

MEMORANDUM ON PROPOSED AMENDMENTS TO SECTION 16 OF
THE FEDERAL RESERVE ACT NOW UNDER CONSIDER-
TION BY THE FEDERAL RESERVE BOARD.

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C. S. H.
May 1, 1916.

The amendments proposed are designed to secure five principal objects which will be considered separately.

I.

Bills of exchange and bankers' acceptances purchased in the open market by Federal reserve banks, under Section 14 of the Federal Reserve Act, may serve as collateral for the issue, by the Federal Reserve Agent, of Federal reserve notes, provided that the acceptor or one of the indorsers is a member bank of any Federal Reserve District.

Under the present law the collateral for Federal reserve notes is limited to notes and acceptances discounted, under Section 13 of the Act, by the Federal reserve bank for a member bank and indorsed by the member bank.

Under Section 14, however, Federal reserve banks are authorized to buy such bills or acceptances in the open market without the indorsement of a member bank, but such purchases are limited to paper of the kind and maturity which would be eligible for discount by the Federal reserve bank under Section 13 if offered by a member bank.

Such purchased bills and acceptances, when not indorsed by a member bank, can not be accepted by the Federal Reserve Agent as collateral for the issue of Federal reserve notes, for the reason that they would not represent a rediscount operation with a member bank, and such notes can only be issued, under the present law, when growing out of such a rediscount operation, as it is only through such operations that a member bank can avail itself of the reserve deposits required to be maintained in the Federal reserve bank. If such paper were presented to the Agent by a Federal reserve bank, the lack of an indorsement by a member bank would show conclusively that the paper did not grow out of a rediscount operation with a member bank.

On the other hand, the Federal reserve bank might present paper to the Agent upon which the last indorsement was that of a member bank, but the paper may have been bought in the open market,

through the medium, for example, of a note broker.

Under such circumstances, the Federal Reserve Board has ruled that such paper could be received by the Agent as collateral, inasmuch as the indorsement of the member bank makes the paper, in effect, arise out of a rediscount operation whether directly at the request of the member bank or indirectly, as, for example, through the medium of a note broker. As a matter of fact, the Agent could not know whether the indorsement of the member bank represented a rediscount or a purchase, and in such a case the distinction would not be material as the benefit of the transaction enures to a member bank whether through rediscount or purchase.

After careful consideration the undersigned has reached the conclusion that the law should be broadened so that the Agent may accept as collateral for Federal reserve notes, any bills or acceptances, lawfully purchased under Section 14, which are either accepted by or indorsed by a member bank of any Federal Reserve District.

To illustrate: A in Buenos Aires sells merchandise to B in Boston and, by arrangement, draws a bill of exchange upon a non-member trust company, C in Boston, payable to the order of A. A then indorses the bill and discounts it with Bank D in Buenos Aires. D indorses it and sends it to its correspondent E, a National Bank in Boston. E presents it for acceptances to C in Boston and having indorsed it, later sells it to the Federal Reserve Bank of New York.

It is a matter of some doubt, under the present law whether this bill could be received by the New York Federal Reserve Agent as collateral for the issue of Federal reserve notes, for the reason that, although indorsed by a member bank, it could not have originated out of a rediscount operation with a New York member bank as E, although a member bank, is not a member bank of the Federal Reserve District of New York, and only member banks of the New York District can obtain rediscounts from the New York Federal Reserve Bank.

Under the proposed amendment, however, this bill could serve as collateral for Federal reserve notes and there is no reason why it should not be permitted so to serve, as the acceptance is guaranteed

by the indorsement of a member bank although not of the Federal Reserve District of New York.

To take another illustration: A in Buenos Aires, draws a bill, by arrangement, upon B, a National Bank in New York City, payable to A's order. A indorses the bill and discounts it with Bank C in Buenos Aires. Bank C indorses it and sends it to its correspondent D a non-member trust company of New York City. D presents it for acceptance to B and then sells it, with or without its indorsement, to the Federal Reserve Bank of New York.

Under the present law, this bill could not serve as collateral for the issue of Federal reserve notes, as, there being no indorsement of a member bank upon it, the bill would show on its face that it did not arise out of a rediscount operation with a member bank.

Under the proposed amendment, however, this bill could serve as collateral as it is accepted by a member bank. The real reason advanced for the objection to such a bill serving as collateral for Federal reserve notes is not from any doubt as to the due payment of the acceptance, but from the fact that permitting such bills to serve as collateral would have the effect of giving the rediscount privilege to other than member banks, which would be contrary to the spirit of the Federal Reserve Act.

It should be remembered however, that the Federal Reserve Act permits Federal reserve banks to purchase such bills and acceptances in the open market in order that they may invest their available funds at times when there is a falling off in the demand for rediscount operations by member banks, or that they may make their discount rates effective. If, therefore, such bills and acceptances can lawfully be purchased under Section 14 there would seem to be no good reason why such purchases; all representing paper which would be eligible if offered for rediscount by a member bank; should not serve as collateral for Federal reserve notes.

The fact that thereby benefits are incidentally given to a non-member bank is not a valid objection, because the transaction is entered into for the direct benefit of the Federal reserve bank, and

for no other purpose. The incidental benefit received by a non-member bank not being a valid objection to granting to Federal reserve banks the power to purchase the paper in the open market, should not, by parity of reasonings, be allowed to serve as an objection to Federal reserve banks paying for such purchases by Federal Reserve notes taken out against the purchased paper as collateral, for the sole benefit of the Federal reserve bank.

Under the present law, when such bills or acceptances are purchased from any holder other than a member bank, the payment must necessarily be made in cash, drawing down the cash resources of the Federal reserve bank. The reason for this is that the seller not being a member bank, could not accept a book credit in payment for the sale, and, the acceptance not being eligible as collateral for Federal reserve notes, the bank could not obtain the Federal reserve notes out of this transaction with which to pay for the purchase.

Furthermore, under present conditions in the money market, even though the purchase were made for a member bank on its indorsement, the member bank would usually take the purchase money in cash, or if accepting a book credit, would at once draw against it. In the latter case, however, if the law were amended, Federal reserve notes could be issued against the pledge of the acceptance which the member bank selling the acceptance very likely would be perfectly willing to receive in payment.

There would seem therefore, to be no good reason for not amending the Act so that paper purchased, having on it the name of a member bank as acceptor or indorser, can serve as collateral for the issue of Federal reserve notes.

II.

Collateral pledged with the Federal Reserve Agent, either gold or paper, may be withdrawn by the Federal reserve bank and other collateral, either paper or gold, substituted therefor.

The present law permits the withdrawal of collateral and the substitution of other like collateral, and this amendment simply strikes out the word "like", thus permitting the exchange by the Federal reserve bank with the Federal Reserve Agent, of gold for commercial paper, or of commercial paper for gold.

Under the present law only commercial paper and bills in foreign trade can be pledged as collateral for Federal Reserve notes. One of the proposed amendments, however, which will be considered in detail later, permits gold to be thus pledged as collateral as well as commercial paper, and if this latter amendment should be enacted into law it will be most desirable to permit the exchange of one kind of collateral for another, as above indicated.

III.

Federal reserve notes may be originally issued against the deposit of gold with the Federal Reserve Agent to the face value of the notes to be issued, and in such case the Federal reserve bank need not carry in its vaults a 40% gold reserve against outstanding Federal reserve notes so covered by gold.

Before considering this amendment it may be well to point out that "issue" in the amendment means issue by the Government, and, further, that notes can only be issued by the Government against the pledge of commercial paper, under the present law, and against commercial paper or gold, or both, under the amendment.

The first object aimed at in the above amendment can now be accomplished in effect under the present law, although indirectly, but none the less legally. Before discussing this proposed amendment, therefore, it may be well to consider present methods by which the first result reached by the above amendment is attainable and in fact, attained under the present law.

Under the Act, as it now stands, as above stated, Federal reserve notes can be issued by the Federal Reserve Agent only against the de-

posit of commercial paper. When once the notes have been issued, however, by the Federal Reserve Agent, the present law permits the Federal reserve bank to pay to the Federal Reserve Agent the face value of the notes in gold, receiving back from the Agent the commercial paper originally deposited.

This follows from the language of Section 16, which reads as follows:

"Any Federal reserve bank may at any time reduce its liability for outstanding Federal reserve notes by depositing with the Federal Reserve Agent, its Federal reserve notes, gold, gold certificates or lawful money of the United States. "

When, therefore, such a payment of gold has been made by the Federal reserve bank to the Federal Reserve Agent the outstanding notes, to the amount of such gold, are in the same position, practically, as if they had been originally issued against gold by the Agent, with certain qualifications which will be explained later.

For example, the weekly statement issued by the Federal Reserve Board showing the condition of the Federal reserve banks on March 17, 1916, showed, under the head of "Liabilities", that the twelve Federal reserve banks had, on that day, outstanding Federal reserve notes on which they were liable to the amount of 11.9 millions of dollars, which was further reduced by 1.7 millions, the amount of such notes held among the assets of the banks, making the net liability only 10.2 millions of dollars. On the other hand, the daily Treasury Statement, published by the Secretary of the Treasury for the same day, showed that there were 191.1 millions of Federal reserve notes outstanding as a liability of the United States Government.

Both of these apparently inconsistent statements were correct, for the reason that on that day, while the Federal reserve banks had originally taken out 191.1 millions of Federal reserve notes against the

deposit of commercial paper, they had later deposited with the Federal Reserve Agent, in gold, the sum of 179.2 millions, and thereby, under the clause of Section 16 above quoted, had "reduced" their liability upon 179.2 millions of Federal reserve notes. Thus the outstanding Federal reserve notes were in the same position as if 179.2 millions had been originally issued against gold deposited with the Agent and 11.9 millions or 10.2 millions net, above referred to, had been originally issued against the deposit of commercial paper.

The statement, made in the last paragraph, that the banks, by the payment to the Federal Reserve Agent of 179.2 millions of gold had thereby "reduced" their liability upon 179.2 millions of Federal reserve notes requires some explanation.

What the word "reduced" really means is that the banks, by this payment, are released from the necessity of carrying any reserve against notes so paid and also that they need not henceforth include them among their liabilities.

All outstanding Federal reserve notes, however, can be presented at any one of the twelve Federal reserve banks for redemption and, therefore, could be so presented to the banks which had paid their full value to the Federal Reserve Agent, as in the example cited above.

The banks, therefore, by making the payment of said 179.2 millions to the Federal Reserve Agents, merely reduced their liability to carry a reserve against these notes and are, therefore, permitted, and in fact, required by the clause of Section 16 above quoted, henceforth to exclude them as outstanding liabilities.

The general obligation, however, imposed by the Act upon all Federal Reserve banks, - to redeem all Federal reserve notes, by whatever Federal Reserve Banks issued, - remains undiminished, but is, of course, not set down as a liability in Federal Reserve Bank statements.

From time to time criticisms have been made upon the action of Federal reserve banks in taking out Federal reserve notes against the deposit of commercial paper and almost immediately paying their face value in gold to the Agent, taking back the commercial paper, - it being claimed that this, if not a direct violation of the Act, is at least an evasion of the spirit of the requirement that notes can only be issued against commercial paper.

Before considering whether this course, thus criticized, violates the spirit of the law, it may be well to point out that there is no inflation of the circulating medium brought about by it, for every note thus issued against the deposit of gold, - whether directly issued, as under the proposed amendment, or indirectly, by the course above described under the present law is covered, dollar for dollar, by gold withdrawn from circulation and impounded with the Federal Reserve Agent. On the other hand, when the note is redeemed the contraction is overcome by the return to circulation of the gold impounded.

It should also be pointed out, - as will be shown fully later, - that if the existing National bank note circulation, - against which no reserve other than the 5% redemption fund is required, - were to be suddenly wiped out and Federal reserve notes, secured by commercial paper, substituted in its place, an immediate contraction of the outstanding circulation would result from the necessity of carrying a 40% gold reserve in place of the 5% reserve carried against National bank notes.

What then is the reason for the above outlined process by which the 191.1 millions of outstanding Federal reserve notes have dwindled as a liability of the Federal reserve banks to the comparatively small amount of 11.9 millions, or, as pointed out above, 10.2 millions net, by virtue of the impounding with the Federal Reserve Agent of 179.2 millions of gold ?

At the outset, it must be apparent that this impounding of gold with the Federal Reserve Agent must have been of some benefit to the Federal reserve banks, or it would not have been so impounded.

What this benefit is, is not difficult to understand. Under the present law the benefit is,

(a) If a bank has made an excess deposit of gold and later desires to withdraw it, but is willing to accept Federal reserve notes, every available Federal reserve note in the bank vaults will help the bank to satisfy the demand of the member bank without depleting its gold supply, and by securing such notes by the deposit of gold with the Agent, a gold fund is built up which is available, at any time, for rediscounting purposes.

(b) If the Federal reserve bank finds that the demands for re-discounts by member banks have fallen off so that the bank needs some other source of earnings for its expense and dividend purposes, by paying out Federal reserve notes already issued to it, it can purchase in the open market eligible bills of exchange or bankers' acceptances, (not bearing the indorsement of a member bank, and hence not directly eligible as collateral for Federal reserve notes), and thus secure needed earnings, and, although not retaining the gold in its own vaults, by placing it in the hands of the Agent, it is rendered available if later needed.

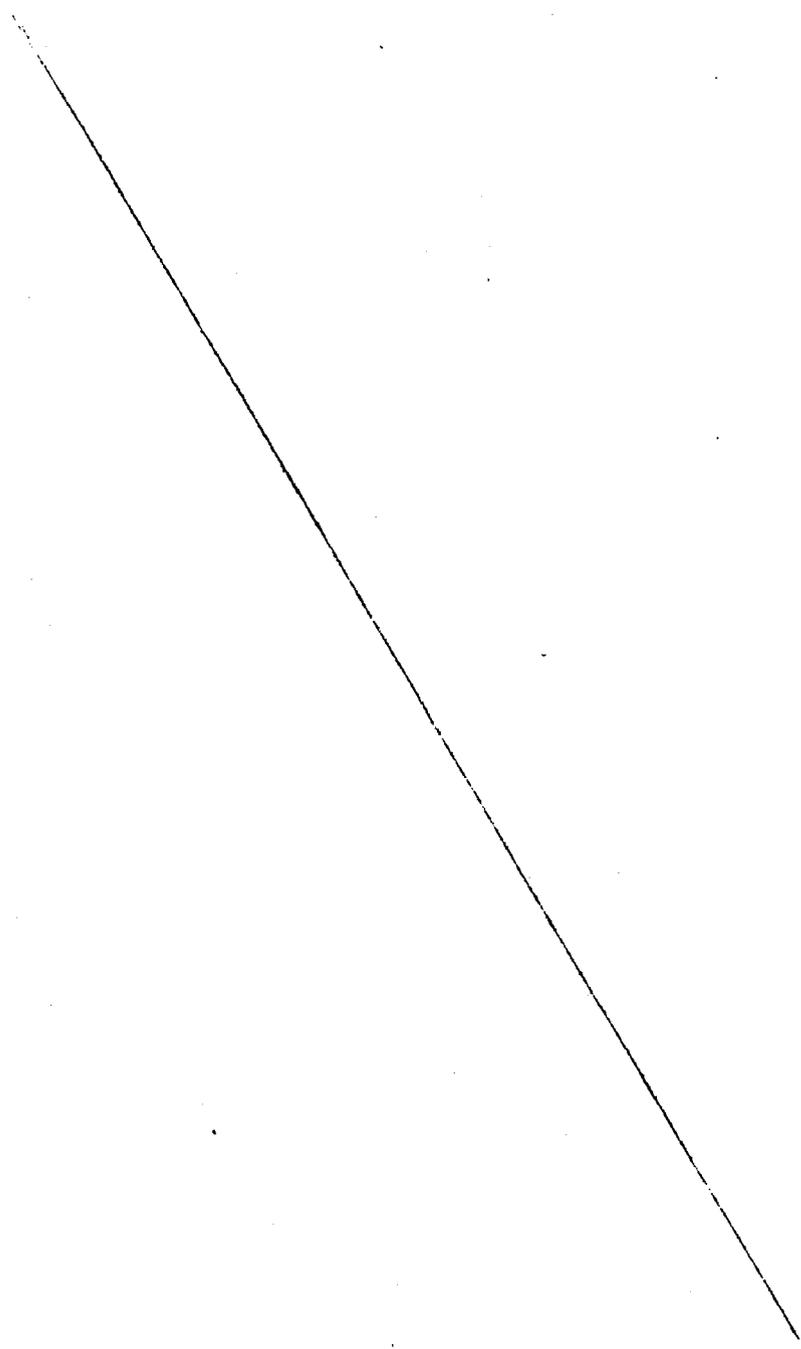
It may, however, be pointed out that, leaving out of consideration excess deposits, a member bank can never draw gold from a Federal reserve bank except by offering commercial paper for rediscount and that such paper when offered for rediscount will serve as collateral for the issue of Federal reserve notes which can be given to the bank if it will take them, in return for the paper rediscounted.

This is undoubtedly true, and if there were no excess deposits of gold made by member banks, the only benefit to the Reserve banks, from the indirect method of issuing notes against commercial paper and later paying gold to the Agent, taking back the paper, would be that described under (b) above, - thus enabling the reserve banks to increase their investments by purchase, with these Federal reserve notes, of bills and bankers' acceptances which could not be directly discounted because of the lack of an indorsement by a member bank.

The underlying spirit of the Federal Reserve Act, however, is to encourage the member banks to make excess deposits. With a satisfactory system of check clearing in operation, excess deposits must

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inevitably result. Furthermore, the burden of maintaining the gold standard of value, although primarily upon the Government, yet will in effect be and is placed upon the Fed-



eral reserve banks under the Federal Reserve Act, as they must pay all their disbursements, whether by way of rediscount operations, clearing balances, or withdrawals of excess deposits, in gold. If they ceased to do this, while they could, under the Act, undoubtedly discharge all their obligations in lawful money, i. e. in greenbacks, silver certificates or silver dollars, yet such a course would inspire distrust and would throw upon the Government a very heavy burden in keeping all our money on a parity with the gold standard, that is, in exchanging for gold the disbursement of the Federal reserve banks made in lawful money.

It must also never be forgotten that the business exchanges of the country rest upon a lawful money basis and that it is the duty of the Government to maintain these exchanges upon the gold standard basis. The Federal reserve banks, through the gold clearing fund, - as between one another, - and by virtue of gold payments to the member banks, are helping the Government materially in keeping all exchanges upon the gold standard of value, and every assistance which Congress can give to the reserve banks in this work should, and it is confidently believed will, be given.

Returning now to the indirect method followed by the banks of taking out Federal reserve notes against commercial paper and immediately paying, in gold, to the Agent, the full amount of such notes, the question arises what immediate gain do the reserve banks derive from this circuitous process.

The answer is that when the reserve banks have gold which can not be used for taking out Federal reserve notes, because of the lack of commercial paper to pledge as collateral for the notes, they have found by experience that they can take notes out against this gold by ^{the} circuitous process above referred to and hereafter more particularly described.

It is scarcely necessary to add that if the banks have on hand or can secure an ample supply of commercial paper, their note issuing capacity will be ^{greater} by pledging such commercial paper ^{than} it could possibly be by paying gold to the Federal Reserve Agent under said circuitous process.

Even under such circumstances, however, the privilege afforded

by the amendment of taking out notes against gold, will enable the reserve banks to conserve their gold, as will be shown more particularly later.

To illustrate this circuitous process, above referred to, let us suppose that a Federal reserve bank desires to invest \$200,000 in open market purchases of bills of exchange or non-member bank acceptances. It holds in its vaults \$100,000 in Federal reserve notes taken out against the pledge of \$100,000 in commercial paper, and can obtain no more commercial paper to pledge with the Federal Reserve Agent for additional Federal reserve notes. It does not want to use \$100,000 in gold, which it has available for such purchases, but wishes to find some way by which it can take out \$100,000 additional notes against this gold, using these notes for the purchases and thus conserving its gold.

By employing the circuitous process now to be described it can take out \$100,000 in Federal reserve notes, based upon this gold paid to the Agent, without securing any more commercial paper to pledge with the Agent for such notes.

For example, it already holds \$100,000 notes secured by the pledge of \$100,000 commercial paper. As a first step it would pay to the Agent \$100,000 in gold thus releasing its \$100,000 of commercial paper. As a second step, it could redeposit the \$100,000 commercial paper with the Agent and take out \$100,000 additional of Federal reserve notes.

The bank would then hold \$200,000 of Federal reserve notes secured by \$100,000 commercial paper and \$100,000 in gold, and it could use these \$200,000 of Federal reserve notes in making its open market purchases and thus conserve its gold.

The above indicates the exact steps taken by the Federal reserve bank which it is claimed, constitute a violation or at least an evasion of the spirit of the law.

It is certainly clear that each step taken by the bank, in the above illustration, is in literal compliance with the law. The notes were originally issued on the pledge of commercial paper, and

and when issued became a liability of the bank. When, however, the bank paid to the Agent \$100,000 in gold, the liability of the bank on these notes was from that moment "reduced" The resources of the bank were decreased by the exact amount of the payment in gold, and at the same time the liability of the bank upon the notes was extinguished

In other words, at least, in a technical sense, the bank made the payment for the purpose, - to quote the words of the statute, - of "reducing", its liability upon the notes.

The liability upon these notes, however, thus "reduced" as to the bank, remains undiminished as to the Government, but the Government, to meet its continuing liability, now holds 100% in gold, through the Federal Reserve Agent, and the Federal reserve notes, as to the Government, at least, now become in effect a gold certificate upon which the Government only is liable, but to redeem which it holds 100% in gold.

If there were no demand for Federal reserve notes for circulation purposes these notes would come back very quickly for redemption. The Government would redeem them and that would end the matter. There being a demand, however, as we assume, for such notes for circulation purposes, they may remain outstanding indefinitely. The bank, however, from the moment of its payment to the Federal Reserve Agent, has parted with its gold and has "reduced" its liability upon these notes.

The criticism, however, might be made that the Government, which originally issued the notes through the Federal Reserve Agent, is now practically in the same position as if it had originally issued these notes against the deposit of gold, rather than of commercial paper, and that the provision of the Act that notes can be issued originally only against the deposit of commercial paper has been evaded by the course thus pursued by the Federal reserve bank.

In this connection, however, it should be pointed out that this same result may be reached directly, even without the payment of gold by the bank to the Agent, in a regular normal way. For example, suppose that a Federal reserve bank takes out \$100,000 in Federal reserve notes against the pledge of commercial paper, as in the above

illustration. The Federal reserve notes have no definite maturity, - they remain an obligation until finally redeemed. Let us suppose, however, that the commercial paper runs only for three months. At the end of that period the maker of the paper must pay the notes to the lawful holder, that is, to the Federal Reserve Agent. The Agent will then be in the same position, practically, as if the bank had paid him the \$100,000 in gold, as in the above illustration, the day after the notes had been issued to the bank, - for the payment of this commercial paper at maturity will "reduce" the liability of the bank upon these notes in precisely the same manner, whether the payment is made by the maker of the commercial paper at maturity, or by the bank before maturity. In either case, however, the liability of the Government remains unchanged.

The above would seem to show conclusively that the course taken by the Federal reserve bank, above described, is at least, in technical compliance with the law. The question remains to be answered, however, whether, admitting such a technical compliance, the course followed is not really an evasion of the spirit of the law.

What, then, is the spirit of the law? It might be claimed to be that Federal reserve notes should be originally issued only on the pledge of commercial paper, and that a bank should only pay the face of the notes to the Federal Reserve Agent when it genuinely desires to "reduce" its liability upon the notes, or desires to secure the commercial paper pledged with the Agent, so that it may be in its possession at maturity when the maker or acceptor must pay it, and that the bank, evades the spirit of the law by taking out the notes against commercial paper, but almost immediately paying the amount in gold to the Agent, thus getting back its commercial paper and leaving the notes outstanding secured by gold as if they had been originally issued upon such security.

The question would therefore arise why, assuming, for the sake of argument, that the above course evades the spirit of the law, the law should now be changed so as to validate the above indirect process by permitting the original issue of Federal reserve notes against the deposit of gold as collateral rather than against the deposit of commercial

paper.

To answer this question we must find the reason why the banks desire this privilege and that reason has already been given, - viz: - when the supply of commercial paper is falling off, and yet there is a demand for cash the member banks must draw down their excess deposits in the reserve banks and if the reserve banks can furnish Federal reserve notes it will thereby conserve their gold; or, on the other hand when the reserve banks desire to make investments, and have Federal reserve notes on hand, they can make the investments and still conserve their gold, So also, conversely, when the member banks have an ample supply of gold they will be glad to deposit it with the reserve banks taking back Federal reserve notes which at any time they can present to the reserve bank for gold, and the issue of these notes against gold at times when there may be a scarcity of eligible commercial paper, will put the reserve bank in the position of being able to conserve its gold.

In the summer of 1914, for example, there was a profound business disturbance growing out of the European War, and an extraordinary demand for currency. Coincident with this demand for currency there was threatened a very great depression in business, which would necessarily decrease the amount of commercial paper eligible as collateral for Federal reserve notes. If some future similar emergency should arise, the member banks, not having the power to issue notes, would have to draw down their excess deposits with the reserve banks and pay out the gold thus withdrawn, which would very probably be hoarded and disappear from circulation, while they could meet every demand for cash if they could receive from the reserve banks, Federal reserve notes.

Experience may thus demonstrate that the present limitation upon the issue of Federal reserve notes to the amount of commercial paper pledged as collateral would greatly hamper the usefulness to the community of the issue of such notes, as the required collateral would tend to decrease in amount while the demand for the notes as substitutes for gold might, at the same time, increase. It would seem, therefore,

most reasonable to permit the issue of these notes either against commercial paper or against gold.

So, also, there might arise a demand for gold by some member bank for export, and in this event, if the Federal reserve bank had the necessary amount of gold deposited with the Federal Reserve Agent, whether under the circuitous method used under the present law, or pledged with the Agent, under the amendment, it could obtain this gold from the Agent by substituting the commercial paper rediscounted by the member banks to secure the gold, and thus give to the member bank the gold so withdrawn from the Agent.

An interesting table, prepared by Federal Reserve Agent Jay, (Appendix I and II), demonstrates that gold thus withdrawn from the Agent's possession does not diminish the credit power of the Federal reserve bank, but, on the contrary, protects that credit power from the inevitable decrease resulting from the payment of the gold directly from the bank's vaults. Mr. Jay shows conclusively that the gold thus deposited with the Federal Reserve Agent increases the credit power of the bank to the extent of 50% of the amount of gold deposited.

The proposed amendment would also, at the present time, at least, operate most conservatively, correcting any present tendency toward undue expansion caused by the great inflow of gold into the United States, for every dollar of this gold which could be secured by the Federal reserve banks from member banks in return for Federal reserve notes, would be taken out of the vaults of the member banks and impounded in the Federal reserve banks. Furthermore, every dollar of gold which a Federal reserve bank could deposit with the Federal Reserve Agent as a basis for Federal reserve notes would be a use of this gold by the issue of the notes simply dollar for dollar; that is to say, there would be no expansion whatsoever in the circulating medium, because for every dollar of notes issued by the Federal reserve bank a dollar in gold would be impounded with the Federal Reserve Agent.

The amendment, furthermore, would enable the Federal reserve banks to lay down and maintain, under the guidance of the Federal Reserve Board, a uniform, National policy of conservation of the gold supply of the United States.

For the above reasons, it would seem most advisable that the law should be amended,

as indicated above, so that Federal reserve notes may be issued by the Federal Reserve Agent against the deposit of gold as well as of commercial paper.

The adoption of this amendment would also correct the curious anomaly, - pointed out above, - the "reduction" of the bank's but not of the Government's the liability, - which results from the payment to the Federal Reserve Agent by the bank, in gold, after the original issue of the notes against commercial paper; for under said amendment the Federal reserve notes, instead of being paid in gold after their issue by the bank, as under the present circuitous process, will be issued originally to the bank upon the deposit of gold, so that as a result the liability of the bank upon these notes will continue the same as the liability of the Government, - until their final redemption.

The apparent inconsistency between the Federal reserve bank statement and the Treasury statement, pointed out above, will also be removed by the passage of the amendment, and the total note liability, both of the banks and of the Government, will be the same, that is, they both will be liable for the total amount of Federal reserve notes outstanding, until final redemption, and the two statements will be in perfect harmony.

The above amendment also provides that where a Federal reserve bank has taken out Federal reserve notes on the deposit of gold with the Agent it need not keep the required 40% gold reserve in its vaults against such notes.

In the indirect operation described above, where the bank takes out the notes originally against the pledge of commercial paper but later pays the full amount in gold to the Agent, the bank, after the payment, need keep no gold reserve in its vaults against these notes, for the good and sufficient reason that the payment of the gold has "reduced" its liability on these notes; therefore, no reserve need be maintained.

Similarly, under the proposed amendment, the original issue of Federal reserve notes to the reserve bank against the deposit of 100% gold will leave the bank liable upon these notes as well as the Government,

but the Government having in its hands 100% in gold with which to pay them, the bank need keep no reserve, for, if presented by the holder to the bank for payment the bank would merely turn the notes over to the Agent who would redeem them from the 100% in gold in his possession for this purpose.

The exact measure of expansion under this proposed amendment, as compared with the maximum expansion under the present law will be shown in detail later.

IV.

The right of the Federal reserve bank, described above under III, to pay to the Agent in gold, etc., the full value of outstanding Federal reserve notes and thus "reduce" the liability of the bank upon such notes is repealed by the omission of the paragraph of Section 16 hereinbefore quoted, granting this privilege. It is also provided that any rate of interest which may be charged by the Federal Reserve Board upon Federal reserve notes shall not be applicable to such notes when and as long as secured by gold deposited with the Agent.

The object sought by this proposed amendment is to maintain the liability of the banks upon all notes issued until they are finally redeemed, thus making the liability precisely the same as that of the Government. This change will also bring about, harmony between the daily statement of the Treasury and the Federal reserve bank statement, and will remove the apparent inconsistencies pointed out above under III.

It would seem also desirable to provide, - as does the proposed amendment, - that in so far as the Agent holds gold pledged against outstanding notes, the bank should be released, pro tanto, from payment of any interest charge imposed by the Federal Reserve Board upon ^{the} outstanding notes, as such notes, - in so far as they are secured by pledge gold, do not constitute, an increase in the circulating medium, but are, to the extent that gold is pledged against them, - to all intents and purposes, merely gold certificates. Under such circumstances it would seem as unreasonable to impose an interest charge on such proportion of the notes, thus secured, as it would be to impose such a charge upon the gold for which the notes have become, pro tanto, to all intents and purposes, merely a warehouse receipt.

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Federal reserve notes may also be issued not only against the deposit of 100% in gold with the Agent, but as well, against the deposit of paper and gold, and further, the gold so deposited as collateral with the Federal Reserve Agent shall be counted pro tanto and included as if in the vaults of the bank as its gold reserve against outstanding Federal reserve notes in actual circulation.

To illustrate:

1. Suppose a Federal reserve bank takes out one million dollars in Federal reserve notes pledging, under the amended law, as collateral 60%, or \$600,000, in eligible paper and 40%, or \$400,000, in gold.

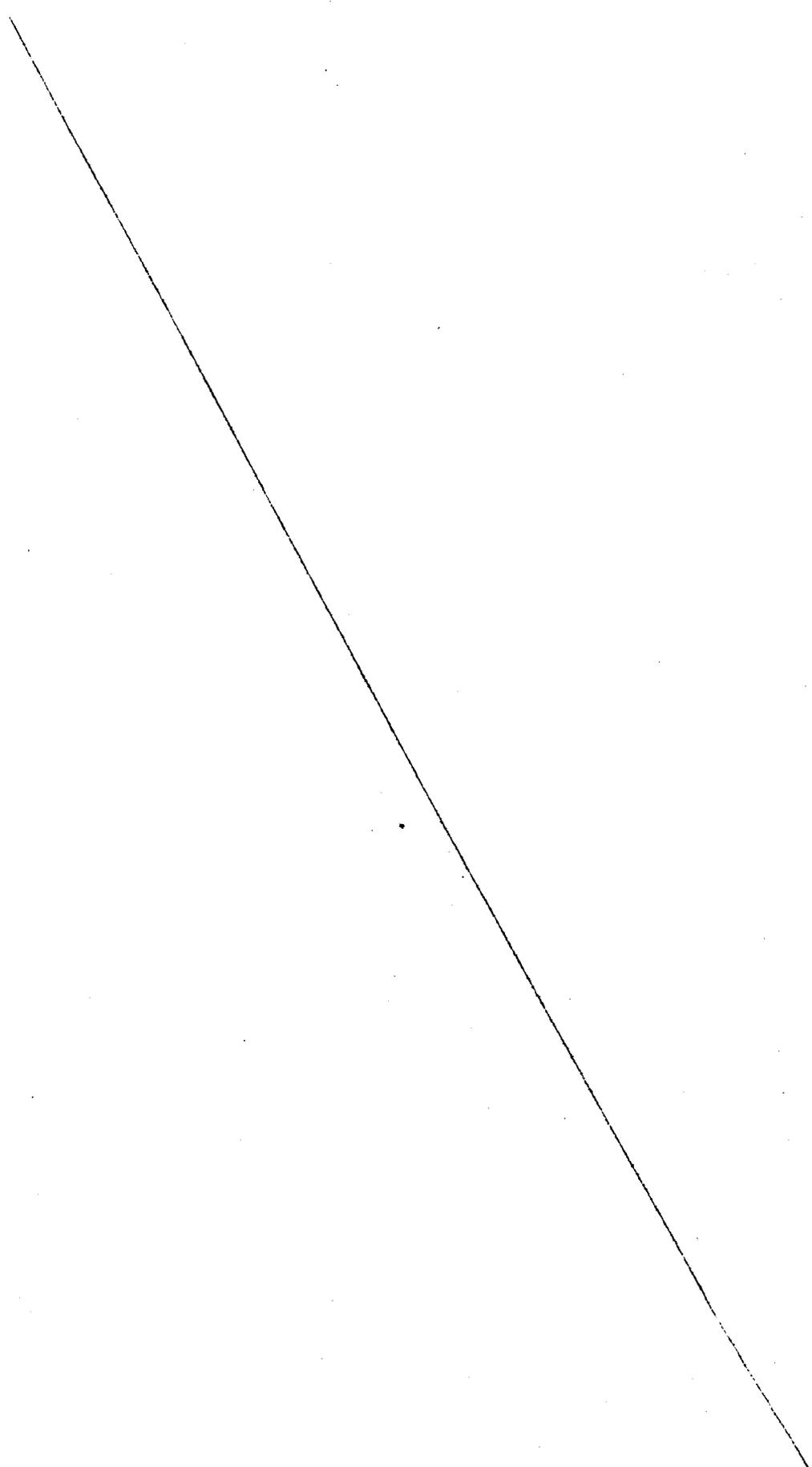
The effect of the above amendment would be that the reserve bank would count the \$400,000 gold deposited with the Agent as its 40% required gold reserve just as if it were actually carried in its vaults, and need carry no reserve in its vaults against such notes.

2. Or, in the alternative, let us suppose, that the reserve bank takes out one million dollars in Federal reserve notes, pledging, - under the amendment, as collateral, 80%, or \$800,000, in commercial paper and 20%, or \$200,000, in gold. The \$200,000 deposited with the Agent would count as one-half of the required 40% reserve, but the reserve bank would have to carry \$200,000 gold as reserve in its vaults, which, together with the \$200,000 deposited with the Agent, make up its required 40% gold reserve. Under such circumstances, however, the bank would probably deposit with the Agent the \$200,000 free gold, and take back a similar amount of commercial paper, leaving the situation the same as in 1. supra.

3. Or, again, let us suppose that the Federal reserve bank takes out one million dollars of Federal reserve notes, pledging with the Agent, as collateral, \$400,000 paper and \$600,000 gold. Under the amendment, the Federal reserve bank would be in the same position as if the \$600,000 gold were still in its vaults, that is, it would have \$400,000 as a 40% gold reserve and would have \$200,000 free gold which could serve as a reserve for further issues of Federal reserve notes, but not as a reserve against deposits.

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It is to be noted that illustrations 1 and 2 could be as pointed out *supra*, indirectly accomplished under the present law, by the payment of gold to the Agent after the notes had been issued.



against 100% commercial paper, i.e. the same situation would result, - the notes outstanding would be the same - one million dollars - at least as to the Government liability, - and the Agent would hold commercial paper in part and gold in part as collateral, - 100% in all.

The reserve situation, however, would be very different, comparing the present law with the proposed amendment.

For example, under 1. supra, the \$400,000 payment to the Agent would cancel the bank's liability on \$400,000 Federal reserve notes but the bank would have to carry in its vaults a gold reserve of 40% upon the \$600,000 Federal reserve notes covered only by commercial paper, i.e. a gold reserve of \$240,000.

So also in 2. supra, under the present law, the bank must carry in its vaults in gold 40% of \$800,000 or \$320,000.

So also, in both 1 and 2, supra, under the present law, the payments to the Agent would be subtracted from the gold resources of the bank.

Under the proposed amendment however, in illustration 1 supra, the payment of \$400,000 to the Agent would not extinguish the liability of the bank upon \$400,000 of Federal reserve notes. On the contrary, these notes would remain as an outstanding liability of the bank.

So also, the bank would not have to keep any reserve against these notes in its vaults, for the \$400,000 pledged with the Agent counts as if it were in the bank vaults, as, instead of being paid to the Agent to reduce liability it is now pledged with the Agent as security for a continuing liability, and being counted as if actually in the vaults of the bank it would count as its 40% gold reserve.

So also, in 2 supra, under the amended law the \$200,000 pledged with the Agent would necessitate only \$200,000 gold to be carried by the bank in its vaults, instead of \$320,000, as under the present law.

So also, in 3 supra, the bank would count the \$600,000 deposited with the Agent as if it were cash in the vault and it could, therefore, have, theoretically, its 40% gold reserve and also \$200,000 free gold

actually in its vaults, as a basis for further Federal reserve note issues.

The first objection which may be advanced against the proposed amendment is that it permits an expansion of note issues.

As a fact, however, where the bank can secure ample commercial paper, no more notes could be issued under the amendment than under the present law, and the amendment would merely permit a substitution of gold as collateral in the place of commercial paper.

On the other hand, assuming that the bank has e. g. 400 millions of free gold and only 600 millions of commercial paper, the amendment would admit of an additional note issue limited to the exact amount of the gold deposited with the Agent as collateral.

The total note issue, however, could in no event exceed 100% of the total collateral, paper and gold, pledged with the Agent; nor could the total note issue in any event exceed $2\frac{1}{2}$ times the free gold owned by the bank, - 400 millions, - whether the gold is held in the bank's vaults or pledged with the Federal Reserve Agent.

It would seem reasonably clear that expansion to this extent is not undue but is consistent with sound banking.

It should also be pointed out that, whenever Federal reserve notes are placed in circulation as a substitute for retired national bank circulation an actual contraction of the circulation takes place.

This will at once be seen from the following tables. For example, there are today about 735.7 millions of national

bank notes in circulation and about 1928 millions in gold coin or certificates. Let us, then, assume that these National bank notes are removed from circulation over night and that their place is to be filled in the circulation by an equivalent amount of Federal reserve notes, the Federal reserve banks having an ample supply of commercial paper to pledge with the Federal Reserve Agent against the issue of the Federal reserve notes.

The account would stand:

		Reserve (5%)	Gold in circulation	Notes and gold in cir- culation	Security held by U.S. Treasurer or F. R. Agent
1. National Bank Notes	735.7	36.8	1928	2663.7	735.7 U. S. bonds
2. Federal Re- serve Notes	735.7	294.2	1670.6	2406.3	735.7 Commercial paper
Contraction			257.4	257.4	

This shows that, under Section 16 as now in force, if 735.7 millions of Federal reserve notes were substituted for the 735.7 millions of National bank notes now outstanding, the gold reserve requirement for Federal reserve notes would result in a contraction of gold in circulation of 257.4 millions, - the amount of the excess of said gold reserve, - 294.2 millions, - over the reserve required for National bank notes, - 5%, or 36.8 millions.

Let us now suppose that the proposed amendment has been enacted into law, and that the Federal reserve banks have only 441.5 millions of commercial paper, and that they take out 735.7 millions of Federal reserve notes by pledging 441.5 millions in commercial paper (60%) and 294.2 millions (40%) in gold.

The account will then stand:

		Reserve	Gold in circulation	Notes and gold in circulation	Security held by U.S. Treasurer or F.R. Agent
1. National Bank notes	735.7	36.8	1928	2663.7	735.7 U.S. Bonds
2. Federal reserve notes Present law	735.7	294.2 (36.8 + 257.4)	1670.6	2406.3	735.7 Commercial paper
3. Federal reserve notes Law as amended	735.7	(294.2) (36.8 + 257.4)	1670.6	2406.3	(441.5 commercial paper) 735.7 (294.2 gold)
4. Federal reserve notes	1164.8	465.9 (36.8 + 429.1)	1498.9	2663.7	1164.8 Commercial paper

Line 3 above shows just what the proposed amendment would accomplish, - it permits the bank to carry its required reserve in the Federal Reserve Agents' trust fund where it is available for the issue by the Agent of 294.2 millions of Federal reserve notes, dollar for dollar.

It will be noticed that the reserve of 294.2 millions in line 3 supra, is put in brackets, for the reason that it is not in fact in the bank vaults but is carried by the bank, - as the amendment permits, with the Federal Reserve Agent.

The gold in circulation is, however, contracted by the same amount, - 257.4 millions net, - as though the notes were issued as in line 2, under the present law, the same reserve being required, but permitted to be carried, under 3, with the Federal Reserve Agent.

It is interesting to note here that, in order to prevent any contraction in the total notes and gold in circulation, - 2663.7 millions, as shown in line 1, a much larger amount of Federal reserve notes would have to be issued. This can be shown by the following algebraic formula:

Let X = the required amount of Federal reserve notes to be issued.

Then $\frac{40}{100} X$ will be the required new reserve.

The formula will then stand: $X - 735.7 = \frac{2}{5} X - 36.8$.

That is to say the new amount of notes to be taken out minus the 735.7 millions now outstanding will equal the new required gold reserve minus 36.8 millions, - the amount of the 5% redemption fund for National bank notes:

Then:

$$X - 735.7 + 36.8 = 2/5 X$$

$$X - 698.9 = 2/5 X$$

$$X - 2/5 X = 698.9$$

$$3/5 X = 698.9$$

$$X/5 = 232.96$$

$$X = 1164.8$$

Transferring these figures to line 4 in the above table, we will see that to keep the total notes and gold in circulation the same as when the National bank notes were outstanding, there must be issued 1164.8 millions of Federal reserve notes, instead of 735.7 millions. The gold in circulation would then be contracted by 465.9 minus 36.8 millions (the amount of the 5% National bank redemption fund) = 429.1 millions, but the same amount, - 421.9 millions, - of Federal reserve notes would be added to the 735.7 millions of notes outstanding, and this would make the total notes and gold 2663.7 millions, - the same amount as was outstanding in line 1 of the table.

This issue could not be made, however, unless the banks had or could secure 1164.8 millions of commercial paper.

It may be asked, however, what amount of Federal reserve notes the reserve banks could issue under the present law, by using the circuitous process above described, that is, by paying to the Agent all free gold in the bank's vaults, thus releasing a similar amount of commercial paper, and then repledging the commercial paper for a similar amount of additional Federal reserve notes.

Using the process above described, assuming that the reserve banks have only 441.5 millions in commercial paper and 294.2 millions in gold, they could take out only 441.5 millions of notes against the pledge of commercial paper, but could then pay their free gold, - 117.6 millions (the balance, - 176.6 millions being held as a 40% gold reserve against the 441.5 millions of notes outstanding) to the Agent, taking back 117.6 millions of commercial paper and later repledging the commercial paper for 117.6 millions of additional Federal reserve notes.

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The account would then stand:

Rediscounts	441.5	Federal		Rediscounts	441.5
		Reserve Notes	441.5		
Gold	117.6	Capital	294.2	Gold	117.6
F. R. Notes	117.6			F. R. Notes	559.1
	<hr/>		<hr/>		<hr/>
	735.7		735.7		559.1
					<hr/>
					559.1

Thus, by using the circuitous process, the Federal reserve banks, under the present law, could take out 559.1 millions of Federal reserve notes, being 117.6 millions more than they could take out without recourse to the process above described; the additional 117.6 millions of notes, however, would constitute a liability only of the Government and not of the banks.

The following table gives the results of the various methods above described:

(See following page)

	Notes	Reserve	Gold in circulation	Notes and gold in circulation	Security held by U. S. Treasurer or R. Agent.
1. National Bank Notes	735.7	36.8	1928	2663.7	735.7 U. S. bonds
2. Federal Reserve Notes - Present Law:					
Notes issued vs. com. paper		(36.8 ± 257.4)			
Direct method	735.7	294.2	1670.6	2406.3	735.7 Com. Paper
3. Federal Reserve Notes - Present Law:					
Notes issued vs. com. paper					
Direct method					
To make total notes plus					
Gold in circulation the		(36.8 ± 429.1)			
Same as in 1	1164.8	465.9	1498.9	2663.7	1164.8 Com. Paper
4. Federal Reserve Notes - Assuming Federal Reserve Banks can secure only 441.5 com. paper and 294.2 in gold.					
Notes issued vs. com. paper		(36.8 ± 139.8)			
Direct method	441.5	176.6	1751.4	2192.9	441.5 Com. Paper
5. Federal Reserve Notes - Same as 4		(36.8 ± 139.8)			(* 441.5 Com. Paper
Circuitous method	*559.1	*176.6	*1670.6	*2310.5	(* 117.6 Gold
6. Federal Reserve Notes - Proposed amendment.					
Assuming reserve banks can secure only 441.5 com. paper and 294.2 in gold.					(441.5 Com. Paper
Notes issued vs. com. paper and gold	735.7	(36.8 ± 257.4)	1670.6	2406.3	(294.2 Gold
		(294.2)			735.7

* Note that the reserve in 5, - 176.6, - is the same as the reserve in 4, yet that 559.1 notes are outstanding in 5 and only 441.5 in 4. The reason is that the payment to the agent of 117.6 millions of gold operates to "reduce" the liability of the banks on that amount of notes, while the liability of the Government is increased by 117.6 millions. The banks being liable only on 441.5 millions of notes need keep a reserve only against 441.5 millions.

Note also that the contraction of gold is the same in 2 as in 5, for the 117.6 millions of gold is taken out of circulation equally whether held in the bank's vaults, as in 2, or held by the Agent, as in 5.

The above table clearly shows that, - when the banks have an ample supply of commercial paper, - the amendment causes no expansion of notes. It merely permits the same amount of notes to be issued, but the requirement of the present law that the Agent shall hold 100% commercial paper is contracted to 60%, and the balance is made up of gold.

The table also shows that when the banks can not secure as much commercial paper as their gold would sustain as a reserve for Federal reserve notes, i. e., $2\frac{1}{2}$ times as much, there is an expansion, dollar for dollar, by the exact amount of gold pledged in lieu of commercial paper, but the total amount of notes outstanding can never exceed $2\frac{1}{2}$ times the total gold held by the banks, whether in their vaults or pledged with the Agent, nor can the total amount ever exceed the total amount of collateral, whether paper or gold, pledged with the Agent.

It may be claimed, however, that in 3 supra, the 294.2 millions of gold serves two purposes, - both as reserve in the bank's vaults and as collateral with the Federal Reserve Agent, - and that this gold cannot serve two masters at the same time.

This latter proposition is undoubtedly true, but it has no application to the present case, for although this 294.2 millions of gold stands for two purposes and thus, in a sense, may be said to serve two masters, it does not stand for both purposes or serve two masters at the same time; on the contrary, it stands in the alternative for either at any time, but not for both at the same time, and there is nothing inconsistent or impossible in this dual but alternative relation.

A similar alternative use of the 40% gold reserve is found in another portion of Section 16 which provides that the Federal Reserve Banks must keep on deposit in the United States Treasury not less than 5% in gold as a redemption fund, but that such deposit of gold shall be counted and included as part of the 40% gold reserve to be maintained by the Reserve Banks in their vaults. Unquestionably, under this clause, the Federal Reserve Board, at the request of the

Secretary of the Treasury, could require the Federal Reserve Banks to deposit their whole 40% gold reserve with the Treasury, and we should then see this gold reserve serving two masters, but the service would be only an alternative service just as in the proposed amendment.

VI.

Let us now work out, step by step, just what note issuing power a Federal Reserve Bank has under the present law and what it would have under the suggested amendment, assuming only a limited supply of commercial paper.

In Appendix II, this has been worked out in detail by Federal Reserve Agent Jay and in Appendix III by Mr. Jacobson, of the Statistical Division of this Board, based upon the present resources, upon certain specified days, of the twelve combined Federal Reserve Banks.

It may, however, be easier to follow the various steps by taking a simpler illustration. We will, therefore, assume that a Federal Reserve Bank has, say, 400 millions of *capital which has been paid in in gold and that the bank has discounted 600 millions of commercial paper for member banks, pledging said commercial paper with the Federal Reserve Agent for Federal reserve notes which the member banks wish to draw out against their rediscounts.

The bank must keep in its vaults 240 millions of gold reserve against the 600 millions of Federal reserve notes outstanding, and thus has left 160 millions in gold which is free. The bank would like to impound this gold and at the same time use it in the shape of Federal reserve notes so as to derive earnings from it.

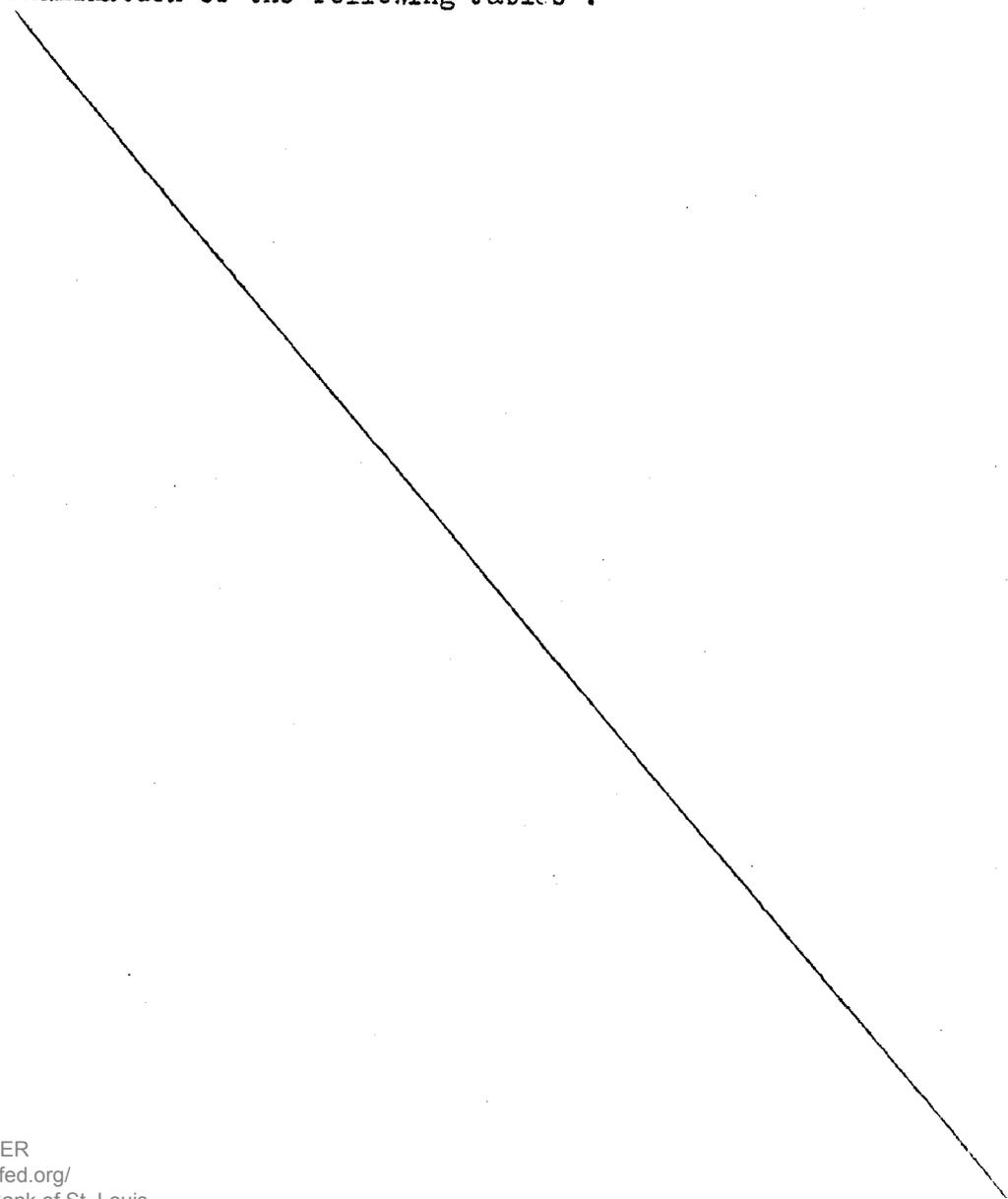
We will assume that the supply of eligible paper has fallen off and that the Bank can secure no more so that it can not utilize its 160 millions of free gold for taking out Federal reserve notes, having no eligible paper to pledge.

(* By the term "capital", free gold is meant, in all the following tables. The term "capital" is used in order to distinguish the free gold, entered under this heading, from gold creating deposit liabilities and requiring a separate 35% reserve.

We will further assume, however, that paper eligible for purchase in the open-market (but not eligible for rediscount for lack of the indorsement of a member bank,) or U. S. bonds or Municipal warrants for any part of 400 millions, have been offered to the bank and that it is prepared to buy in the open-market as much of these as it can pay for by the issue of Federal reserve notes based upon the 160 millions of free gold in its vaults, assuming, at the same time, that those who offer these securities or paper for sale are willing to accept Federal reserve notes in payment.

The question which then arises is what amount of Federal reserve notes can the bank, under the present law, take out and issue against this 160 millions of free gold. We can then compare this with the amount of notes which can be issued under the proposed amendment.

The answer to this question will be found from an examination of the following tables :



PRESENT LAW

I.

The Federal reserve bank starts with 400 millions of capital paid in in gold. It has discounted 600 millions of commercial paper for member banks, pledging said paper with the Federal Reserve Agent against the issue of Federal reserve notes which the member banks draw out against their rediscounts.

It desires also to invest in open market purchases, United States bonds, or warrants as above assumed.

The account of the Federal reserve bank will stand as follows:

Reserve Bank.				Federal Reserve Agent.			
Rediscounts pledged	600	F.R. Notes	600	Rediscounts	600		
Rediscounts free	-	Capital	400	Gold	-		
Rediscounts total	600						
Gold paid to F.R. Agent	-						
Gold in bank vaults	400						
Gold - total	400						
F. R. Notes	-					F. R. Notes	600
Total	1,000		1,000		600		600

Reserve.
40% of 600 = 240

Free gold = 400 - 240 = 160

Credit power. F. R. notes = $2\frac{1}{2} \times 160 = 400$.

The bank here has 160 millions free gold but it can not take out Federal reserve notes against it directly under the present law, not having rediscounts to pledge, all its rediscounts - 600 millions - having been already pledged with the Federal Reserve Agent. The bank, however, can indirectly, but none the less legally, make a further issue of Federal reserve notes, even on its present holdings of redis-

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counts, by taking two steps as follows:

2.
Step 1.

The bank pays 160 millions of gold which it has in its vaults free, to the Federal Reserve Agent, taking back 160 millions of rediscounts from the Federal Reserve Agent, under the provisions of Sec. 16 above quoted.

The account will then stand:

Reserve Bank		Federal Reserve Agent	
Rediscounts pledged	440	F.R. Notes	440
Rediscounts free	160	Capital	400
Rediscounts total	600	Gold	160
Gold paid to F.R. Agent	(160)		
Gold in vault	240		
Gold total	240		
F. R. Notes	- -		F. R. Notes 600
Total	840	840	600 600

Reserve.

$$40\% \text{ of } 440 = 176$$

$$\text{Free gold} = 240 - 176 = 64$$

$$\text{Credit power, F. R. Notes} = 2\frac{1}{2} \times 64 = 160$$

This operation leaves the bank with 160 millions in free rediscounts upon which a further issue of Federal reserve notes can be taken out.

2.
Step 2.

Let us assume that the Bank repledges the 160 millions of free rediscounts and that it takes out 160 millions of additional Federal reserve notes.

The account would then stand:

Reserve Bank		Federal Reserve Agent.	
Rediscounts pledged	600	F.R. Notes	600
Rediscounts free	- -	Capital	400
Rediscounts total	600	Gold	160
Gold paid to F. R. Agent	(160)		
Gold in vaults	240		
Gold - total	240		
F. R. Notes	160		F. R. Notes 760
Total	1,000	1,000	760 760

Reserve.

40% of 600 = 240

Free gold = 240 - 240 = 0

Credit power. F. R. Notes = 0

Thus by the two steps above described the Bank has paid 160 millions to the Agent and has thus "reduced" its liability on 160 millions of Federal reserve notes. This payment, however, has released 160 millions of rediscounts which have been repledged for 160 millions of additional notes. The bank's liability for Federal reserve notes remains as before at 600 millions, the additional 160 millions being offset by the 160 millions on which the bank's liability was "reduced" by the payment to the Agent. As the notes are all outstanding, however, the liability of the Government is increased by 160 millions and now stands at 760 millions.

The bank still has 240 millions of gold in its vaults, but this 240 millions it must keep as a 40% gold reserve against the 600 millions of Federal reserve notes outstanding.

The total note-issuing power of the bank is thus seen to be 760 millions. It could therefore issue 160 millions of additional Federal reserve notes for the purpose of making investments other than regular discount operations, for which latter, as assumed above, there is no demand, and these additional 160 millions would be a liability only of the Government.

3.

Let us now assume that the proposed amendment has become law and that henceforth Federal reserve notes may be issued by the Agent originally against the deposit of gold, commercial paper, or both.

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Going back to I, we will assume the Bank pledges its 160 millions free gold with the Federal Reserve Agent instead of paying it in order to reduce its liability. The account will then stand :

Reserve Bank			Federal Reserve Agent				
Rediscounts Pledged	600		F. R. Notes	760	Rediscounts	600	
Free	-		Capital	400	Gold	160	
Total	600					F.R. Notes	760
Gold * Pledged	160						
Free	240						
Total	400						
F.R. Notes	160						
Total	1160		1160		760		760

Reserve

40% of 760 = 304

Free gold, 400-304 = 96

Credit power, F.R. Notes = $2\frac{1}{2} \times 96 = 240$

By this process, under the amended law, the pledge of 160 millions gold, instead of "reducing" liability on 160 millions of Federal reserve notes as was the case in II, steps 1 and 2, supra, has increased the liability of the bank by the amount of additional Federal Reserve notes taken out, - 160 millions, - and the bank, as also the Government, is liable on the total, - 760 millions. Note also that the bank has in fact only 240 millions gold in its vaults and 160 pledged with the Federal Reserve Agent. The amended law, however, provides that the 160 millions pledged with the Agent shall count as reserve/ against Federal reserve notes as if actually held in the bank's vaults. The total gold in the bank's vaults- 240 millions should, therefore, have added to it the amount pledged with the Agent- 160 millions, making a total of 400 millions.

We saw above under II, step 1, supra, that a payment to the Agent under the present law reduced the cash in the bank's vault to 240 millions while on the other hand the liability of the bank on Federal reserve notes was reduced to 440 millions.

Under the amendment, however, the 160 millions of gold pledged with the Agent is still counted as cash in the bank's vaults, while, on the other hand, the 160 millions of additional Federal reserve notes taken out by the bank instead of reducing its liability to 440 millions, increases its liability on Federal reserve notes from 600 to 760 millions, making it the same as the liability of the Government.

4.

We saw also under II, Step 2, supra, that the bank had 240 millions of gold in its vaults which it could not utilize for further issues of Federal reserve notes as it had to serve as a 40% gold reserve against the 600 millions of Federal reserve notes outstanding upon which the bank was liable. This 240 millions, however, is not a trust fund for the redemption of the notes but merely a gold (cash) requirement.

Inasmuch as the amendment provides that this gold reserve may be deposited with the Federal Reserve Agent and still be counted as if in the bank vaults let us suppose that the bank transfers i.e. pledges this 240 millions of gold with the Federal Reserve Agent. By this transfer or pledge, what was reserve before now becomes part of the Agent's trust fund, but being gold, it also, under the amendment, satisfies the gold (cash) reserve requirement as if it still were in the bank's vaults.

After such transfer, the account would stand:

Reserve Bank			Federal Reserve Agent		
Rediscounts: Pledged	600	F. R. Notes	1000	Rediscounts	600
Free	-	Capital	400	Gold	400
Total	600				F. R. Notes 1000
Gold Pledged	400				
Free	-				
Total	400				
F. R. Notes	400				
Total	1400		1400	1000	1000

Reserve:

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40% of 1000 = 400

Free gold 400 - 400 = 0

Credit power, Federal Reserve Notes = $2\frac{1}{2} \times 0 = 0$

In the above statement the gold in the bank vaults is entered as 400 millions. In fact there is not a dollar in gold in the vaults, as it all has been pledged with the Federal Reserve Agent, but, under the amendment it counts as reserve in the bank vaults.

V.

Let us now consider just how great an expansion of credit power in the shape of Federal reserve notes has been made possible by the provisions of the amendment that gold deposited with the Agent shall count as reserve in the bank's vaults. We here still assume that 600 millions represents the maximum of eligible paper the bank can secure.

We saw above under I that the bank had 160 millions in free gold but could not take out Federal reserve notes/against it because it had no free discounts.

Under the amendment, however, the Agent can issue Federal reserve notes against the deposit of this gold.

We also saw in II, Steps 1 and 2, that by paying this 160 millions in gold to the Agent the bank received back 160 millions in commercial paper and that this paper was redeposited with the Agent and 160 millions additional notes taken out but that although the bank was liable on this additional 160 millions, it had also, by the payment of 160 millions "reduced" its liability on notes to an equal amount, and that therefore, the bank remained liable only on 600 millions, as before, while the Government liability had increased to 760 millions.

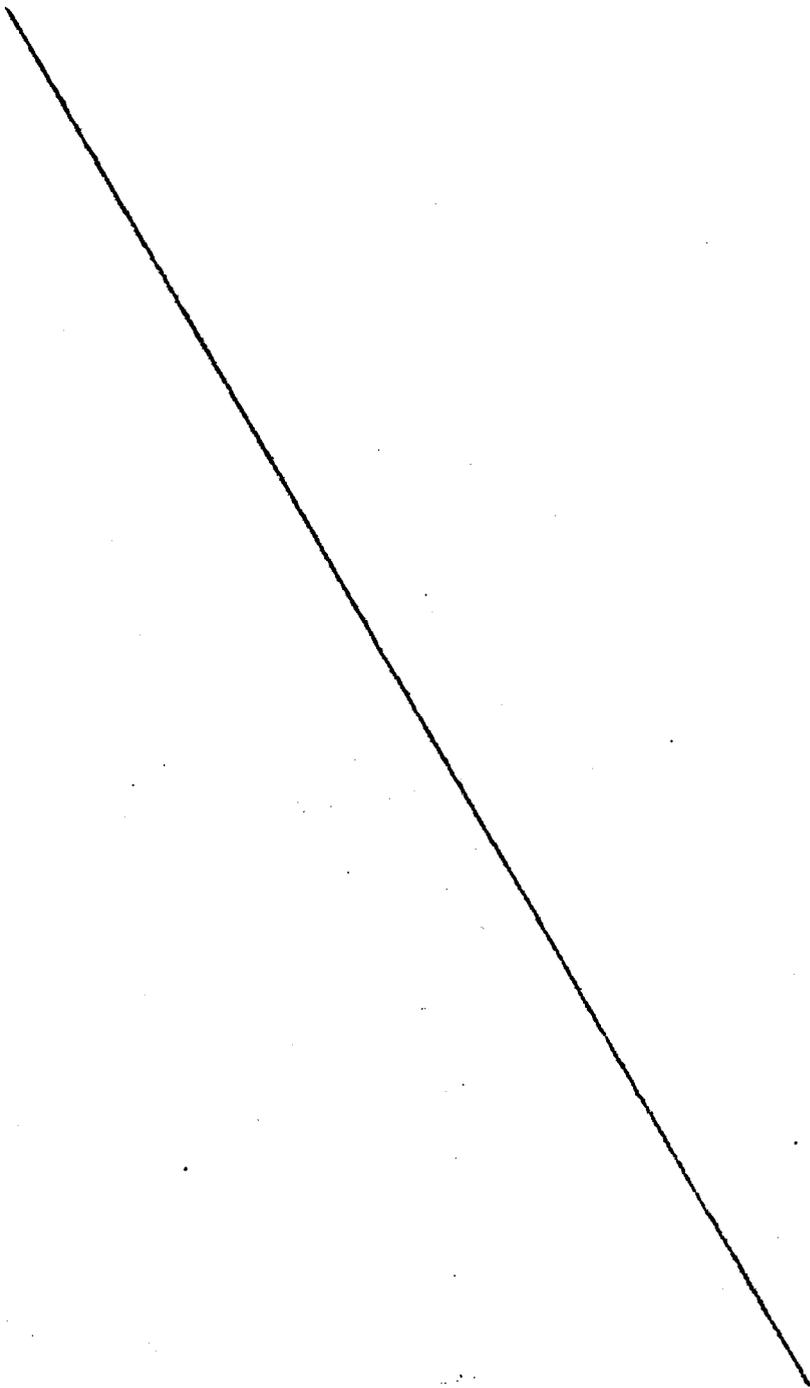
We also saw under III that under the amendment, the bank could pledge this 160 millions of gold with the Agent and thereby increase the total note issue outstanding from 600 to 760 millions upon which both the bank and the Government were liable.

We also saw that under the amendment the bank could also pledge its 240 millions of gold held as reserve against the 600 millions of out-

standing Federal reserve notes, with the Agent and take out 240 millions of additional Federal reserve notes.

To find, therefore, the true measure of expansion under the amendment we must consider; (a) the effect of the payment of 160 millions of gold to the Agent, under the present law, as compared with; (b) the effect of the pledge with the Agent of 160 millions of gold under the amendment, and (c) the effect of the further pledge of 240 millions of gold with the Agent.

We find that (a) increased the total note issue 160 millions while (b) increased the total note issued by 160 millions, and (c) by 240 millions, making a total of 400 millions in all.



That is to say, the payment to the Agent left the bank under the present law, with only 240 millions of gold which constituted its gold reserve of 40% against 600 millions of Federal reserve notes outstanding, while under the amendment, this 240 millions is actually deposited with the Agent, authorizing the issue by him of 240 millions of additional Federal reserve notes, but the 240 millions, as also the 160 millions above mentioned is counted as if still in the vaults of the bank. In the bank's vaults, this $160 \pm 240 = 400$ millions stands as a reserve for $2\frac{1}{2} \times 400$ millions of Federal reserve notes, while with the Agent it stands for the issue, dollar for dollar, of 400 millions Federal reserve notes, while the 600 millions of commercial paper pledged with the Agent serves as collateral for 600 millions of Federal reserve notes.

The Agent then holds 100% in collateral, - 600 millions in commercial paper and 400 millions in gold, while the 400 millions of gold, is counted as reserve in the bank's vaults, and serves as a gold reserve for $2\frac{1}{2} \times 400$ millions = 1000 millions in Federal reserve notes, - the exact amount issued by the Federal Reserve Agent.

This shows that the real effect of the Amendment is to consolidate, for Federal reserve note purposes, the gold held by the bank with that held by the Agent, that is to say, the gold held by the Agent serves as if actually held in the vaults of the bank.

Going back to II, Step 2, we see that after issuing the maximum amount of notes possible under the present law, the account of the bank and Federal Reserve Agent stand as follows:-

Reserve Bank		Step 2.		Federal Reserve Agent	
Rediscounts Pledged	600	F. R. Notes	600	Rediscounts	600
" Free	-	Capital	400	Gold	160
" Total	600				
Gold Paid to F.R. Agt. (160)					
" in vaults of Banks	240				
" Total	240				
F.R. Notes	160			F.R. Notes	760
Total	1000		1000	760	760

Reserve:

40% of 600 = 240
 Free gold = 240 - 240 = 0
 Credit powers, F. R. notes = $2\frac{1}{2} \times 0 = 0$

The bank here has 240 millions of gold in its vaults but has to retain it as a 40% gold reserve upon the 600 millions of Federal reserve notes outstanding. This gold, however, is not a trust fund, it is merely a cash reserve requirement.

The amendment provides that this gold reserve of 240 millions may be deposited with the Reserve Agent and still count as reserve, After depositing this 240 millions with the Agent, the account, as shown, supra, under IV, stood: -

Reserve Bank.		Federal Reserve Agent.	
Rediscounts pledged	600	F. R. Notes	1000
" free	-	Capital	400
" Total	600	Rediscounts	600
Gold pledged with Agent	400	Gold	400
" in vaults of Bank	*(400)		
Total	400		
Federal Reserve Notes	400		F.R. Notes 1000
Total	1400	1400	1000 1000

*Held, as per amendment, with the Federal Reserve Agent.

Reserve:

40% of 1000 = 400
 Free gold = 400 - 400 = 0
 Credit power - Federal Reserve Notes = $2\frac{1}{2} \times 0 = 0$.

This shows at a glance what the amendment accomplishes:

Under II, step 2, (present law) the bank paid 160 millions in gold to the Agent which authorized the Agent to issue 160 millions in Federal reserve notes in return for the unpledged discounts which the payment of said 160 millions of gold released.

Similarly, under the amendment, the bank pledges this 160 millions for an equal amount of notes.

Under the amendment, the bank also pledges the 240 millions of gold held by the bank under II, step 2, present law, as a reserve against the 600 millions of Federal reserve notes outstanding, and this pledge with the Agent authorized him to issue 240 millions additional of Federal reserve notes making a total of 1000 millions, as against 760 millions under the present law.

Under the amendment, however, the 600 millions of rediscounts is pledged as part collateral, 60% for 1000 millions of Federal reserve notes, instead of, as in II, Step 2, (present law), as 100% collateral for 600 millions of notes.

So also, the 160 millions paid to the Agent under II, Step 2, (present law) remains with the Agent as part collateral for 1000 millions of Federal reserve notes, instead of as 100% collateral for 160 millions of notes.

So also the 240 millions of gold, which was tied up in the bank's vaults as reserve under II, Step 2, (Present law), but which, under the amendment, is pledged with the Agent, stands as part collateral for 1000 millions of Federal reserve notes.

Thus we see that the amendment has not changed the law as to the requirement of 100% collateral to be pledged with the Agent, for we see that the 1000 millions of Federal reserve notes issued by the Agent are secured by 100%, i.e. by 600 millions of commercial paper, and 400 millions of gold. Nor has it changed the law that a reserve of 40% in gold must be held against outstanding Federal reserve notes, for the required reserve on 1000 millions of Federal reserve notes is 400 millions and we see that there are in the Agent's possession 400 millions in gold which serves as the 40% reserve, as if actually in the bank's vaults.

What change, then has the amendment brought about ?

It has simply provided : (a) that the 40% gold reserve, if deposited with the Agent, may also count as part of the trust fund of 100% which the Agent must hold against all Federal reserve notes issued by him. (b) that instead of issuing notes only against commercial paper, the Agent may also issue them against gold. (c) that when the gold pledged for notes amounts to 40% of the total issue, the gold may serve as the gold reserve, or pro tanto, which the bank is required to keep, as a cash requirement, in its vaults, against such total issue. (d) that the gold reserve is not thus used at the same time for two inconsistent purposes but is used in the alternative for either of two purposes, and that its use for one releases it from the other.

It may be claimed that, by the amendment the bank is permitted to take out 1000 millions of Federal reserve notes without the necessity

of carrying 40% or 400 millions in gold.

This, however, is not true in fact as the gold reserve of 400 millions is just as much a cash reserve when held by the Agent as when held by the bank. What is true, however, is that ^{if} 400 millions of gold had been actually in the vaults of the bank, under the present law, the Agent would have had to hold 400 millions of commercial paper in addition.

The proposed amendment releases the Agent from the necessity of carrying this 400 millions of commercial paper, by permitting the gold reserve to be held by him in its place. It thus dispenses with the necessity for using 400 millions of commercial paper but as the bank is assumed to have no commercial paper - other than the 600 millions already pledged with the Agent- no commercial paper in fact has been released to it.

On the other hand, if the bank had an ample supply of commercial paper, the amendment would leave in the bank, unpledged, 400 millions of commercial paper, but the total note issued ^{could} never exceed $2\frac{1}{2}$ times the amount of gold held by the bank, plus that pledged with the Agent.

That the permission given by the amendment to count the gold reserve against Federal reserve notes, when deposited with the Agent as part of the Agent's trust fund, is just, equitable, and in consonance with sound banking will readily be seen if we consolidate the accounts of the bank and the Agent, as is really accomplished, at least for Federal reserve note purposes, by the amendment.

The account would then stand as follows:

5.

Consolidated account of Bank and Federal Reserve Agent.

Rediscounts	600	Federal Reserve Notes	1000
Gold	400	Capital	400
Federal Reserve Notes	400		
Total	1400		1400

Reserve:

40% of 1000 = 400

Free gold = 400 - 400 = 0

Credit power, Federal reserve notes = 0.

The above shows conclusively that, under the amendment, - (a) the Agent may issue notes based upon commercial paper or gold; (b) the total notes outstanding can never exceed $2\frac{1}{2}$ times the gold in the trust fund, serving also as a 40% gold reserve, as if in the bank's vaults; (c) the notes

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issued can never exceed 100% of the total collateral, - commercial paper and gold - held by the Agent.

VI.

Finally, it may be claimed that, assuming that the Amendment is correct in theory, yet in practice it would not work out successfully, for the reason that the bank, - as shown in the statement of account under LV, supra, - is including the gold, - amounting to 400 millions, - deposited with the Agent as part of his trust fund, also as a reserve as if in the bank vaults, whereas it is not in the bank vaults, and the bank has no control over it, and, as a result, if the outstanding 1000 millions of Federal reserve notes, or any portion of them, were presented to the bank for redemption, it would have no gold actually in its vaults as reserve for such payment.

The answer to this objection is that although the bank does not hold this 400 millions of reserve actually in its vaults, yet it has an immediate right to its possession, which is as good as if it were in its own vaults.

In this connection it must be remembered that although Federal reserve notes are an obligation both of the Government and of the banks, and must be redeemed by either, the demand for redemption must be made upon one or the other and not upon both. In other words, the holder of the note on which he desires redemption must elect whether to present it to the Government or to the bank through which it was issued.

If for example, the holder presents it to the Government, the latter must redeem it and, towards this redemption, it has the gold deposited with the Federal Reserve Agent and with the Treasurer, that is the Government has 40% in gold and must pay also the remaining 60% which, later, the bank must repay to it.

If, on the other hand, the holder elects to demand redemption from the bank, the latter by paying the note in full and surrendering it to the Federal Reserve Agent will receive back the 40% gold reserve, leaving its net payment from funds in its vaults, 60%.

Thus in either event, the 40% gold reserve is available to the Government or to the bank, - whichever is called upon to redeem the note; and in either event the bank must pay 60% of the amount of the note from its cash resources in its vaults and can obtain the 40% gold reserve for the balance.

The only distinction is that if the holder demands redemption from the bank the 60% aforesaid is paid by the bank to the holder; while if the holder demands redemption from the Government, the 60% aforesaid is paid by the bank to the Government.

To sum up :

1. The Federal Reserve Bank, in its illustration given above, by paying the 160 millions of free gold, under the present law, to the Agent, can issue 160 millions additional notes upon which the Government is liable but upon which its liability is "reduced".
2. The bank by pledging this 160 millions of free gold, under the amendment, with the Federal Reserve Agent, can take out 160 millions additional notes, upon which it, as well as the Government is liable.
3. The bank, by pledging the 240 millions of gold held, under the present law, in its vaults, as a 40% reserve against the 600 millions of Federal reserve notes outstanding, of which the collateral is commercial paper, can take out 240 millions more of notes, as this 240 millions of gold will count both as reserve and also collateral for all notes outstanding, thus displacing the necessity for 400 millions of commercial paper being held by the Agent.
4. The same amount of reserve must be held under the amendment as under the present law, but it may be kept with the Agent and count as part of the 100% collateral behind the notes.
5. All notes issued must be covered by collateral with the Agent of 100% in commercial paper, gold or in part, of cash.

The real effect of the amendment, therefore is that, whereas under the present law, when the collateral is 100% commercial paper, a 40% gold reserve must be kept by the bank, under the proposed amendment if e. g. 40% of the collateral is held in gold by the Agent this will dispense with the necessity for a gold reserve in the bank's vaults.

The effect of the present law, in other words, is to impound in the shape of reserve and collateral, 140% of the value of all notes issued, whereas the proposed amendment dispenses with the extra 40% collateral in the shape of commercial paper, where at least 40% of the collateral consists of gold.

This will appear clearly if we were to assume that the law were changed so that the office of Federal Reserve Agent were abolished and the accounts of the Agent and the bank were consolidated as in the above illustration, and that the law further provided that the bank could issue Federal reserve notes, provided, it kept in its vaults, as a trust fund for the redemption of the notes, 60% in commercial paper and 40% in gold.

It is clear, in the above case, that the requirement of a 40% cash (gold) reserve against Federal reserve notes would be satisfied if the bank held 40% in gold segregated as a trust fund. This is in effect, the result reached by the proposed amendment, the office of Federal Reserve Agent being retained, but the accounts of the bank- at least for Federal reserve note purposes,- being consolidated with the accounts of the Agent.

It is submitted that, for the reasons set forth in detail above, the proposed amendment should be enacted into law. Under the law so amended, the Federal reserve banks will be able to conserve gold already in their possession, to secure gold now held by the member banks, and finally, to initiate and maintain an effective and greatly needed National policy of gold conservation.

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