that slow-going Canada has her troubles, too. Even if her currency system did pull her through without cash suspension by her banks, we can not adopt that system without adopting her branch system with it. For proof, Mr. J. B. Forgan, who is an ardent advocate of the Canadian system, in 1902 declared in an address: “To me the simple statement that about 10,000 (now double that number) banks, with capitals running all the way from \$25,000 to \$25,000,000, would have the privilege of issue settles it as impractical and impossible.”

Query: Do we wish to surrender our independent system and adopt the monopolistic, “cream-skimming” Canadian system? Friends, draw your own conclusions. I refrain from wasting any more powder, although there is abundance left.

As a constructive policy is the real issue, I respectfully close with the following:

Condemning the best banking system the world ever knew, with a small “mote” in it, and glorifying the monopolistic branch banking systems of other nations with big “beams” in them, will not eradicate our single defect. We can only ameliorate panic conditions, but not through a big bank with many branches which will enter into severe competition with existing banks; not through acceptance privileges to 7,400 national banks, which would only aggravate our already overstrained credit; not by additions to our present inflated currency. These simply spell monopoly, inflation of currency and credit. They are panic breeders and not preventers. On the other hand, we can, if we will, prevent cash suspensions by banks and thereby ameliorate panic conditions through either of these simple methods.

I care not for the method, if results are obtained, barring objections stated. As the political party in power has turned down the Monetary Commission bill, I respectfully offer, under first, a new suggestion for earnest consideration and then mention two others well understood.

First. Permit the banks of the country to deposit in the Treasury Department at Washington, or other depository, out of present reserves, as follows (estimated): Five per cent of deposits from the three central reserve cities; 2 per cent of deposits from the three general reserve cities; 1 per cent of deposits from the country banks. This would mobilize, say, \$300,000,000 in cash now held as reserve, and therefore would occasion no loss to any bank. In ordinary times country banks can obtain rediscounts as they do now—through their city correspondents. When trouble threatens in any section this vast reservoir of ready cash will be open to “discount freely to all solvent parties” at high rates, and the mere knowledge that relief can be had will impart general confidence. Its operation should be like unto a water reservoir—to put out a fire in its incipiency and refill again ready for future troubles—not a money maker; a servant, not a master.

Second. Extend the privileges of the Aldrich-Vreeland Act to all banks on a uniform form of currency. There are \$1,200,000,000 of bonds now in the banks of the United States eligible for use to obtain extra cash in troublous times, and the Treasury Department holds \$500,000,000 national-bank notes for this purpose.

Third. Legalize clearing-house certificates, on which extra uniform currency can be had when panic threatens.

Either of these will cure our single material defect. We will also maintain our splendid independent system intact. We must turn a deaf ear to the siren song of those who argue so loudly for complex and compound remedies. They are worse than the disease.

Brother bankers, why should we not get together by eliminating all complex and compound matters not germane to the end in view and decide upon a simple remedy for relief in the day of trouble? That is all we need, as banks which

can not take care of themselves in ordinary times are unworthy to live. This is the whole thing in a nutshell.

Query: It is a maxim that currency is not capital. In developing days the special privilege of issuing currency by banks as a substitute for capital seemed justifiable. To-day that function by banks generally is unjustifiable, because great accumulations of surplus capital have cut interest rates to less than one-half of those of 50 years ago; because our per capita circulation—mostly gold or gold certificates—more than doubled in that period, and because our credit is overexpanded now; therefore—

If a bank extends its loans to the limit of its assets (total loans are now over nine times the capital of all banks), then swaps its printed I O Us without interest in exchange for its customer's note drawing 5 per cent interest and upward, does not that act spell bubble blowing?

Is not a measure for relief in the day of trouble like unto a governor on an engine—all we need?

(Thereupon, at 5.45 o'clock p. m., the committee adjourned until to-morrow, Saturday, morning, at 10 o'clock.)

SATURDAY, SEPTEMBER 20, 1913.

COMMITTEE ON BANKING AND CURRENCY,
UNITED STATES SENATE,
Washington, D. C.

The committee assembled at 10.30 o'clock a. m.

Present: Senators Owen (chairman), Hitchcock, O'Gorman, Reed, Pomerene, Shafroth, and Bristow.

The CHAIRMAN. Mr. Flannagan, the committee will be glad to hear you now. Mr. Flannagan is from Montclair, N. J.

Could you state your position and your experience in banking matters so that it may be embodied as a part of our record?

STATEMENT OF WILLIAM W. FLANNAGAN, OF MONTCLAIR, N. J.

Mr. FLANNAGAN. I was formerly cashier of the People's National Bank, of Charlottesville, Va., and afterwards the president of the Southern National Bank, in the city of New York. At present I am not engaged in any business, but after the severance of my connection with the Southern National Bank I was engaged a good many years in private banking.

Senator REED. In what year did you cease to be an active banker?

Mr. FLANNAGAN. In 1905.

Senator REED. Was that when you severed your connection with the Southern National Bank of New York?

Mr. FLANNAGAN. No; I severed my connection with the Southern National Bank in 1895.

Senator REED. How long were you president of the Southern National Bank?

Mr. FLANNAGAN. Ten years.

Senator REED. What was its capital stock?

Mr. FLANNAGAN. \$1,000,000.

Senator REED. Can you tell us what its deposits were?

Mr. FLANNAGAN. Three and one-half million dollars. Shall I go ahead with my statement?

Senator REED. Yes; I think you may go ahead with your statement; I merely wanted that information.

Senator HITCHCOCK. Yes; these questions are merely preliminary.

Mr. FLANNAGAN. I should like to make my statement, and then any questions that the members of the committee desire to ask me I shall be glad to answer.

I am firmly convinced that the measure before you, now under general discussion throughout the country, has in its preparation been prompted by an earnest and patriotic desire to advance the best interests of all the people, irrespective of particular localities, and has not sought to benefit one class at the expense of another.

I consider that the bill displays a high order of constructive ability in legislation; that it is sound in its fundamental principles, and that with few changes it will remove the inherent defects which were inseparable from financial legislation 50 years ago, necessitated under the stress of abnormal conditions.

I have read with much interest and benefit the excellent report made by the House Banking and Currency Committee which accompanied the presentation of the bill and am impressed with its judicial tone and the spirit in which the difficulties of the problem are considered and the convincing reasons for the adoption of the remedies suggested.

I have also read the report and recommendations of the currency commission of the American Bankers' Association growing out of the recent meeting at Chicago. No one with an open mind can read and compare those two reports without being impressed with the contrast in the pervading idea of the two documents. The "presidents of 47 State bankers' associations" and "the representatives of 191 clearing houses," "being invited to attend and unite in an expression," "through their representatives adopt certain resolutions," which in the preamble are generally commendatory of the bill, but the provisions of which they emasculate in the changes suggested. These suggested changes are not supported in that document by any argument or appeal to reason. The signers seem to rely entirely upon a formidable array of names of the banking institutions and associations which they claim to represent, as if the "dictum" of such a quantity and quality of these eminently respectable bodies should carry conviction and be the last word.

The preamble says that to insure the successful operation of a new banking law, it must be of such a character as to warrant a general acceptance of its provisions by existing banking institutions, and therefore proceeds to tell what these changes must be in order to meet this approval. This method of securing legislation does not appeal to the average citizen, and I doubt if it appeals to you. After such an exhibition of the "big stick," it ill becomes these bankers to complain of the compulsory nature of the bill in question.

I can not doubt the patriotism nor the good faith of men in these high positions of trust, nor can I doubt, after much reflection, that what they contend for does not serve the best interests and welfare of the whole country.

What is the explanation? Can it be the pervading idea which has afflicted the great managers in the combinations of capital, that they are the guardians of the Nation's prosperity, and that such prosperity is inseparable from their continuing guardianship? Such a condition of mind may arise, and is apt to arise, where good men hold the power which directs the destinies of others, especially where

such men are imbued with the milk of human kindness and have the love for their fellow man warmly pulsating in their hearts. I have the greatest respect for the banking fraternity. I have been of it for many years, and my father was before me.

Banks and bankers are commonly considered dispensers of credit, this credit constituting more than 95 per cent of the daily financial and commercial operations of organized society in the supply of human wants, and yet I am inclined to the opinion that the very confusion of thought produced through the varied uses of this word "credit" accounts for an obsession on the part of many bankers and is not exclusive to them.

If I sell a man a horse and take his promise to pay in the future in the form of a note, I extend him credit; he has my confidence that he will pay. If I sell a bank that promise to pay—that is, have the note discounted and the proceeds placed to my credit in the form of a deposit—the meaning of the word is entirely changed. For now I say, the bank has given me credit, while in the sense of confidence the contrary is true; I have given the bank credit; I have extended to the bank my confidence that it will pay and accepted its promise in lieu of payment.

I am the creditor in both cases, and have exchanged my horse for the promise of the bank to pay me on demand, and yet I say I gave the buyer of the horse credit when I sold him the horse, and the bank gave me credit when I sold the note.

Senator HITCHCOCK. Mr. Flannagan, may I interrupt you there for a moment?

Mr. FLANNAGAN. Certainly.

Senator HITCHCOCK. That line of testimony is quite general; but I am unable to see how you can treat the action of the bank as you do. When you sold the note to the bank, you did it because you wanted the funds to use.

Mr. FLANNAGAN. Yes; I am going to explain all of that, and tell you exactly how it is a swapping of debts.

Senator HITCHCOCK. So that although you may start with credit on the books of the bank, what you are really doing is getting cash? It may be only to your credit five minutes. Now, why do all you bankers maintain that when you borrow money, or a person borrows money of a bank, he gets a credit on the books, whereas the general rule is that when he borrows money from a bank he borrows because he wants to use it, and it goes off the books?

Mr. FLANNAGAN. If you will let me get through with my statement I will illustrate that proposition to you.

Senator HITCHCOCK. That is to say, there is no need for credit being given you on the books of the bank at all. When you borrow money you go to the bank because you want to get money——

Mr. FLANNAGAN. It is an exchange of debts to begin with. It may be afterwards that the debt is discharged by the substitution of another debt or by the payment of coin.

Senator REED. I think, Senator Hitchcock, that Mr. Flannagan is arguing for the same idea as you.

Senator HITCHCOCK. Well, I have literally borrowed hundreds and thousands of dollars from banks, and when I borrowed money from them I have never left to my credit in the bank any considerable amount of money. I have used it at once. I have either taken the

cash over the counter or checked it out at once. And yet every banker who comes here goes upon the theory that when a man borrows money from a bank he leaves a credit on the books of the bank.

Mr. FLANNAGAN. Now, if you will let me get through with that point, I will illustrate it.

Senator HITCHCOCK. Oh, I beg your pardon for interrupting you.

Mr. FLANNAGAN. I will be glad to discuss that with you, because I think I can cover that very point to your satisfaction.

They are identically the same form of commercial transactions. In both instances I have parted with my property and accepted a promise of payment in lieu of payment. In one case I say I have given credit to my debtor, and in the other case that my debtor has given credit to me.

Is there any wonder that confusion of thought should arise when we thus use the same word to express entirely different meanings?

Again, the same word "credit" is used in an entirely different sense from either of the above. We speak of individuals or corporations having good credit, meaning their general standing in the community, or we say the credit of the United States stands the highest in the world, meaning the ability to borrow at the lowest rate of interest. In both cases the meaning of the word is the "ability to incur debt"—that somebody or everybody will accept the debt of the individual, corporation or Government—that is, the promise to pay instead of actual payment. This ability is not inherent. It must be conferred by another. Robinson Crusoe, with his ownership of everything around and about him did not have the ability to incur debt, and hence could not have credit. Nor can Rockefeller or Carnegie, with their untold millions, command or obtain credit unless they come in contact with some one else who confers it upon them.

In every exchange of property or service where the element of time enters, a reciprocal relation of debtor and creditor is established. A debt can not be created unless credit exists, nor can credit exist without the creation of a debt. So that though we speak of debt and credit separately, they can not exist separately, as they are relative terms, and it depends from which standpoint we view the relation.

Whether by common consent, or whether from the desire and ability of bankers to inculcate and circulate the idea that they are always to be associated with conferring credit, I do not know, but the fact is that the public does reverse the relation of debtor and creditor when speaking of banks, and instead of looking upon a bank as it would an ordinary debtor thinks and speaks of the banks' debt as a credit.

Every deposit in a bank is a debt by the bank to somebody; every circulating note issued by a bank is a debt to somebody. These "somebodies" are the creditors, and are the great mass of the people whom you represent, and whose welfare you purpose to promote. These deposits and these notes are the debts which are used by the people as a substitute for coin, and your problem is to legislate so that the substitution may be safely made, while at the same time facilitating this mutual relation of debtor and creditor to the advantage of both.

We say, and generally believe, and the bankers themselves believe, that the banks and bankers control the credit of the country, and

they think they are entitled to do so and to regulate the method of such control, by reason of their calling. But this is a great fallacy, and quite the contrary is true. The banks do control the credit which is represented by an entry on their books, but they do not control the credit or confidence which must be extended to them in order that these entries may be made. If they did, we should not have had financial panics nor the necessity for the legislation which is now under consideration.

Credit must emanate from the creditor and not from the debtor, and the banks are primarily the debtors. The credit of the country is conferred on or extended to the banks by the people, for the banks create the debts which the people accept in lieu of coin in their daily interchange of property and service.

Without the credit extended to them in the deposits the banks receive and in the notes which the people receive and circulate the banks could not ever assume the position to extend credit to others, except to the limited amount of their own capital, and with such limitation they would not, and could not, remain in business.

Of course you know this is true, but it may be well to emphasize this fact in figures. If you will examine the last condensed statement of all the national banks, published by the Comptroller of the Currency as of August 9, 1913, which I have here, you will find the total liabilities to be \$10,876,852,343.58. Included in this amount is the capital stock, surplus fund, and undivided profits, aggregating \$2,041,228,571.83, which, being deducted, leaves \$8,835,623,771.75.

This remainder represents what the banks owe. I am not saying they have not corresponding assets wherewith to pay, for this is exactly the case; but I do say this amount of upward of 8,835 millions of dollars represents their debt over and above their capital and profits, and that the creditors are the public.

It may possibly be said that this is not a fair way of stating it, because of this 8,800 millions of indebtedness 2,100 millions is among the banks themselves (due to banks), and 108 millions represents borrowed money from other banks—that is, rediscounts and bills payable—and hence the public are not the creditors.

This may serve as an argument if you take the banks from the classification of "the public," but if the indebtedness is reduced by calling the banks the "creditors," instead of the public, then we must reduce the corresponding assets by the amount of the loans in which the banks appear as the "debtors" (due from banks), say, 1,360 millions. The method of pyramiding the indebtedness really makes it impossible to analyze accurately as between two classes.

But let us consider the statement from the assets side, a favorite way when we want to "point with pride" to the great "banking power" of the country, as compared with the rest of the world. Out of the total assets, which, of course, are the 10,876 millions as before stated, I wish to draw your attention to debts on which the banks draw interest, as follows (omitting thousands):

Loans and discounts.....	\$6,163,555
Overdrafts.....	18,378
United States bonds.....	790,023
Other bonds and securities.....	1,095,906
Reserve agents.....	769,214
Total debt earning interest.....	8,837,076

Assuming that:	
Due from other national banks.....	\$408,922
Due from State banks.....	192,214
Being a total of.....	601,136
Does not draw interest:	
Deduct—	
Capital.....	1,056,346
Surplus.....	725,334
Undivided profits.....	259,549
	2,041,229
Less invested in real estate.....	284,569
	<u>\$1,756,660</u>
Leaves the capital of others, on which the banks earn profit.....	7,080,416

That is to say, the national banks, operating under a franchise conferred by the people, are given an earning capacity by reason of that franchise, sufficient to have doubled the original capital invested, and that this earning capacity continues on an amount equal to four times the increased capital thus doubled from profits, and that \$7,000,000,000 thereof, on which they draw interest, represents their indebtedness to the people—whom you represent.

It therefore follows that in establishing a Federal reserve board, composed exclusively of Government officials, and in the adoption of the other provisions approved by your best judgment, and supported by convincing reason, you are exercising your true prerogative as the representative of the people and conserving their interests, and not likely to be swerved from your purpose when you are told by a combination called for the avowed purpose of influencing your action that without general approval by it of the measure you adopt such measure can not be carried into successful operation.

While I can not approve the form and tenor of the resolutions adopted by the Chicago meeting, I do think it is of the greatest importance to have the measure meet the hearty and enthusiastic indorsement of the banking fraternity.

I do not believe you can reasonably expect this kind of approval from the national banks in the reserve cities, and to a less degree from the banks in the central reserve cities. They have so long been accustomed to having the use of the "so-called" reserves of other banks as ordinary deposits with them, that they naturally feel averse to a change which deprives them of this source of profit.

Perhaps in many instances they fail to realize that this is the controlling influence in their opposition. But this loss may be compensated in other ways, and by making the measure more attractive to country banks (while preserving its fundamental principles) you can make their approval so overwhelmingly unanimous that the big banks will of necessity acquiesce.

Now, Senator Hitchcock, if you wish to discuss with me the matter of credits, we will take it up—or shall I continue? I am now going to discuss what the amendments are which I propose.

Senator HITCHCOCK. That was not at all an important matter that I had in mind, but I notice that almost every witness that was ever before the committee, and every banker that I have ever talked to, goes on the theory that when a man borrows money he at once, instead of taking the cash across the counter, secures a credit on the books of the bank.