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THE AMERICAN CRISIS OF 1907.

THE economic revulsion in the United States is still too recent to allow an exact determination of its consequences, and for that reason, its underlying causes cannot be thoroughly analysed at the present time. The crisis and panic which appeared during an early stage of the reaction may be taken, however, as a sufficiently distinct problem for separate examination, which can be studied with a reasonable measure of completeness from the material already at hand. At the outset it will be of advantage to make a more definite distinction than has been customary between fluctuations in business activity and the crises and panics which have frequently accompanied the transition from prosperity to depression. During the eighteenth and the greater part of the last century it would be difficult to find an instance of a period of decided trade reaction which began without sudden and violent disturbance, but in some countries, notably in France and Great Britain, recessions in business activity during the last forty years have come about with a noteworthy diminution of strain, sudden collapse, and general destruction of credit, even the crisis of 1890 being, properly speaking, a crisis averted. In the United States, on the other hand, crises have been no less frequent, and there has been no alleviation in their sudden and disastrous consequences. Crises are commonly ascribed to unsound conditions which have developed during years of business activity, but this is more properly an explanation of fluctuations in trade, unless we assume that crises occur when conditions are extremely unsound, and that with only moderately unsatisfactory conditions depression may come without sudden disturbance. In accord with this view many writers have called attention to the highly speculative character of business in new and rapidly advancing countries like the United States, and have considered it the fundamental cause of the frequency and severity of crises in that country.

It may, however, be questioned whether, in the study of crises, the central point of departure should be the analysis of general economic conditions. The banks are the storm centre in all crises, the chief symptoms of which are the destruction of confidence and sudden liquidation upon a large scale. As business is at present organised, the extent and, what is of vastly greater importance, the rapidity of liquidation is largely determined by the condition of the banks and by the policy which they are able to adopt. It may happen that general conditions have become so unsound that the banks, through the deterioration in the average quality of their assets, become little more than passive sufferers in the general catastrophe, and the American crisis of 1893 may perhaps be looked upon as of this nature. Confidence in the stability of the currency had been weakened by silver legislation. Agricultural prices had fallen to unremunerative levels owing to the increase in production consequent upon the rapid settlement of the public lands in the Western States, while farmers were heavily burdened with mortgage indebtedness. The railways had been extended beyond the requirements of existing traffic, and were burdened with bonded obligations and guarantees of dividends of smaller roads which had been absorbed often for speculative financial purposes. Finally the manufacturing industries of the country had been unhealthfully stimulated by an additional dose of protection in 1890, which led to ill-judged investments of capital and over-production in those industries which had been most favoured. It is therefore reasonably certain that the crisis of 1893 could not have been averted. But there are few crises which can be ascribed to an equal number of unfavourable influences, and, in any case, it is of primary importance to determine, from investigation of the banking features of a crisis, whether sudden liquidation and loss of confidence might not have been at least in part prevented.

The crisis of 1907 is particularly worthy of study in this connection, because there is reason to believe that it might have been confined within narrow limits, even if it could not have been entirely averted. Nothing in the general economic condition of the country has been disclosed, either during the crisis or in the subsequent months of depression, which can be regarded as so hopelessly unsound as to have rendered the explosion of last autumn clearly unavoidable. The number of business failures was comparatively small, notwithstanding the strain to which the banking troubles subjected all branches of industry, nor were there many bank failures which may be accounted for by the impairment of loans from general causes. Some of the unfavourable influences potent in previous American crises were conspicuously absent, and this was most strikingly the case in agriculture. The preceding ten years of high agricultural prices had enabled farmers to free themselves from debt to an extent unknown since the beginning of settlement in the Mississippi valley. The harvests of the staple crops in 1907 were from 10 to 20 per cent. less than in the previous year, but as somewhat higher prices were being secured, the return to the cultivation promised to be greater than ever before. It is therefore not surprising that bank failures in purely agricultural sections of the country, numerous in former crises, were entirely absent during the recent disturbance. The railways were also in a satisfactory position compared with previous periods, and for some years had experienced great difficulty in handling their rapidly expanding traffic, though their facilities were being constantly increased. In the general commodity markets there was no pronounced accumulation of unsold goods, except in the case of coffee, the demand for which had fallen off on account of an attempt to hold the price at an exorbitant level. For other commodities the existing means of production were apparently not beyond the prevailing rate of consumption at current prices. Indeed, it would be difficult to find an equally long period of business activity at the close of which the relative development of different industries would seem to have been similarly satisfactory.

Turning now to indications of a less satisfactory nature, it should be observed that the more important disturbing factors were not peculiar to the United States. Everywhere the difficulty experienced in securing additional capital gave clear indication that the advance of the previous years, even if continued at all, was to be at a less rapid pace. New issues of the highest grades of bonds were being marketed with increasing difficulty and upon more burdensome terms to borrowers, while higher average discount rates in the money markets of the world reflected the growing strain upon floating capital. Extravagant consumption retarded accumulation, while the demand of industry and governments for capital was unabated. The inability to secure supplies of capital is not necessarily the cause of serious disturbance. It may have serious effects, if it prevents the completion of work already under way, as in 1857, when the construction of many American railways suddenly stopped, because further capital could not be obtained. The recent inability to secure capital, however, has been almost entirely a check upon projected improvements, and has not made previous investments unproductive.[1] The floating indebtedness of many manufacturing and trading firms was also large, but there were so few suspensions or failures from that cause during the crisis that it cannot be said to have been more than a secondary influence.

During March and August, 1907, very general and considerable decline took place in the prices of stock exchange securities, which, whatever the causes, by checking speculation and reducing the collateral loans of the banks, diminished the strain upon credit, and placed the banks in a better position to meet later emergencies. Fundamental conditions would ultimately have brought about a fall in the value of securities, but it may be questioned whether it would have been so extreme on that amount alone prior to the crisis, since stock markets are notoriously blind to the significance of anything beyond those influences which cause temporary fluctuations. The activities of the national and State Governments having the object of controlling railway and other corporations was certainly an influence which was largely responsible for the successive declines in the value of securities. Whatever opinion may be held as to the wisdom with which this movement has been conducted, it cannot be doubted that, in so far as it tended to prevent speculation, the country was in a better position to withstand the crisis of last autumn. Contrasted with the previous year, the financial position was vastly more satisfactory. In 1906 a speculative movement in stocks, of large proportions, had been continued into the autumn months, and was only checked by the intervention of the Bank of England, which discountenanced the enormous advance by London banks which had made it possible. Had a crisis broken out in that year, assistance from Europe could not have been secured. Moreover, there was a striking absence of new issues on securities on account of railway amalgamations and industrial combinations, which in previous years underwriting syndicates were holding for sale by means of loans

[1] The large railway borrowings upon short term obligations during the two years before the crisis might have occasioned serious trouble if the crises had come somewhat later.

in Europe as well as in New York. For these reasons it is probable that the New York market was more independent of temporary foreign indebtedness at the beginning of last autumn than at the same time in any of the previous eight years. In financial circles the view has been expressed that the crisis was largely the result of Government interference with economic activities. The validity of this opinion can be more properly estimated after we have followed the course of the crisis, but it may be stated without qualification that in some important respects Government economic activity had indirectly tended to remove certain elements of weakness in the general situation.

The initial episode of the crisis on October 16th was, as has often happened in previous crises, insignificant enough. An unsuccessful attempt to corner the stock of a copper company of secondary importance involved the failure of certain brokerage firms, including that of the brother of Mr. F. A. Heinze, who at the beginning of the year had become president of the Mercantile National Bank upon securing a majority of its stock. Mr. Heinze had acquired a large fortune from highly speculative operations in Montana copper properties, and distrust of his methods led many depositors to withdraw their accounts from the bank after the change of management. The resources of the bank seem to have been used to an increasing extent in the furtherance of copper enterprises and speculation, and the failure of the copper corner brought matters to a head. The bank was unable to meet an unfavourable balance at the clearing house which assumed large proportions because alarmed depositors were shifting their accounts to other banks. The request for assistance from the clearing house was granted after an examination to determine the solvency of the bank, and upon condition that the president and entire board of directors should resign. On October 21st the bank began business under a new management, and thereafter ceased to be a disturbing factor in the situation, though, it may be added, in January it was deemed advisable to close the bank for liquidation. While the reorganisation of the Mercantile Bank was being carried out, the clearing house was given an opportunity to intervene in the affairs of certain other banks whose management had long been regarded with distrust. One of the directors of the Mercantile Bank was Mr. C. F. Morse, whose activities in the industrial and banking world had been of an extreme character, even when judged by American standards. He first became prominent as the promoter of the American Ice Company, an enterprise disastrous to its shareholders, and in recent years he had been chiefly engaged in the formation of a combination of shipping companies engaged in the Atlantic coasting trade. For a number of years he had been one of the largest owners of shares in New York banks, but, it is important to observe, only in banks of moderate size. He was a director in seven banks, over three of which he seems to have had complete control. In securing this chain of banks, the shares of one bank were used as a security for loans with which to purchase shares in another bank and so on in succession, while at the same time the various banks were efficient instruments for the furtherance of other enterprises. Mr. Morse had long been regarded with distrust in banking circles, and a clearing-house investigation of his methods had been made as early as 1902, but it led to no definite action. His connection with the Mercantile Bank seems to have frightened depositors in his other banks, and two of them were obliged to appeal to the clearing house for aid on October 19th. Assistance was granted upon condition that Mr. Morse and certain other persons associated with him should retire altogether from banking in New York. Various clearing-house banks subscribed to a fund of $10,000,000 to be used if necessary, and on Monday, October 21st, it may be said that the clearing house had completed the work of putting its affairs in order. The total deposits of these banks were only $30,000,000, and therefore it was not a very difficult matter to give them the necessary assistance, but their difficulties gave rise to a vague feeling of distrust, which assumed dangerous proportions when it became known that certain banking institutions outside the clearing house were also in need of assistance.

The narrative of the crisis may with advantage be interrupted at this point to call attention to the significance of this Heinze-Morse episode as an example of a deep-seated cause of weakness in the American financial world. National banks are not permitted to open branch offices, and most of the States have enacted similar legislation. Consequently, banks are numerous, nearly sixteen thousand, if savings banks are included, and generally of small size. They are not large enough to be the principal business interest of those who own and control them. Upon the whole, the system has not worked badly, since the directorate has commonly included successful men from various occupations, but danger arises when, by securing possession of a majority of its shares, an individual or group of closely associated individuals gain control of a bank for the purpose of furthering their own private undertakings. Unfortunately, there seems to have been a distinct tendency in this direction in recent years, and there is an almost entire lack of definite public opinion opposed to the practice. American good-natured optimism extends even to financial matters, regarding which there is a painful absence of thorough unflinching criticism in any financial journal. The weak and ineffective American attitude is well illustrated by the following comment by an influential New York journal upon the particular case of the Morse banks: "A few capitalists of no great standing, actively engaged in speculative industrial schemes of their own, were gaining control of a group of banks through mere stock ownership on a margin. . . . The possibility of danger had been known for six years past. If it be asked why no one interfered, the answer is that no one outside of the banking department had the right to examine the accounts of these banks and challenge the manner of control; second, that the very hazards involved in existing conditions rendered open accusation extremely perilous."[1]

Surely a money market in which urgently needed remedies are thus dreaded can hardly escape an occasional upheaval! A healthy tradition should be cultivated, which would lead depositors to desert a bank known to be controlled by one man, or closely identified with a single industry. Even when honestly managed, there is the obvious danger which arises from the lack of a wide distribution of risks.

Returning to the narrative of events in New York, it is to be noted that there had been nothing in the nature of a crisis during the week the clearing house was putting its affairs in order. Crisis conditions developed during the following week, and were occasioned by the difficulties of certain trust companies, a group of financial institutions outside the clearing house. Trust companies were originally formed, as the name implies, to act as trustees, and, until about twenty years ago, had confined themselves closely to business of that nature. For the effective performance of their functions, they were necessarily given wide powers, and gradually it came to be perceived that they could engage in banking, unfettered by the restrictions imposed upon both national and State banks. Thereafter the number of companies increased rapidly in most American cities, but especially

[1] *The Nation*, Oct. 24, 1907.

in New York, where, in recent years, their deposits have been not much less than those of the clearing-house banks.[1] Relations between the banks and the trust companies had been somewhat strained for a number of years. The banks complained of the unfairness of competition with institutions which were not required to hold a large cash reserve, and in 1903 the clearing house adopted a rule which required all trust companies, clearing through members of the association, to accumulate a reserve which, though smaller than that of the banks, was considerably larger than was held by most of the trust companies. Rather than submit to this condition, most of the trust companies gave up clearing-house privileges, the most important exception, curiously enough, being the Knickerbocker Trust Company, the troubles of which began the second stage of the crisis.

The Knickerbocker Trust Company was the third largest trust company in New York, having deposits of $62,000,000. The association of its president with some of the Morse enterprises engendered distrust, which made itself felt in a succession of unfavourable clearing balances. On Monday, October 21st, the National Bank of Commerce announced that it would discontinue clearing for the company on the following day. A committee representing other trust companies examined its affairs, without taking definite action, but a reassuring statement was issued by the Knickerbocker directors, in which the resignation of its president was announced. On Tuesday, after a run of three hours, during which $8,000,000 were paid out, the company was found to suspend. Whether the company could not have been assisted is not clear, but that, if possible, it would have been of advantage to the banks and other trust companies is certain. The size of the company alone rendered assistance an undertaking of no little difficulty. The condition of its assets at the time has not been disclosed, but that it could not have been hopelessly unsatisfactory is indicated by the reopening of the company in March under a plan of reorganisation adopted in the interests of its depositors and shareholders. The plan of reorganisation adopted, however, showed that the assets of the company were even then far from being in a liquid condition, and, in the absence of any association among the trust com-

[1] Some trust companies have remained true to their original purpose, and trust funds and other more or less inactive deposits make up a considerable proportion of the deposits of nearly all of the companies. It is reasonably certain, however, that their banking deposits are at least equal to half those of the clearing-house banks.

panies, or of responsibility on the part of the clearing-house banks, the suspension of the company was unavoidable.

Equally favourable judgment cannot be passed upon the means which were adopted at the next stage of the crisis. On Wednesday, October 23rd, a run began upon the Trust Company of North America, the second of the trust companies in size, having deposits of $64,000,000. The president of the Knickerbocker was one of its directors, but the unfortunate disclosure that its affairs had been the subject of a conference on Tuesday was the chief influence in precipitating a panic among its depositors. The company withstood a run which continued for two weeks, during which it paid out some $34,000,000, on Wednesday and Thursday paying $12,000,000 and $9,000,000. During those two days New York was threatened with a general panic. A number of other trust companies experienced runs of varying degrees of severity. A few small mismanaged banks in the outskirts of the city were found to suspend, loans could only be secured with extreme difficulty, and the fall in Stock Exchange prices was alarmingly violent. The Trust Company of North America was assisted, since its assets were apparently in a more satisfactory condition than those of the Knickerbocker, and even more because it was clear that the foundations of the entire credit system were endangered. The steps taken, however, were slow, and the means adopted were not sufficiently clear in import to renew general confidence. A committee of six trust company presidents was formed to receive applications for assistance, make examinations, and report to meetings of all trust company presidents. Money was provided in large amounts, but confidence was not restored until on November 6th announcement was made that a majority of the shares of the Trust Company of North America and of another trust company had been placed under the control of a committee of trust company presidents, and that the "necessary financial arrangements had been made to enable both companies to proceed with their business." The inference cannot be escaped that the New York money market is not adequately organised to cope quickly and effectively with an emergency.

During the three days of heavy runs upon the trust companies, the strain upon the clearing-house banks was very severe. They had to furnish most of the money required by the trust companies, whose reserves were deposited with them, and at the same time they were shipping money to the interior for crop moving purposes, and they also suffered some loss in payments to their own frightened depositors. On the other hand, they were strengthened by the receipt of $25,000,000 of Government deposits, with the result that the loss of cash for the week ending October 26th was only $13,000,000. The reserve was $254,000,000. These figures are taken from the bank statement, which shows average conditions for the week. Doubtless the actual loss was somewhat greater, but certainly the loss in reserve was not large after so eventful a week.

At the close of the week there were many indications that the worst of the panic was past. Withdrawals of deposits were diminishing, the savings banks were exercising their right to require sixty days' notice from depositors, and the trust companies had agreed to pay depositors, so far as possible, in certified cheques upon clearing-house banks. As a further measure of relief, it was decided to issue clearing-house loan certificates, a device the import of which is often misunderstood. It is not, as it is sometimes described, a partial suspension of specie payments in a disguised form. In ordinary times, clearing balances between banks are settled evenly by the payment of money. The clearing-house loan certificate makes it possible for a bank to pay in another way, though most payments continue to be made with money. Banks may pay with the certificates, which are issued upon the deposit of securities approved by a clearing-house committee appointed for the purpose. It is a sort of organised system for procuring rediscounts made by the banks as a unit instead of through single banks. The use of these certificates does not diminish in any way the obligation of the bank to pay, or the power of the depositors to secure payment on demand. It is a device of the very greatest utility, wherever there are many banks, which do not clear through the shifting of deposits on the books of a central reserve bank. It makes possible a liberal loan policy in time of crisis, by taking away the temptation to secure favourable clearing balances and thus accumulate reserves by restricting loans, while other banks are doing all in their power to relieve the situation. For several days before the issue of loan certificates, stock brokers had been unable to secure money on call from the banks, because each bank was unwilling to lend unless the other adopted the same policy. In order to sustain the stock market from utter collapse it was found necessary to organise each day a money pool to which the various leading banks subscribed. After the issue of loan certificates that cumbersome and uncertain method was no longer required.

The belief that the worst of the disturbance in New York was over proved well grounded. Trust company difficulties continued for more than a week, until settled in the manner already described. There were no further bank failures, and no important failures of any kind. New York was only concerned with the later course of the crisis through its position as the reserve banking centre of the entire country over which the crises extended during the week ending November 2nd. A number of adverse circumstances had already been reported from various parts of the country while New York was struggling with its own difficulties. The various Westinghouse companies went into the hands of receivers on account of inability to secure the renewal of large floating indebtedness, and as a consequence the Pittsburg Stock Exchange was closed—an exchange dealing almost exclusively with local securities. The Heinze troubles involved a bank in Butte, Montana, and in Goldfield, Nevada, runs on the banks due to local causes forced them to suspend. In Providence, Rhode Island, a large trust company with deposits of $25,000,000 was obliged to close, and other smaller banks were subjected to runs.

These widely scattered troubles are mentioned because they contributed to the alarm which spread throughout the country on account of the panic in New York. Everywhere the banks suddenly found themselves paying out money in response to the demands of frightened depositors, and were in turn forced to draw upon their reserves deposited with other banks. The evidence of lack of confidence in the banks is clear, and points to a serious problem in American banking. For an historical parallel in England we should need to go back to the first quarter of the last century. Explanation is simple, however, if the course of previous American crises is recalled. Seven times during the last century the banks suspended payment in some measure at least, and there has been a currency premium, the last occasion having been so recent as 1893. There is a well-grounded belief among the people that it will be difficult to secure cash during periods of economic disturbance. In all countries, in times of crisis, some depositors withdraw their money and hoard it from unreasoning fear. In the United States there are also withdrawals by prudent depositors who wish to be absolutely certain that they shall have the money needed in their affairs, and still others who are influenced by the prospect of a handsome profit, in a few weeks, through the sale of money at a premium. Former suspensions have established a tradition which is an ever-present source of weakness, and which can only be broken by the successful endurance by the banks of the strain of a crisis. Last autumn provided an exceptionally favourable opportunity, since general economic conditions were far less unsound than on many occasions when payment was suspended in the past. Unfortunately, almost as soon as withdrawals began, and before the banks had suffered a serious loss in reserve, specie payments were suspended once more. It was a measure not taken as a last resource; it was simply a precautionary measure wholly without justification from anything which had occurred. Before the end of the week ending November 2nd, partial suspension was general throughout the country, though there had been but one important banking failure, a San Francisco trust company, with deposits of $9,000,000. The withdrawal of deposits and the hoarding of money were the only reasons which led to suspension where it was first resorted to. In some cities and by some banks it may have been necessary, because it had already taken place elsewhere, but this is improbable, because of the short time in which suspension became general. The extent to which suspension was carried cannot be accurately determined. It varied in different sections of the country, and with different banks, and also from day to day by the same bank. The governors of some of the western States declared a succession of legal holidays, though not in every case at the desire of the banks. More generally the banks began to "discriminate" in making payments. In Chicago, a central reserve city, "the banks stopped shipping currency for two or three days to their correspondents south and west, but for the past day or two have resumed such remittances on a moderate scale in cases where the demand seemed imperative." From various reserve cities came similar reports; *e.g.*, "In Minneapolis and St. Paul the bankers agreed to suspend temporarily the payment of money on cheques, certificates of deposits, or drafts, except for small sums, and further, for the present, to furnish no money for bank correspondents." "In New Orleans the associated banks have limited currency payments to any one depositor to $50, except in cases where deviation from the rule seems necessary."[1]

Banks as well as individuals throughout the country were evidently hoarding money, and trying to collect still more. Their demands upon the New York banks suddenly assumed unprecedented proportions. Even at this point, if the New York banks

[1] See *Commercial and Financial Chronicle*, Nov. 2, 1907, p. 1119.

had met every demand for money made upon them, it is probable that the banks elsewhere would have soon resumed the normal course of their operations, but they failed to do so, though they did not begin to discriminate so soon or in the extreme manner of the banks in some other cities. During the two weeks ending November 2nd, they sent $42,000,000 to interior banks, and their reserve was reduced by about the same amount and stood at $224,000,000. In the meantime, gold imports to the amount of $29,000,000 had been engaged with more in prospect. The position of the banks was far from desperate, yet they had already entered the fatal and discreditable path of suspension, paying depositors at their own discretion. On October 31st, a premium of 3 per cent. was paid for money in New York, and a premium of varying amount, sometimes as high as 4 per cent., continued until the close of the year.[1]

It is not possible to determine the extent to which suspension was carried in New York. It was stated with justice on behalf of the banks that money in large amounts continued to be paid out, and it was admitted that money was refused when it was believed that hoarding, whether by banks or individuals, was the object. On the other hand, when we find individuals, corporations, and banks buying money at a premium with certified cheques, it cannot be doubted that the refusal to pay cash was something more than an obstacle to the unintelligent demands of frightened depositors. There is fortunately some evidence upon this matter, which is not derived either from the complaints of depositors or from the apologetic utterances of bankers. After November 2nd, the weekly bank statement shows almost no further decline in the cash reserve. On that date it was $224,000,000; on November 23rd it had been reduced by only $9,000,000, and thereafter it increased week by week, and stood at $251,000,000 at the time the money premium disappeared. In other words, at no time after the beginning of November did the New York banks supply the country with appreciably more than the additional money they secured through gold imports and in other ways, and not even all of that during most of the time that the money premium continued. It is significant that the much smaller banking reserve of the Bank of England was reduced during the first two weeks of this period from £24,000,000 to £17,000,000 without the remotest thought of suspension. Whatever may have been the situation in the rest of the country,

[1] For a table giving the premium for each day see "Hoarding in the Crises of 1907," by Professor Andrew, in the *Quarterly Journal of Economics*, Feb., 1908.

the New York banks proved themselves wholly unequal to the duties of their position as the central reserve banks of the country.

It is not a little surprising to find that American financial opinion is far from unfavourable to the banks, the suspension of which seems to be generally thought to have been unavoidable. This opinion is a natural and inevitable consequence of an entirely erroneous habit of thought in the United States with reference to banking reserves. Before the establishment of the national banking system in 1863, insufficient reserves were a constant source of weakness of American banks. The national banking law required a certain minimum of reserve to deposits from all banks entering the system, the percentage varying with the location of the bank. For New York and other central reserve cities, of which there are still but two—Chicago and St. Louis —a reserve of 25 per cent. is required. Banks in reserve cities (now about forty in number) must also have a reserve of 25 per cent., one-half of which may be deposited in central reserve city banks. Other banks, commonly called country banks, must have a reserve of 15 per cent., three-fifths of which may be deposited in reserve or central reserve city banks. Under the influence of this legislation, undue importance has come to be attached to the ratio between reserve and deposit liabilities, which is consequently maintained at all costs. On November 2nd, when the New York banks had $224,000,000, they were below the 25 per cent. requirement by the amount of $38,000,000, and a little later, when they still had $215,000,000, the deficiency was $54,000,000. This was an amount far greater than ever before and was apparently regarded by bankers and the public as a sufficient reason for partial suspension, and as evidence that everything had been done to the full extent of the power of the banks to relieve the situation.[1]

Without exaggeration, this arithmetical reserve ratio can only be adequately characterised as a sort of fetish to which every maxim of sound banking policy is blindly sacrificed.

Outside New York the banks manifested an even more slavish attention to reserve requirements. In the absence of weekly statements, comparison must be made of the condition of the national banks on August 22nd and December 3rd, when reports

[1] For persistent failure to keep the required reserve, the Comptroller of the Currency may close a bank. There is no other specific penalty, and therefore it is not the requirements of the law that force the banks to maintain their reserve ratio in all circumstances.

were made to the Comptroller of the Currency. Taking all the banks in the system, cash holdings were reduced by only \$40,800,000, while their deposit liabilities had at the same time been diminished to the extent of \$350,000,000. The New York national banks alone lost \$41,700,000, or more than all the banks of the system taken together, and had a reserve of 21·89 per cent. The other two central reserve cities lost \$18,000,000, and were both below reserve requirements. The forty reserve cities held \$28,000,000 less in December than in August, but were still, taken as a whole, somewhat above the reserve requirements. The city banks taken together paid out \$87,000,000, but still had \$414,000,000 against a deposit liability of \$2,421,000,000, of which \$143,000,000 consisted of deposits of reserve city banks in central reserve city banks. In the meantime the country banks increased their cash holdings from \$199,000,000 to \$246,000,000, taking more than half the amount lost by the city banks, and had increased their cash reserve percentage from about 7 per cent. to nearly 10 per cent. If the money holdings of trust companies and State banks could be secured, it would probably be found that they had absorbed all the money not taken by the country national banks, since a relatively larger proportion of the reserve of those institutions is normally deposited with city banks.

The figures just given do not by any means show the amount of money paid out by the banks. During the three months before December, the money in circulation was increased by \$72,000,000 of Government deposits, by \$70,000,000 from gold imports, and by an increase of \$50,000,000 in the issue of bank notes. Nearly \$200,000,000 was added to the money outside banks and trust companies, and most of this was probably hoarded.[1] This is indeed a large sum, but for that very reason it is reasonable to suppose that the hoarding demand for money could have been satiated if the banks had refrained a little longer from adopting the policy of suspension. And finally, it may be observed that if in the end suspension had become unavoidable, it would not have made any serious difference whether the reserves of the banks had been but 10 per cent. rather than 20 per cent. of their deposit liabilities.

The effects of this partial suspension cannot be stated in

[1] After suspension more money would necessarily be required for a given volume of business, since people would be chary of depositing in the banks money for which they could foresee a need in the near future. On the other hand, extensive use was made of certified cheques and of other evidences of bank credit for payments, which in ordinary times are made with money.

general terms, because, as has already been noted, the extent of suspension varied in different places and with different banks, and with the same banks from day to day. For purely local purposes various substitutes for money, such as certified cheques, were in many places largely used even for small retail purchases, and for the payment of salaries and wages. Many factories were, however, closed, or went upon half time from the sheer impossibility of securing any medium for the payment of wages. A more general and depressing influence upon industry was due to the dislocation of the exchanges between different parts of the country. Domestic exchange became irregular, and at times it was almost impossible to secure it at any price. Drafts upon distant banks were of uncertain utility, for the banks would not always accept them even at a heavy discount. In every branch of trade, reports were made of rapidly diminishing sales simply on account of the currency situation. Some little time elapsed before this influence made itself felt in the production of commodities. In the iron and steel industry, November showed a distinct decline, which was, however, small compared with December. Taking the earnings of the United States Steel Corporation as a measure, we find a reduction of about 25 per cent. in November compared with the same month in the previous year, while in December they fell away nearly 65 per cent. Pig iron production tells the same story, December production of 1,234,000 tons, compared with 2,336,000 in October and 1,828,000 tons in November. This severe depression was a direct consequence of the partial suspension of the banks, but even under the strain to which all industry was subjected, there were only 1,180 failures in November with liabilities of $17,600,000, compared with liabilities of $12,000,000 in November, 1906.

Further indication of the course of trade is afforded by the figures of railway gross earnings, which, compared with the previous year, increased in November by about 3½ per cent., but fell off in December by more than 6 per cent. The reduction would have been greater but for the heavy traffic in commodities for export, notably cereals, cotton, and copper. The banks seem to have made special efforts not to disturb the export trade by means of which foreign gold might be secured. Exports for November and December were nearly $39,000,000 greater than in the same month in 1906, while imports fell off $51,000,000 compared with the previous year. It is altogether likely that this abrupt change in the relative amounts of exports and imports would have led of itself to gold imports, but it is equally certain that the enormous quantity of gold brought to the United States from foreign countries was in a large measure secured as a result of the currency premium. In November the net gold imports were $63,000,000, and in December $43,000,000. The currency premium enabled American bankers to bid fancy prices for gold in London, and when it was above 3 per cent. it was possible to import gold at a profit, even when exchange rates were at the normal export point. The ordinary safeguards of the banking reserves in foreign free markets for gold were made of no avail, and European industry was burdened with onerous rates of discount because American bankers were not "playing the game" according to the rules which long custom had established. Certainly the most obvious instincts of self-protection would seem to suggest the wisdom of restricting American open credits in European banks within definitely narrow limits.

Many foreign observers have expressed the view that the American banking troubles were the result of deep-seated moral causes, assuming that the many disclosures during the last few years of corporate greed, mismanagement, and wild financing had created distrust of the banks. In the case of the early runs upon New York banks and trust companies, there is perhaps some ground for this opinion. It does not, however, apply to the banks in general. In the absence of branch banking, the banks in each place are, with few exceptions, owned as well as managed by local people. The misdeeds of trusts and railways cannot be supposed to weaken the confidence of the people in those of their neighbours who happen to be engaged in banking. It may, however, be thought that the withdrawal of their deposits by the country banks was due to the distrust of the bankers in the large cities, but since the crisis money has been returned to the city banks as in former years, though there has been no change in the management of those banks which might have restored confidence had it been lost. We are therefore driven back to the conclusion that the country banks were influenced in part by unreasoning fear, and to a greater extent by past experience of the difficulty of obtaining money from the reserve banks in times of crises.

In the United States an equally mistaken explanation has found general acceptance—the inelasticity of the currency system, and in particular the difficulty of expanding a bond secured issue of bank notes to meet emergencies. In the recent crisis, however, there was no lack of expansion in the purchasing medium. During October there was an increase of $70,000,000 through

Government deposits in the banks and the issue of bank notes, in November $120,000,000 by similar devices and by gold imports, and in December there was an increase of $60,000,000. In another crisis these means might not be available. The Government treasury does not always hold a surplus; gold imports cannot be depended upon; and Government bonds for circulation are not always procurable.[1] For further emergencies, therefore, it may be advantageous to have a less rigid system of note issue, but no one should entertain the expectation that by that means alone troubles similar to those of last autumn will not reappear. No system of note issue can be devised which will be safe, useful for normal occasions, and at the same time will make possible an acceptable additional issue in time of crisis as large as the $250,000,000 by which the money in the country was increased in the last three months of 1907. Had greater freedom of issue been possible, it is more than probable that credit would have been extended in that form to sustain speculation and prevent some of that moderate decline which came before the crisis. In this connection, it should be noted that none of the measures now before Congress contain that provision which is most essential to secure a safe and truly elastic currency where there are many banks of issue, viz., the requirement that no bank shall pay out the notes of other banks. This is the usual practice of the Scotch and Canadian banks, and is followed because to their obvious advantage. In the United States, with its thousands of banks, the cost of note redemption would be heavy, and the specific advantage to any one bank would be trifling. Without definite legal requirements, it would not be done, and hitherto bankers have shown no willingness to accept such an arrangement, or, indeed, very little conception of its importance.

The principal source of weakness in the American banking system can be traced to the large number of banks in the country. There are nearly sixty-five hundred national banks with aggregate resources of more than $8,000,000,000, nearly ten thousand State banks with resources about half as large, and about eight hundred loan and trust companies whose resources fall a little short of those of the State banks. The proposal of

[1] Late in November the Secretary of the Treasury sold $25,000,000 of Panama Canal bonds and $15,000,000 certificates of indebtedness, not because the Government needed money, but to provide further security for the issue of bank notes. For the former, 90 per cent. of the purchase-money was left on deposit with the banks, to whom their sale was almost wholly confined, and 75 per cent. in the case of the certificates. These sales were made under a strained interpretation of the law, and the addition to the circulation was small and came too late to be of real assistance.

a central bank of issue, which is favoured by many persons at present, would be of doubtful value among so large a number of banks and in a country having such varied conditions as the United States. The experience of other countries with a central bank affords little or no indication of its probable consequences. If branch banking were to be permitted, and if sufficient time were to elapse to allow considerable banking concentration and the acquisition of knowledge of its working, many American banking problems would be simplified, and the experience of foreign countries might be followed.

In the existing state of public opinion in the United States, the acceptance of branch banking is unlikely, and therefore, in the consideration of legislative proposals, conditions arising from the enormous number of banks should not be neglected. The actual amount of money held by American banks (about $1,100,000,000) in proportion to their deposit liabilities ($9,000,000,000) is large, but it cannot be used effectively. It can hardly be expected that thousands of bankers can be made acquainted with the policy demanded by crisis conditions, and that they will have the courage and daring required to put it in practice. The undertaking which Bagehot set himself, to convince London of the proper policy for the Bank of England, was slight in comparison. In the future, as in the past, we may expect that in time of crises, each bank, or at any rate the banks in each locality, will forget that they are members of a closely interwoven system, and will act as if they were separate entities. In ordinary times, therefore, it is important that the banks should not become vitally dependent upon each other. The deposit of reserves in city banks has evidently been carried too far. The provision of the national banking law regarding the proportion of reserve which may be deposited should be changed. Instead of keeping two-fifths of their reserve, the country banks should be required to hold at least three-fifths, and instead of one-half, the reserve cities should be allowed to deposit no more than one-third in central reserve cities. The practice of depositing reserves has been greatly stimulated by the payment of interest, usually 2 per cent., for bankers' deposits. Even temporarily idle funds are sent to the city banks. The country banks normally have much more on deposit than is needed for their reserve requirements, and the rapid growth of State banks and trust companies in recent years has added enormously to deposits of this nature in city banks. This is, of course, especially the case in New York, where very nearly half the deposits of the national banks are of that description. A law prohibiting the payment of interest upon bankers' deposits would diminish their amount, and at the same time would make it possible for the city banks to keep larger reserves against them. Legislation of this kind, together with some provision for a heavily taxed emergency note issue, are the simplest and, upon the whole, the most effective legislative remedies for the recurring troubles among American banks, but, above all, a more intelligent understanding of the purpose of banking reserves is required.

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