Like every reform, the Federal Reserve System must depend for enduring success upon popular approval and support. It cannot be expected that both the bankers and the public will accord this support unless the various features of the System and its operations are open to examination and discussion. The importance of this cannot be exaggerated when it is realized that changes are taking place in the world's financial affairs which are certain to throw heavy burdens and responsibilities upon the reserve banks. Plans to anticipate these must be made in advance, and should be understood. We must also recognize that the authors of the Federal Reserve Act little realized at the time of its preparation that before the reserve banks could be organized all Europe would become involved in the greatest war of all times. Nor could any human wisdom foresee the changes which would take place in our country's trade, in its international balance sheet and in the magnitude and character of its banking transactions.

The addition of over $1,000,000,000 to the country's gold stock in two years is one of the most significant and impressive of these occurrences. It raises questions in regard to our currency which should be discussed and considered at this time.

The purpose of this and subsequent articles is to describe certain transactions of the Federal Reserve Banks and the difficulties which have arisen and which may continue to multiply on account of that part of our
hodge-podge currency with which the Federal Reserve Act does not deal. Also, to suggest certain inconsistencies and dangers in those matters which can be dealt with if we are willing to consider that the Federal Reserve Act is only the first step in a program for progressive reform of our currency.

**OUR CURRENCY RECORD.**

Since the establishment of the Colonies, the American people have almost continuously paid dearly for experiments with unsound currency. It seems as though many costly lessons of experience in other countries had been ignored by our government and banks and that American ingenuity had been directed to devising new currency expedients equally expensive and disastrous. Our trade with the Indians was first conducted by the use of beads and wampum and the enumeration of what has since been employed as "money" from that day to the present sounds almost grotesque. We have used bales of pelts, hogheads of tobacco, irredeemable Colonial notes (which were generally defaulted), irredeemable Continental currency (likewise defaulted), coins of foreign nations, wildcat bank notes, shin plasters, postage stamp currency, greenbacks, Treasury notes and occasionally clearing house notes, not to mention the present bond secured bank notes and long years of experiment with bimetallic currency.

Throughout a considerable part of this period, the losses sustained by the American people were enormous. Not only was there the direct loss caused by the repudiation or depreciation of notes issued by the Colonial and state governments and by the Continental Congress and later by the failure of state banks of no responsibility to redeem their notes, but
there was the much greater indirect loss resulting from the expulsion of gold from the country, with the consequent derangement of prices and trade.

The unfortunate inheritance of the present generation from those past days are both tangible and intangible. The tangible legacy consisted January 1, 1917 of

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States notes (greenbacks)</td>
<td>$346,681,016</td>
</tr>
<tr>
<td>Silver certificates</td>
<td>$476,795,613</td>
</tr>
<tr>
<td>Treasury notes</td>
<td>$2,035,188</td>
</tr>
<tr>
<td>National Bank notes</td>
<td>$726,825,240</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,552,337,057</strong></td>
</tr>
</tbody>
</table>

The intangible legacy consists of the great crop of disordered notions about our currency which it seems impossible to fully eradicate. Fortunately, the sound money campaign laid the bogey of bimetallism in the dust and the five years of agitation for banking and currency legislation of 1908 - 13, resulting in the passage of the Federal Reserve Act, has at last prepared the way for the final settlement of this perplexing currency question.

The Federal Reserve Act has among its objects two, which are most important and fundamental: One, the laying of a foundation upon which will be based a complete reform of our inelastic currency; the other, the creation through the instrumentality of reserve banks, of a sound and adequate system of gold banking reserves. The following treats of the first of these objects.

**GRADUAL RETIREMENT OF NATIONAL BANK NOTES.**

Congress could not or, at least, did not undertake at one stroke to dispose of the existing assortment of nearly $1,600,000,000 of currency above mentioned, some part of which should never originally have been is-
sued and all of which once having been issued should have been retired as rapidly as the development of the country's resources and the growth of the government's credit permitted. So the effort of the present legislation was limited, first, to the gradual retirement of about two-thirds of the national bank notes and, second, to the introduction of a new and elastic element into the currency by the creation of Federal Reserve note issues, leaving everything else undisturbed. The language employed in the Act for these purposes is somewhat obscure and the operations involved rather complicated, but it is only necessary to get a clear general understanding of what the law in its present shape permits of accomplishment, limited though it is, and then form our conclusions as to the character of evolution which must be relied upon to perfect the law and ultimately complete this reform. Short-sighted criticism must not be allowed however to discredit a great piece of legislation or mislead the public as to what it may ultimately accomplish. Most of the criticism of the Federal Reserve Act has been of minor importance, considering the broad purposes of the legislation, but in one important matter those directing the policy of the reserve banks have been charged with failure to observe the spirit, if not the letter, of the law. It is claimed that issues of Federal Reserve notes in exchange for gold are being made by a method not authorized by the statute, and that this process constitutes inflation and is not in harmony with the theory of elasticity.

**ISSUES OF NOTES AGAINST GOLD.**

The legal basis for the method now being employed for issuing Federal Reserve notes against gold has been established to the satisfaction of the Federal Reserve Board and of the officers and directors of
the Federal Reserve Bank of New York, and the legal aspects of this operation have been elaborately explained in former statements made by the members of the Reserve Board and by officers of the New York Bank, which need not be repeated here.

It seems, however, that the object of the amendments to the note issue provisions of the Federal Reserve Act proposed to the last session of Congress must have been misunderstood, when it is claimed that the failure of Congress to enact the amendments constituted a rebuke to the managers of the system for permitting the present method of issuing Federal Reserve notes. The amendment was designed to accomplish two needed changes in the Act. The important change was to make clear that the reserve banks may count gold accumulated by note issues as part of their assets and may treat the notes so issued as part of their liabilities and thereby immensely strengthen their reserves. This was the real object sought by the amendment. Of less importance, and having the effect simply of saving much clerical work and inconvenience, was the proposed authorization of direct exchanges of notes for gold without so many bookkeeping motions involved by the preliminary pledge of commercial paper. Congress failed to adopt the suggestion about the gold counting as reserve, but had it intended this as disapproval of the method now authorized by the law, which was fully and clearly explained, it would have amended the statute so as to have prevented the issue by the present less convenient method.

**THE CHARGE OF INFLATION.**

As to the charge of inflation, however, it may be disposed of in a few words: The Federal Reserve banks had received from the government at January 5th, 1917 $300,280,000 of notes which amount constituted
the entire outstanding issue to that date. These notes are secured by
the pledge of $281,292,000 of gold and $20,272,000 of commercial paper.

Such of the notes as are secured by commercial paper are, in fact, offset
by $21,664,000 of notes which the twelve Federal Reserve banks held in
their cash on January 5th, 1917, so that if all the notes held in their
tills were simultaneously surrendered or presented for redemption, the net
issue today would not represent one dollar of inflation. About $281,000,000
of Federal Reserve notes, which cannot be counted as reserves by the banks
of the country, have been substituted in circulation for a like amount of
gold which otherwise would count as reserve and which would form the basis,
in time, of a very considerable expansion of credit. It is this issue which
suffers the indictment of "inflation". How ridiculous! Had the entire
$281,000,000 of notes been issued against discounted paper, every dollar
would have been added circulation and "inflation" - if increased circulation,
even though it be legitimate and necessary, can be termed "inflation".

In brief, the effect of exchanging Federal Reserve notes for gold
is to cause no change whatever in the volume of currency, although inci-
dentally, it does impose some restraint upon the expansion of bank credits
to the extent that gold has been withdrawn from bank reserves. So much
for "inflation." Now as to the matter of elasticity of the new note issue.

THE ELASTICITY OF FEDERAL RESERVE NOTES.

Prior to the enactment of the Federal Reserve Act, the country
clamored for an elastic currency. Elasticity in the currency means that
the volume can be expanded to meet the demands of trade by some other
method, of course, than by the importation of gold from foreign countries,
or by its production from domestic mines. That is to say, currency must
be issued in exchange for some kind of security other than gold. The
Federal Reserve Act proposes that this be done by permitting the Federal Reserve banks to issue their notes, (for the payment of which the government has been unnecessarily obligated), upon depositing as security therefore certain classes of commercial paper which they have discounted. The principal limitation imposed upon the amount of notes so authorized to be issued is in the requirement that there shall always be on hand a gold reserve equal to at least 40% of the issue. This is the theory of all elastic note issues and of course contemplates almost unlimited expansion as demands arise, provided always, that sufficient gold is in hand to comply with the 40% minimum reserve requirement. But is there sufficient gold now in hand to fortify note issues which may be required to meet whatever legitimate demands may arise, and if not, how may it be obtained? It is necessary to take into consideration the method of obtaining this gold and the certainty of the sources of its supply for upon this will inevitably depend the amount of possible expansion, the degree of security and the adequacy of the reserve.

VOLUME OF NOTES WHICH MAY BE ISSUED.

The member banks have now paid in to the reserve banks about $56,000,000 as capital and they, with the government, have also paid in $682,000,000 as deposits, the greater part originally consisting of gold. Of this $738,000,000 of gold, the reserve banks have since paid out $213,000,000 in acquiring discounts from member banks and investments in the open market - it will later be explained why these operations always necessitate gold payment - so that, allowing for other deductions, such as holdings of silver, United States notes and uncollected checks carried by the reserve banks, their net gold reserve today is about $460,000,000 excluding the $281,000,000 held by the Federal Reserve Agents against note
issues above mentioned.

With $213,000,000 invested at interest, the reserve banks as a whole are earning their expenses and somewhat less than 6% dividends on the capital. To earn the full dividends on the capital and a margin for increased expenses, would require the investment at present interest rates of about $75,000,000 additional, which would involve the loss of a like amount of gold and leave the gold reserves of the twelve banks at, roughly, $385,000,000. The minimum required reserve of 35% for deposits (substantially no reserve being required for note issues as at present with gold security) amounts in round figures to $240,000,000.

If, therefore, the banks held investments sufficient to pay all expenses and dividends, there would remain in their hands only about $145,000,000 of gold in excess of the minimum reserve permitted by the statute, if we exclude the $281,000,000 of gold held as security for note issues. No one would for a moment advocate such a reckless policy for the reserve banks that their reserves would normally remain at anything like the minimum level, but assuming that a time of crisis justified such a policy, and further assuming that the reserve banks were able at such times to issue notes freely in payment for discounts to member banks instead of paying out their reserve money, the positive limit of elasticity to the Federal reserve note issue (unless the gold accumulated by issues of notes is counted as reserve) would at present be about $360,000,000. This sum is only about two-thirds the combined totals of Aldrich-Vreeland notes and Clearing House loan certificates of the New York Clearing House Association alone issued during the fall of 1914.

HOW CAN FEDERAL RESERVE BANKS DISCHARGE THEIR OBLIGATIONS AND RESPONSIBILITIES?

How, therefore, may the Reserve Banks discharge the obligation
resting upon them, on the performance of which the country has placed almost unlimited reliance, of supply whatever demands for currency may arise, not only in normal times, but growing out of possible disturbances resulting from the war? How, also, may the Reserve Banks be expected to furnish their members with some part of the $1,000,000,000 of recently imported gold when the conclusion of the war results, as it may, in adverse exchanges and large gold exports? They can meet every demand in my opinion by regulating the note issue in accordance with sound principles as a means of accumulating gold; but this policy should not be made the excuse for expanding the amount of bank loans and credits, for which at present there is no justification and which, taking the country as a whole, are already of unprecedented if not dangerous volume.

GOLD SHOULD BE ACCUMULATED THROUGH NOTES AS WELL AS THROUGH DEPOSITS.

Stating the matter in plainest terms, the member banks of the country have deposited $656,000,000 gold with the reserve banks, and that money is owing to the member banks in the form of book credits. Free issues of Federal Reserve notes against deposits of gold, dollar for dollar, would simply mean that indirectly the public, which requires currency for daily transactions, would also deposit gold with the Reserve Banks and in exchange accept notes. The book credits are usually more convenient to banks for use in settling accounts between themselves and their customers and to a great extent between each other. The currency is more convenient for the pay-rolls and retail trade of the public. Both forms of credits, as furnished by Reserve Banks, serve to impound gold in their vaults. This operation of accumulating gold by note issues involves no "Inflation", does not alter the volume of currency one dollar, nor violate any sound banking principle. What it will do, is vastly to increase the
power which the Reserve Banks may exercise in time of need. It will enable them when crisis or emergency threatens, to extend credit to the member banks of the system and (through the banks) to issue currency to the people of the country, who are the customers and beneficiaries of the system.

If, in addition to the $656,000,000 deposits now made by the member banks, the public also deposits, say, $600,000,000 of gold, for which it accepts notes, then when the demand comes, the resulting "inflation" of the note issue - if again the term "inflation" applies to issues of notes against assets, as in the case of the Aldrich-Vreeland notes - will be sufficient to meet demands, will be based upon an adequate gold reserve to support its issue and will be acceptable to those who demand its use. There would still remain in circulation and in member and non-member bank reserves, over $1500,000,000 of gold, an amount exceeding the total stock of any other nation.

SUPERVISION RATHER THAN LEGISLATION BEST CHECK TO EXPANSION.

No fear need be entertained that this enlargement of the gold reserves of the Reserve Banks means an unlimited expansion of credit or enlargement of fiduciary note issues. None of the many restraints imposed by law upon reckless expansion of credit or inflation of note issues are as effective as is the good judgment and common sense of those who are managing the system. They already have ample powers to indulge in all sorts of reckless experiments which would discredit the system and bring about its downfall. The restraint of public opinion and a proper sense of responsibility can be relied upon to prevent misuse of powers which are necessarily broad, and convincing evidence of the
exercise of this conservatism is afforded by the moderate earnings of
the Reserve Banks during a period when there is strong incentive for
them to make a good showing of earnings. They have continuously demon­
strated their unwillingness to press their funds upon a market already
gorged with credit.

Various suggestions have been made, however, for preventing
undue expansion of note issues by express provision of law, and it may
be necessary, but only in order to satisfy public opinion, to surround
the discretionary powers of the Reserve Banks with such restraints.
Those proposed have generally been either to impose a tax of some kind
upon issues of notes as they expand, or to fix an arbitrary limit on
the total beyond which issues cannot be made. Neither of these plans
would be satisfactory. A tax upon note issues would begin to operate
when the Reserve Banks had become extended and were consequently earning
large profits, a part of which would go into the United States Treasury.
A tax would not, therefore, have a restraining influence when the banks
were already paying large profits to the government, as they would be
indifferent whether these payments were made as a tax upon notes, or
simply as a contribution out of surplus earnings.

Fixing a statutory limit to the note issue would be equally
unsatisfactory. It would have no relation whatever to the condition of
the Reserve Banks or their reserves. It has been estimated that had the
tax proposed by the Aldrich Bill been applied to issues of National Bank
notes less than two decades ago, the maximum tax of $0.6 would already ap­
ply to a considerable portion of the bank notes now in circulation. The
steady growth of our country's population and of its banking resources
are too rapid to justify any such arbitrary limitation with the inevitable and unfortunate necessity for periodical revisions. A brake, however, might be applied to expansion at the point where expansion arises, that is, by an automatic increase in the discount rate charged to member banks whenever the reserves of the Reserve Banks are reduced below a fixed statutory minimum. That is the kind of restraint which would be effective, as it would apply as a penalty to those who are responsible for the expansion.

FURTHER CURRENCY LEGISLATION.

Two years of experience with the Reserve Banks in operation have I believe demonstrated to the managers of the System that the Federal Reserve Act failed to reach fundamental difficulties with our currency. It provided only for an elastic note issue without providing for a sufficiently prompt retirement of National Bank notes and failed entirely to furnish any means of dealing with United States notes and silver certificates. A somewhat cumbersome method is now being employed to fortify the position of the Reserve Banks by accumulating gold against issues of reserve notes, but the process is not as effective as it would be if the gold counted as a part of their reserves. Our whole currency system will remain defective so long as National Bank notes, silver certificates and greenbacks continue to occupy the important place which they now do in our currency circulation and so long as Federal Reserve banks are restricted in their note operations by the limitations now imposed by the law upon the method of issuing Federal Reserve notes and so long as Federal Reserve notes do not count as cash reserves for the member banks.

These defects have caused and will continue to cause difficulties
in the adjustment of domestic exchange. Our currency laws likewise have an important bearing upon the development of our banking system in foreign countries. But these matters can all be dealt with expeditiously and effectively if we take advantage of the present opportunity and of the present plethora of gold now in circulation to complete the reform by further legislation, to which reference will be made in subsequent articles.