The end so much to be desired cannot, however, be achieved by any thoroughgoing revolutionary action. The proposition is too large, the complex problems too numerous, the involved financial relations of the Government too firmly fixed. To illustrate this, we have the legal-tender notes of the United States, with their special reserve fund of $150,000,000. We are met with the fact of a silver currency of some $600,000,000 possessed of a commercial bullion value of something like half that sum. For the difference between these stand the credit and pledge of parity by the Government. Who is to take the place of the Treasury in the practical work of maintaining equivalencies between these Government obligations and gold? I point also to the artificial status of United States bonds. Now impounded as security for national-bank notes, the question of an "elastic" bank currency is handicapped by the necessity of protecting vested interests, which would be imperilled by any course which would give an open, natural and free market to Government securities.

There is the guaranty of the Government to bank-note issues, an illogical and, I believe, a harmful influence in the currency. There are the established Sub-Treasuries with all their appointments and appointees. There are the great bureaus at Washington, known as the issue and redemption division, with the hundreds composing their personnel, all dear to the heart of the political administration. These reflections bring in the suggestion that "reform" must be by graduated steps, with possibly long intervals between each; it must be effected by modifications rather than by radical changes. The first object to be gained, as it appears to my thought, is the perfecting of the Banking and Currency System. This once placed upon scientific foundations, the next question will be in order, namely, how to bring the Treasury into more natural and more harmonious relations with our general financial interests through a broader utilization of the Bank Agency. LYMAN J. GAGE.

II.

THE NATION'S CURRENCY AND BANKING SYSTEM.

THE dry details, indicating the condition of our banking and monetary system, and suggesting the future of financial affairs, are not, ordinarily, of sufficient interest to the average reader to claim the time and attention necessary to a thorough understanding of them; but the subject has been so vividly brought to the fore by the recent stringency, by the efforts to relieve it and by the various suggestions as to how a repetition of it might be obviated, that a wide-spread and general interest in the question seems to have been created.

There is that in the situation itself, at the present moment, which demands the careful consideration of the thoughtful, as to whether our system is all that it should be, and, if not, how it should be reconstructed to meet future emergencies without creating opportunity for other and even more serious contingencies. Without going far into the voluminous figures which substantiate conclusions, a few preliminary facts will aid to the proper study and easier understanding of the necessities confronting those who attempt to correct the imperfections, and will indicate the value of the safeguard required.

No grave and general upheaval of financial affairs comes without more or less warning to those whose business it is to watch the signs of the times. The conditions both at home and abroad, very early in the present year, indicated the probability of a contraction in business in general and a tightness in the money-market, but the extraordinary conditions which developed in October were not foreshadowed to any appreciable extent in the bank reports as a whole up to August 22nd. There was a steady increase in the volume of loans and discounts—an increase due in part to the number of new banks chartered during the year, but mainly to increase in the business of the old associations. Individual deposits, representing fifty per cent. of the banks' liabilities, reached the maximum in the history of the system on May 20th, 1907, when they amounted to $4,322,841,141. The number of depositors in savings-banks reporting—exclusive of those having accounts in savings departments of the State banks of Illinois—increased since 1900, from 5,898,091 to 7,982,893, and the average deposit increased from $404.33 to $437.86. For the current year, individual deposits in all reporting banks aggregate $13,099,635,348—a gain of nearly six billion dollars, or 80 per cent., in the last seven years. The highest record of increase in individual deposits, in the year ending June 30th, 1907, was made by banks in the Western States, where they increased nearly twenty per cent. during the single year.

In 1891, the outstanding circulation of national banks reached the lowest point in the life of the system since 1865—only about $167,000,000, representing ten per cent. of the stock of money in the United States. There was very little variation from that percentage up to 1900, when the proportion increased to 13.23. On June 30th, 1907, national-bank notes represented 19.38 per cent. of the money in the United States.

Incident to the usual business of clearing, documents termed "Clearing-house certificates," representing lawful money deposited for the purpose, are issued for the convenience of members of the Association in settling balances. Under section 5,192 of the Revised Statutes, such certificates are deemed lawful money in the possession of any Association belonging to the Clearing-house issuing such certificates. Under exceptional circumstances, they have also issued Clearing-house loan certificates, based on bills receivable and other securities approved by the loan committee.

The Director of the Mint, from the most recent and reliable data obtainable, estimates that, at the close of the calendar year of 1906, the stock of money in the world was $14,280,100,000. Eighty-two per cent. of the gold was held by eight countries, as follows: The United States, $1,593,300,000; Germany, $1,030,-300,000; Russia, $939,400,000; France, $926,400,000; England, $486,700,000; Austria, $306,400,000; Italy, $215,500,000; Spain, $90,900,000. Over 56 per cent. of the stock of silver was held by the same countries, the United States leading again with $698,700,000.

In 1890, Mulhall estimated the world's banking power at $15,985,000,000, of which the United States was credited with $5,150,000,000. Since that year, the banking power of the United States alone has increased to $12,674,800,000—over 146 per cent.; that of all the other countries has increased only to $16,199,200,000—the banking power of the United States being thus little less than one-half that of the entire world. These colossal proportions and comparisons but imperfectly indicate the enormous extent of the banking and monetary system with which we have to deal in making any radical change.

There has been no lack of warning indications of financial troubles. For the last ten or twelve years there has been an era of advancing prices and of great industrial, commercial and speculative activity, in all countries of the world. Credits were increased till the limit was reached in the amount of reserve money on which they must be based. For two or three years, it has been constantly more evident that there must be a slackening of the pace if we would avoid a general crisis in commercial affairs. As is always the case, when there is a demand for liquidation, it first manifests itself in the stock-market. For months, there has been a more or less steady decline in quotations. The difficulty in selling bonds became so great that many of the railways have had to raise money for their necessary expenditures through short-time notes instead of by the regular bond issues. Merchants and manufacturers of the highest credit have found it harder and harder to renew loans, and the rates have risen, steadily, for months.

It was under such conditions that we approached the autumn crop-moving period, when there are always withdrawals of balances from the reserve cities. For a time, there was reason to hope that there might be no more than a gradual liquidation of credits which would not develop into a bank or commercial crisis. But, in October, the collapse of a highly speculative corner in stocks dealt in on the "curb" in New York—not even listed on any regular exchange—brought suspicion upon an old and well-established national bank. Examination showed this bank to be entirely solvent; but public interest had been aroused to such an extent that runs developed in New York city on several other banks and trust companies. Some of them were not prepared for co-operation and protection against the sudden demands, and a number of failures followed.

In this emergency the Clearing-house banks of New York issued Clearing-house certificates for use in the payment of balances, and decided to suspend the shipment of currency to out-of-town banks. This example was followed by the central reserve banks and most of the other reserve cities, of necessity precipitating a famine of currency and a serious bank crisis. The means of remittance and collection were almost entirely suspended. Individuals, corporations and even the banks themselves drew and held all the money of any kind they could obtain. A curious feature of the situation was that there was more of a panic among the banks than among the people; but the hardship was to business generally. Every class of business was interfered with, so that business operations of every kind were curtailed. Factories have suspended, workmen have been thrown out of employment, orders have been cancelled, the moving of crops has been retarded, exports have fallen off at a time of the year when they should be at their highest. Another serious result has been the reduction of the volume of foreign credits available, just at the time when they are most needed to offset the large imports of gold which have been made.

It was not the failure of a few banks which brought on the panic. It was the system which rendered a panic practically inevitable under certain conditions — and they are conditions which can be many times repeated. It was not lack of confidence on the part of the people, but lack of confidence in the banks themselves. They were fearful that the reserve system would break down, and it broke down. They were fearful that a sufficient amount of currency could not be supplied to meet the demands—the demands were all made at once and there was not a sufficient amount to meet them. The remedy lies in improving the reserve system, so that the reserve deposits of the banks shall be kept where they are always and certainly available, and in imparting to our currency system an element of elasticity, so that, when there comes a sudden demand for bank-notes, they can be supplied without obliterating the reserve. This can only be satisfactorily accomplished through the establishment by the Government of a central bank of issue and reserve—the system which is working so satisfactorily in all of the great commercial centres of Europe. It would not only solve the two great problems of our banking system, but would also provide the machinery for conducting Treasury operations with the least disturbance.

The real weakness of our present banking system is the result of the provision regarding reserve deposits, through which the reserves are piled up in central reserve cities, without a sufficient amount of actual cash reserve on hand, so that when an emergency arises the reserves are not reserves at all. It would help against embarrassment to add to the reserve required, all along the line; but the proper solution is to increase the amount and require all reserves to be held in a central bank organized for that purpose. The depositing bank would not only be sure that the funds were always available, but that, as long as it was solvent, it could go to the central bank and get any amount of cash needed on notes of its customers or other good security. With such a bank to depend on, no solvent bank need ever doubt its ability to meet all possible demands.

The law concerning reserves, as it stands, requires that a minimum reserve of twenty-five per cent. on deposits be held in lawful money in the vaults of the central reserve city banks. The reserve cities must also keep twenty-five per cent. reserve, one-half of which may be on deposit in the central reserve banks. Banks in all other cities are required to keep fifteen per cent., three-fifths of which may be on deposit in reserve or central reserve cities. With any lack of confidence, this system is necessarily a source of weakness instead of strength. Realizing upon what small margins they depend, each bank is, in self-defence, impelled not only to collect its loans, but to withdraw its reserve deposits. Deposits of $10,000,000, in country or non-reserve banks, call for a cash reserve to be kept in those banks of only $600,000, with $900,000 on deposit in reserve city banks. These banks must have in their vaults only $112,500 of the amount, with the same amount on deposit in central reserve cities, where, in turn, there need be on hand but $28,125 representing it. There is, therefore, but $740,625 in cash, kept, unloaned, anywhere, against this deposit of $10,000,000 in the country banks. Of this only $140,625 is outside the banks' own vaults. If there is a reduction in the deposits of the country banks, of $150,000, out of the ten millions, only one and one-half per cent., it calls for more cash than has been kept on hand in reserve banks for the whole ten millions. What wonder that the fall demand for $200,000,000 in currency, for crop-moving, always causes anxiety, and that when it is accompanied by a withdrawal of deposits and curtailment of credits, caused by uneasiness or distrust, the banks are forced to drastic measures in self-defence.

There is nothing new in this situation. It has been known to all students of our banking and currency system, and has been written and talked about for many years. It has produced panic after panic, and a stringency in the money-market every fall for forty years. It was wholly due to this that the crisis of October assumed the phase of a bank panic and spread over the country. There was no other reason at all why the banks as a whole should have become involved, and their business and that of all of their customers disturbed as it was. All that was needed to have prevented this was a proper system of credit bank-note currency and bank reserves, both of which would have been supplied by a central bank of issue and reserve. There would have been no scarcity of currency, no derangement of domestic exchange and no panic among the banks or among the people.

The only way in which bank-deposit credits can be properly protected from sudden calls, when all banks may be involved at the same time, is by a system of note credits which can be at any time and immediately exchanged for deposit credits. They are essentially the same thing, and they should be daily, hourly, if necessary, convertible from one to the other. With such a system there is no inflation or expansion when a note is paid out, and no contraction when a note is returned. It makes no difference to the bank or to any one but the customer, who uses either at his option, whether the deposit remains in the bank as a credit to be checked against or is taken away in the shape of a circulating note.

Our bond-secured bank-notes offer no help to a bank in sudden calls for deposits. They are a fixed currency, issued on the secured currency principle, as distinguished from the credit or banking principle. When issued they stay out indefinitely, only returning to be renewed when worn out. It is only when the bonds for security can be borrowed or some Government deposit is obtained that they are of any value in meeting an emergency. It will not help the matter to increase the volume of bonds. It would only increase the volume of rigid, unelastic notes. They would only be a power of expansion till they were issued. Then they would stay out, with no tendency to contraction when not needed. There would be no temporary expansion possible to meet the sudden demands of an emergency. We must have a note circulation which can change quickly and automatically in response to demands. Contractibility is quite as necessary as expansibility. Several of the panic reliefs which have at various times been suggested have good points. They would serve a purpose in quieting a panic after it is under way, but not in preventing it. The use of Clearing-house certificates by the banks has been found a very efficient means for their defence, and on many occasions has probably prevented a great number of bank failures during panics. But they are only half-way measures. They carry us no farther than to the inevitable conclusion that we should have a national and central bank of issue and reserve. Clearing-house certificates, which are really credit-notes on a large scale, should be issued by a central bank under Government authority. This would have none of the disadvantages of the other system, while it would have all of the advantages and many more besides.

The real need is for something that will prevent panics, not for something that will relieve them; and the only way to attain this is through the agency of a Governmental bank. The experience of all other countries has demonstrated this. We shall surely have panic after panic till we learn the plain lesson which the others have learned and adopt the only efficient, scientific and proper means to protect our business interests. It is a matter of greater importance to the people at large than it is to the banks themselves. The banks devise ways and means to stand together, with the aid of the Clearing-house, and by suspension or partial suspension of payment to bridge over and avoid failure. But the other business interests of the country are left almost in a state of chaos. The machinery of domestic exchange suddenly stops. Collections and remittances are almost impossible. Manufacturers are forced to suspend. Workmen are thrown out of employment. Business men are forced to fail through no fault of their own. There is no citizen of the United States who is not in danger of more or less loss and embarrassment. And worst of all is the long period of depression which follows a panic, bringing suffering and privation to those who are in no way to blame. The thing which is absolutely essential is a banking system with bank-notes which will be responsive to the demands of business and will as readily contract as expand; with a system of bank reserves which shall be real reserves and always immediately available.

The installation of a central Government bank would be of incalculable value to all of the business interests of the country, and it would also solve the problem of the relations of our Treasury Department to business. It would provide a reliable and efficient system of handling our Government finances, add stability and safety to our banking system, and shield and protect the citizen in all the relations which are so vital to him for the conduct of his business and the support of his family. When the revenues of the Government are in excess of the expenditures, there is always the problem before the Secretary of the Treasury as to how, quickly and efficiently, to replace in circulation the money which the Government is forced to collect. To deposit it with the banks is the only means available, but that course is unsatisfactory, unsystematic and inefficient. It is always a course provoking criticism and complaint. A central Government bank, to which all revenues could be paid and through which all disbursements could be made, would be far better for the Government and result far better for the people.

Such a bank should not be allowed to do a general commercial business. It should be confined to the Government business, the issue of credit-notes, the receiving of reserve deposits from other banks, the discounting of their paper on approved security or rediscounting of their notes from their customers. It should have the right to deal in bonds of the Government, and probably of States and municipalities, but not in stocks. It should have such authority for dealing in foreign exchange as would enable it to accumulate gold credits abroad and import gold and bullion when needed for its reserve. It should have exclusive right to issue bank-credit notes, and it could thus regulate the issue of notes in accordance with the demand, which would be determined automatically, and with perfect precision, through its relations with other banks. We need make no change in the present system of bond-secured notes of national banks, nor disturb the present volume of currency.

Such a bank would also be a great aid in the establishment of a Postal Savings-bank system, determining at once how the deposits should be handled and invested to prevent such savings-banks only adding to the amount of money which the Government already takes out of circulation. It would also greatly improve the efficiency and value of the Treasury Department, making it a means of assistance and benefit to business, and would make our currency and banking system a source of impregnable strength in times of financial stress. It would absolutely prevent, in the United States, the recurrence of any wide-spread bank panic. It would add to the stability of our business in every line, and give us a banking and financial system equal to any in the world.

The panic of last October only endorsed the lesson of the panics from 1857 to 1893, in demonstrating beyond denial that perfectly solvent banks, if isolated units, without co-operation, cannot protect themselves and save themselves from failure without such suspension of payments as to produce demoralization in all the business of their customers. Well-managed, sound and solvent banks have often been forced to refuse payment, and commercial, industrial and financial affairs have been thrown into confusion in the past, and will be in the future until the Government provides the necessary machinery to protect them in times of excitement. The nations' banks must depend upon the nations. They do in other countries. They must in ours. Our financial stability will be subject to constantly recurring attacks until this plan becomes an established fact.

WILLIAM B. RIDGELY.

III.

THE LESSONS OF THE PANIC.

THE recent financial panic was due chiefly to the excessive manufacture of securities during the past ten years. Every panic has its special phases. While there is a similarity in the evolution of each, yet no two spring from exactly the same causes. The experience of one crisis is the lesson which guards against the same errors in the next; but, after the law has tardily and clumsily patched over the weak spots in old conditions, some new form of enterprise in finance brings on a new period of over-speculation and unwise banking. The panic of 1873 was largely due to over-extension of railways; that of 1893 was precipitated in this country by the danger of departure from the gold standard, although there were deeper causes which affected the whole financial world. In the panic of 1907, demands for capital from the railways had their share, but they were less influential than the abuse of industrial securities.

The essential feature of the recent panic was the collapse in prices of the great mass of securities poured upon the market since the revival of enterprise at the close of the last century. There were two possible dangers in this creation of new securities—some of them might not be good; and even if they were good, the amount might be greater than the available supply of capital would absorb. The difficulties of the recent situation