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Modern Business

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BANKING

BY

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PREFACE

The aim of this volume is to explain the principles of sound banking. As it is written primarily for business men, it does not contain a detailed description of the inside routine of a bank but goes into that field only so far as the customer of a bank needs to go. The banker may get from it some help in solving the broad questions of policy which are, after all, the most important. For example he may get new light upon the relations which his bank should maintain with customers and with other banks in the country and some new ideas as to the kinds of business which are safest and most profitable for his type of bank to undertake.

In the first half of the volume there is an explanation of fundamental principles. Then, the systems tried out in early American banking and those now existing in Canada and in the chief countries of Europe are described briefly so that the reader may see how sound and fallacious principles have been applied and what the results have been. Finally, the Federal Reserve system is explained and analyzed critically, and some of the more important current problems in banking are discussed.

It is impossible to mention in so small a space all those who have made it possible for me to write this book. Chief among my teachers have been Dean Joseph French Johnson of the New York University School of Commerce, Accounts and Finance, and Professor E. W. Kemmerer of Princeton University. The National City Bank, The Corn Exchange Bank and The Broadway Trust Company, all of New York City, have been extremely courteous and patient in giving me helpful information. I am indebted to Mr. B. C. Reese for valuable assistance in reading proof and in research; and I am particularly grateful to Mr. Howard M. Jefferson, Auditor of the Federal Reserve Bank of New York, for most of the material on practical banking.

MAJOR B. FOSTER.

New York.

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BANKING

CHAPTER I

CLASSES OF BANKS

1. *Primary functions of a bank.*—The great metropolitan bank of today presents an appearance of mystery to the ordinary observer who examines it for the first time. It has so many interests, its influence is so far flung and the sums in which it deals are so large that usually the outsider despairs of ever understanding it.

As a matter of fact, the essential operations of every bank, whether large or small, are extremely simple. All that any bank does is to deal in credit. Every bank exercises two primary functions, the accepting of deposits and the making of loans or discounts. A third function performed by many banks is that of issuing notes for general circulation as a substitute for money. These are the most important ways in which a bank deals in credit. In each of them the bank is always exchanging money for credit, or credit for money or credit for credit.

A bank, then, is an institution which deals in credit thru the accepting of deposits, the making of loans and discounts and the carrying out of other related operations which are less essential, such as issuing notes, buying and selling foreign exchange, etc. Deposits and discount (or loans) are the essential functions. Note issue is important but not necessary to the business of all banks. About one-fourth of the banks in the United States issue notes, and of all the banks in the world even a lower proportion are banks of issue.

2. *Secondary functions.*—In addition to the three principal functions—discount, deposit and issue—banks perform various other services for the community. One important service is advising business men on questions of finance. A growing business needs more capital. Shall it be secured thru an issue of bonds? If thru bonds, what kind shall be issued? Or, would it be better to issue short-term notes or additional stock? How can capital be obtained most advantageously? Under present conditions, is it advisable to extend the business to any great extent? The banker, with his knowledge of the money market and of general conditions, should be in a position to give valuable advice on such points as these. Business men in the United States do not take advantage of this service as thoroly as they might. In Canada the tie between business men and bankers is much stronger.

3. *Development of banking.*—The operations of receiving deposits and of lending are so simple that they were practised by individuals long before the estab-

lishment of regular banking institutions. The demand for these simple services comes early in every growing community. There are people who have accumulated savings and want to leave them somewhere for safekeeping, and there are enterprising men who see golden opportunities in business if they can find the funds with which to finance them.

As the business life of a community develops and becomes more complex, the banks in it find new things to do. At first, the farmer borrows and leaves a little on deposit; the merchant sends in his cash for safekeeping at the close of each day and borrows to discount his bills; and the clerk stores his savings against a rainy day. Gradually the bank establishes itself in the confidence of the people until, after a while, it is called upon to act as trustee for estates, give credit information, finance new developments and exercise many of the secondary functions of banking. All the work of a miniature trust company, savings bank, financial bank, commercial bank or safe deposit company is done under one roof until finally the continued growth of the community brings specialization. Then separate institutions are organized to carry on the work of the savings bank, trust company, etc. In the larger cities a bank today is as highly specialized as any other organization in the business world.

An interesting development of more modern times is the growth of mammoth banks in the larger cities. Such banks as the National City Bank of New York and the Canadian Bank of Commerce do almost everything in the banking field. The various special functions are grouped together again as they were in the small banks at the beginning.

We shall indicate briefly the nature of some of the different kinds of banking institutions.

4. *Banks of discount.*—A bank of discount is one which is engaged in lending operations, in addition to accepting deposits. Banks of discount are of two kinds: commercial banks and financial banks, according to the kind of loans they make. In general, it may be said that commercial loans are based on commercial transactions already in process or completed, such as the purchase and sale of goods. A wholesaler sells a bill of goods but will not receive payment before ninety days. In the meantime, he finances his business thru a ninety-day loan at the bank. The loan has back of it an actual sale of goods and is to be paid out of the proceeds of the sale. Loans like this, which as a rule do not run over six months, are in the field of commercial banking. Most of the deposits in a commercial bank are payable on demand.

Financial loans are made for investment and development purposes. A manufacturer builds a new plant, borrows part of the funds and wants five years in which to make payment. Loans like this, based on transactions not yet begun and made for promoting new enterprises, are in the field of financial banking. The bank gets its funds for this sort of loan from capital subscriptions, from its own surplus earnings and from deposits left with it for a long time. Obviously, a deposit that is liable to withdrawal at any minute cannot safely be loaned to a railroad for twenty years.

Many institutions do both a commercial and a financial banking business, but a conservative house always limits the financial business according to the amount of its permanent funds.

5. *Trust companies.*—The early trust companies in the United States and Canada were organized to execute private and corporate trusts and to act in certain fiduciary capacities. In some cases, they also carried on a surety and an insurance business. Nearly all modern trust companies have dropped the insurance business and, in Canada and some of the states, they have branched out into the field of commercial and financial banking. One of the most important functions of the modern trust company is that of acting as trustee under corporate mortgages. It holds mortgages in trust for bondholders, registers bonds, collects the interest, pays the bonds at maturity and protects the bondholders in case of default.

The early trust companies kept most of their ready cash on deposit with banks. Then they began to put out call loans in the market, to make regular commercial loans and, finally, to bid for demand deposits. This reaching over into the field of commercial banking has not always been happy.

There is real danger in the temptation to mix commercial with financial banking business. The assets of trust companies, especially in Canada, are based largely on real estate and other non-liquid securities. Millions of deposits are accepted with the understanding that they will be returned upon demand. To loan these deposits on real estate is to invite disaster both for the bank and its depositors.

The trust company has many advantages over the ordinary type of bank because of its comparative freedom from legal restraint and, if it is wisely managed, there is no reason why it should not be safe as well as profitable.

6. *Savings banks.*—A savings bank is a banking institution, organized for the purpose of gathering together the small savings of the community in which it is located and investing them in such interest-bearing obligations as are prescribed by law. The interest so earned is divided among the depositors, after paying expenses, providing for amortization of premiums on bonds and reserving reasonable amounts for the accumulation of a surplus. In New York State, the savings banks have no capital, the depositors being the owners of all the assets of the association. In some states, they are organized with capital stock and run for profit.

7. *Savings and loan associations.*—Several kinds of savings and loan associations are defined in the New York State banking law as follows:

> The term, savings and loan association, means any corporation formed for the purpose of encouraging industry, frugality, home building, the saving of money by its mem-

bers, the accumulation of savings, the lending of such accumulations to its members, and the repayment to each member of his savings when they have accumulated to a certain sum, or at any time when he shall desire the same, or the association shall desire to repay the same.

The term, savings and loan association, shall include every corporation, company, or association doing business in this state and having for a part of its title or name the words building association, building and loan association, building and mutual loan association, savings and loan association, savings association, cooperative loan association, or cooperative bank, and every corporation, company or association whose shares are wholly or in part payable by accumulative fund in regular or periodical instalments, or which is doing business in the form and of a character similar to that authorized herein.

The ordinary procedure is for the members to pay in dues periodically. Any member wishing to borrow makes an application which is acted upon by a committee. Some associations terminate as soon as they accomplish the purpose for which they organize. In other cases the members wish to continue the association even after they have ceased to borrow because of the opportunity for profitably investing their small savings. Then they begin loaning to outsiders who are building homes or buying real estate and can offer security. Losses are often heavy in this kind of business, for the committee may not be able to judge as to the quality of security offered when they go beyond their acquaintances. A better plan is either to dissolve or try to find new members who will borrow. In any event, a competent banker should always be on the loan committee.

8. *Investment companies.*—The New York State law defines the class of financial corporation known as investment companies as follows:

> The term investment company means any corporation formed . . . for the purpose of selling, offering for sale, or negotiating bonds or notes secured by deed of trust or mortgages on real property or choses in action, owned, issued, negotiated or guaranteed by it, or for the purpose of receiving any money or property, either from its own members or from other persons, and entering into any contract, engagement or undertaking with them for the withdrawal of such money or property at any time with any increase thereof, or for the payment to them or to any person of any sum of money at any time, either fixed or uncertain.

These institutions render a valuable service to business by broadening the market for good securities which are not widely and favorably known, for one reason or another. Today, a large percentage of the business is in city real estate mortgages; twenty-five years ago much of it was in farm mortgages. Mortgages on western farm lands were bought up, deposited with a trustee and bonds were issued against them. The panics of 1893 and 1907 killed many of the larger companies doing this kind of business. Some of the western states, notably Kansas, were fairly plastered with mortgages and the farmers were unable to pay.

A new and promising field is now opening to these corporations. Securities of foreign governments and of alien corporations have never been well received in America. We have been too busy with our own railroad and industrial expansion to stop and study foreign securities; but the European war enabled us to cancel a large part of our foreign indebtedness, and we have even been loaning enormous sums abroad. Perhaps the quickest and most economical way of selling foreign securities in America is to bring them into our financial centers just as we brought in farm mortgages a quarter of a century ago, deposit them with trustees and issue against them the securities of American corporations for sale to the public. If the issuing house is strong and favorably known its securities will sell where the foreign collateral would not be looked at. It promises a profitable field for investing American capital, and the corporations going into the business should earn legitimately a handsome return. This is a type of financial banking.

9. *Industrial banks.*—The need for these "poor man's" banks is told vividly in a story which appeared in the columns of the New York *Evening Post.* A fairly high-salaried clerk, earning $2,400 a year, was suddenly called upon to raise $400 to prevent his son-in-law from going to prison. His large family had made it impossible for him to save, so he had to go to one of the "loan sharks" who was accustomed to advertise loans at six per cent, but really charged from 100 to as high as 1,000 per cent. During four years he paid back more than $2,000 on his original loan, and at the end of that time, according to the money lenders, he still owed $1,700. Fifty-five years old, he was breaking under the strain when he was rescued by

his employer in cooperation with the Division of Remedial Loans of the Russell Sage Foundation.

The "loan shark" is being fought in many states thru legislation, employers' organizations and more particularly thru industrial banks which make loans at a fair rate of interest and help the borrower without pauperizing him. The Morris Banks and the Remedial Loan Societies are doing notable work. The associated societies, during the year 1915–1916, loaned over $28,000,000, the average loan being around $33. Dividends on stock ran as high as ten per cent in one case. Only three of the member societies were located in the cities of less than 100,000 population.

Wide awake employers will not long neglect to provide some protection for their employes, for no employe is efficient when struggling in the grip of a "loan shark."

10. *Land banks.*—Farmers find it impossible to get adequate accommodations from ordinary banks. They need funds for several months if they want to finance crops; for several years, if they borrow to make permanent improvements, such as drainage and buildings. For crop financing, they can sometimes borrow on short time notes from commercial banks with a tacit understanding that the notes will be renewed. Often, they are carried by storekeepers, implement dealers and purchasers of farm products. Loans for periods of from five to thirty years, such as are needed for making permanent improvements,

cannot be had from the commercial banks. The savings banks, insurance companies and other financial institutions which have funds available for long-time loans are not in close touch with the farmers, and therefore cannot take care of them.

European countries solved the problem long ago by establishing a special type of farm loan banks. Mortgages on a number of farms are pooled and funds are borrowed to be loaned out again to individual farmers. There are certain variations between the several plans in use but in all of them the key to the problem is the substitution of the credit of a group for that of the individual.

An attempt to adopt the European plan to conditions in the United States is made in the Federal Farm Loan Act, which was approved July 17, 1916. Only the general outline of the law need be given here as the system has not yet had an opportunity to show what it can do. There are twelve Federal land banks under the supervision of the Federal Farm Loan Board at Washington. Each bank must have a capital of at least $750,000. The land banks are agencies thru which credit is granted to cooperative farm and land associations, whose members are land owners or prospective purchasers of land. Funds for the loans are obtained from paid in capital and from bond issues secured by mortgages. The bonds pay five per cent and the amount issued by any land bank may not exceed twenty times its capital. The loans are to be made only on an adequate value as a basis and may run not less than five nor more than forty years. They are gradually amortized by equal annual payments which include a part of the principal as well as the interest.

The advantages of the Act will be greatest in those states where capital is relatively scarce and where farmers have been compelled to pay excessive interest rates for funds.

11. *Safe deposit company.*—The New York State law defines a safe deposit company as follows:

> A safe deposit company is a corporation organized for the purpose of receiving upon deposit as bailee, for safekeeping and storage, jewelry, plate, money, specie, bullion, stocks, bonds, securities and valuable papers of any kind and other valuable personal property and guaranteeing their safety upon such terms and for such compensation as may be agreed upon by the company and the respective bailors thereof, and of renting vaults and safes and other receptacles for the purpose of safekeeping and storage.

A safe deposit company is a valuable adjunct to the business of a trust company, and if it is properly located and managed may be made a valuable advertisement. Very frequently, the vaults of the trust company are rented from the safe deposit company. Many banks in small cities and towns are beginning to realize the benefit that may be derived from leasing vault space and, when erecting new buildings or remodeling, they are building much larger vaults than their present needs require and equipping a portion of the vault space with boxes to be leased to their customers and others. A bank often nets as much as

15 per cent on its vault investment without any disturbance to its own business.

12. *Source of authority.*—In America, banking was, at first, a common law right. No special charter was needed to begin the banking business any more than one is needed now to enter the grocery business. At one time notes were issued and a regular banking business carried on by merchants, bridge and turnpike companies, or by anyone who chose.

The peculiarly public nature of banking was soon recognized, however, and numerous restrictions were put upon banking operations at an early date. Indeed, public opinion swung far in the opposite direction and banks were restricted unnecessarily and unwisely in some instances. Many of the early chartered banks were required to perform certain services for the government. Some were required to make loans to the state, some to carry on certain fiscal operations for the government, some to perform various other public services which are not necessarily connected with a bank's real business.

In most of the older states it was necessary, at one time, for banks to obtain a special charter from the legislature before opening business. As every new bank charter had to run the gauntlet of legislative action, it was quite possible to set political influence at work either for or against a proposed charter, to the detriment of sound banking. Many a legislator was found who would set a price on his vote.

Finally, the states passed general banking laws.

The law now states certain conditions which must be complied with before a new charter is granted. Any group of reputable men who will comply with these general provisions, which apply to all alike, may engage in the business of banking. This plan is evidently much better. In addition to taking the banks out of politics, it provides for a uniform system of banks thruout a particular state. Some of the operations of banking may still be carried on without a special grant of authority from a state, some states being more strict than others.

13. *National banks.*—The National Banking Act, passed in 1863, provides for the incorporation of banks by the Federal government. On November 17, 1916, there were 7,584 national banks in the United States with total resources of over $15,000,000,000. As compared with this, on June 30 of the same year, there were 19,934 banking institutions of all kinds operating under state charters and having combined resources of over $18,000,000,000.

14. *Federal reserve banks.*—Under the Federal Reserve Act of 1913, twelve Federal reserve banks were established in the United States under the supervision of the Federal Reserve Board at Washington. The stock in these banks is subscribed by the national banks of the country and by a few state banks which have entered the reserve system.

15. *Individual and private bankers.*—Individual and private bankers receive the funds of individuals or corporations and invest them for their account.

They also underwrite or purchase outright new issues of bonds or stock and dispose of them to their clients. Frequently they permit depositors to check against funds left with them. This is seldom an important part of their business, however, for the money intrusted to their care is usually left for investment.

There is a legal distinction between an individual and a private banker in the United States which has been clearly established by the courts. An individual banker is one who has received authority from the banking department of his state to engage in business subject to state inspection. A private banker is one who carries on a banking business without having secured any special privileges or authority from the state.

Two types of private bankers should be distinguished. The one is the large financial house, such as J. P. Morgan & Company, which promotes and finances enterprises, underwrites securities, sells bonds and stocks, makes loans to national, state and city governments, etc. These houses receive deposits and sometimes discount commercial paper.

The other type is the little private banker who solicits deposits, usually from the poorer classes, and conducts a general banking business. The banking business is often combined with some other business, such as real estate, department store or insurance. Depositors' funds are sometimes loaned by the bank to the mercantile or real estate end of the joint business. If the store or other allied business fails, the bank fails also. Immigrants are often persuaded to deposit with small private bankers of their own nationality, who sometimes abscond as soon as their pockets are well lined.

The private banking business is now regulated in some states. It should be watched carefully everywhere, for frequent failures injure the very ones who are least able to lose.

16. *Choosing your bank.*—The value of a good banking connection cannot be overestimated. If the wrong choice is made, the time may come when the needs of the depositor cannot be met by his bank.

A case in point may be given: A small but growing corporation engaged in the manufacture of embroidery kept its account with a trust company which did not compete with the banks of discount for commercial deposits, and which did not make commercial loans. The account was not large, but the owners of the business did their best to handle their corporation well. The time came when they needed a loan. The trust company did not care to make an exception in this case, and the corporation in question found it difficult for a time to finance its business properly.

Another instance was presented about the same time. A young and successful manufacturer of an article in great demand had started his business with a small capital and had been borrowing for a number of years from those who might be called "loan sharks." He was compelled to pay very high rates of interest. Finally, he sought the advice of a trust company as to a method of financing his business which would relieve him of these exorbitant rates. The trust company advised him to open an account with a commercial bank in the vicinity of his business and to keep on with his present discounting relations until he had established himself with the new depository. He did so, and in less than six months had established satisfactory credit relations and was able to release himself from the clutches of the "loan sharks." The commercial bank was able to give his business the support which the trust company could not give.

If a business man will carefully analyze his business as well as the banking facilities within his reach, or confer with a reliable banker, he can determine which institution is best fitted to serve his needs.

REVIEW

Describe the principal and subordinate functions of a bank.

State the functions of each of the different kinds of banking institutions.

What are the usual requirements and what is the usual procedure in establishing an incorporated bank?

What are the usual functions of the private banker?

What considerations should enter into the choice of a bank?

CHAPTER II

OPERATIONS OF A COMMERCIAL BANK

1. *Commercial banks.*—Nearly all the business of buying and selling, and much of the producing and manufacturing, is of such a nature that the banking needs can best be taken care of by commercial banks. For this reason a great part of the present Text will be devoted to the study of this type of banking house. Moreover, a thoro understanding of the principles of commercial banking will make easy the study of financial banking.

The business of banking can be explained most clearly, perhaps, by outlining some of the fundamental operations and showing how they appear upon the books of the bank.

2. *Capital.*—A bank, like any other business concern, must have capital. What should be the proportion of capital to the total volume of business done? This is one of the most perplexing questions in the whole field of banking, and it cannot be answered in general terms. Each bank must consider its own case separately, having in mind the kind of business it expects to do, the nature of the business carried on by its customers, its relation to other banks, and the

general condition of the community in which it is located.

Some countries fix a minimum legal ratio between capital and the volume of business. The minimum capital for national banks in the United States is regulated according to the population of the town or city in which the bank is to be established. Such requirements as these can only approximate the general average. They are of little assistance to the individual banker when he tries to work out his own problem. The one thing he does know is, that the greater the volume of business that may be done safely on a given amount of capital, the higher is his rate of profit. The law tells him only what his minimum capital must be; experience will determine the maximum.

Canada, intending evidently that no banks shall be established to do a small business, requires a large capital of all banks. Happily, the large banks are permitted to establish branches to take care of the smaller communities, which could not have a bank otherwise.

The capital of a bank should be paid in cash, because so many of the liabilities are payable on demand that some cash at least must be available with which to meet them from the very day the bank doors are opened. Generally, the law requires that a certain amount of capital be paid in cash before the bank begins business, and that the balance be paid soon thereafter. In some communities, the requirement is that a certain capital must be subscribed, but that only a part of it need be paid in cash. The unpaid capital must then be paid in case of insolvency, or it may be subject to call by the directors.

3. *Liability of stockholders.*—As has just been stated, the stockholders are liable for the stock for which they have subscribed, but for which they have not paid. This is true generally of all corporations. The principle of limited liability is almost universal in corporation law and, as a rule, stockholders cannot be made liable for further payments on their stock if it has been fully paid. Limited liability, of course, makes it possible for persons, who are not willing to take unlimited risk in becoming partners in an enterprise, to become stockholders with a maximum risk of losing only what they have paid in or subscribed. In the case of banks, however, it has become the fixed custom in many countries to place a double liability upon stockholders for the better protection of depositors. A man who has bought $1,000 worth of bank stock is thus liable to lose not only his thousand in the case of failure, but another thousand as well if that much should be needed to pay his share of the debts. If he has subscribed for $1,000 worth of stock and has paid only $500, he is liable for the unpaid $500 and the extra $1,000 also, or so much of it as is needed.

Double liability is imposed by Federal law upon stockholders of national banks and Federal Reserve banks. Most of the state banking laws follow the lead of the national law in this respect. Some states prescribe double liability for corporations other than banks.

4. *Opening for business.*—Suppose a group of men have complied with all the requirements of the law, have paid in $100,000 in gold for stock, and have spent $10,000 for furniture and fixtures. The bank's condition would be as follows:

RESOURCES		LIABILITIES	
Gold	$90,000	Capital	$100,000
Furniture, fixtures, etc...	10,000		
	$100,000		$100,000

5. *Is capital a liability?*—Capital stock is placed under the head of liabilities, but it is evidently not the same kind of liability as a promissory note, for there is no maturity date on it, and the stockholder cannot demand its payment so long as the bank is a going concern. If the bank goes out of business, however, the stockholder has a right to his share of all assets remaining after prior claims have been satisfied. Capital stock may be called a liability in liquidation or an accountability; it is merely a part of the difference between resources and liabilities as long as the bank is a going concern. Surplus and undivided profits constitute the remainder of this difference.

A large paid-in capital stock may be properly considered an evidence of strength, inasmuch as it means that the stockholders have staked a certain amount upon the success of the institution. While cash may be paid originally for the stock, it may soon be spent for almost any kind of property the bank chooses to buy. It may be spent unwisely; nevertheless, there is always the comforting fact that the stockholders have staked something and that they will try to make the bank a success.

6. *A deposit.*—The bank is ready for business. Let us suppose that depositors come in and leave $50,000 with the bank in some sort of cash. For our present purposes, it is unnecessary to distinguish between gold and other forms of cash. The bank's condition now is:

RESOURCES		LIABILITIES	
Cash	$140,000	Capital	$100,000
Furniture, fixtures, etc.	10,000	Deposits	50,000
	$150,000		$150,000

7. *A loan.*—So far the bank has made no profit. Most of the profits of a commercial bank come from loans and discounts. Suppose some one comes in and borrows $10,000 for three months with interest at six per cent, and leaves half the proceeds of the loan on deposit with the bank, taking the remaining $5,000 away in cash. The bank now stands with:

RESOURCES		LIABILITIES	
Cash	$135,000	Capital	$100,000
Furniture, fixtures, etc.	10,000	Deposits	55,000
Loans	10,000		
	$155,000		$155,000

The profit will come when interest is paid on the loan. Of course interest is accruing all the time. Bookkeeping practice varies with different banks.

In some, no account is taken of the profit until the interest is actually paid. In others, the accruing interest is entered upon the books periodically—every month in some cases. Any adequate bookkeeping system will take account of accruing interest.

8. *A discount.*—A discount is essentially the same as a loan, the only difference being that interest is taken out of the principal when the loan is made, instead of being paid at maturity as in the case of ordinary interest. For example, suppose some one wishes to discount his note of $10,000 for sixty days at six per cent. The discount, amounting to $100, is taken out of the principal at once, and $9,900 is left to the borrower. Obviously, the discount is more profitable to the bank and less profitable to the borrower than is the loan, if the rate is the same in both cases, for the borrower has the use of a smaller principal and pays just as much as he would for a loan. He gets $9,900 today, and pays back $10,000 at the end of sixty days. If he had made a loan, he would have had the use of $10,000 at a cost of $100.

Here, again, some banks take account of the accrued earnings, while others do not. Often, the bank enters the entire $100 as profit earned as soon as the discount is made, altho it is not earned altogether until sixty days have passed. Of course this practice is inaccurate. If it is followed, the condition of the bank immediately after the discount is made will appear as follows, assuming that all the proceeds are left on deposit:

RESOURCES		LIABILITIES	
Cash	$135,000	Capital	$100,000
Furniture, fixtures, etc...	10,000	Deposits	64,900
Loans and discounts	20,000	Undivided profits	100
	$165,000		$165,000

9. *Undivided profits.*—Loaning and discounting will go on until a considerable sum is earned. The undivided profits remain in the bank until the directors decide what to do with them. So long as the bank is a going concern, stockholders cannot claim these profits until the directors decide to pay them out as dividends. When the directors meet they may choose to pay out only a part of the profits and leave the remainder in the bank as surplus. In fact, the law sometimes specifies that a surplus shall be built up.

National banks are required to carry at least one-tenth of their net earnings to a surplus fund until the fund amounts to 20 per cent of the capital. The directors may vote to carry still more of the net earnings into surplus, if they so desire, and may declare dividends out of any part of the surplus over and above the required twenty per cent.

The paying out of dividends simply diminishes the bank's cash and decreases the amount of undivided profits or of surplus, as the case may be. The bank may place the amount of the dividend on deposit for the stockholders' account. If this is done, deposits will be increased instead of cash being decreased.

10. *Investments.*—Usually when a bank begins

business it is unable to make enough loans at first to employ all its capital. In fact, it often happens in the history of a bank that surplus cash will be on hand which cannot be loaned safely at a satisfactory rate of interest. The thing to do at such a time is to invest in something which is safe, which yields a fair rate of return, and which can be easily disposed of for cash whenever ready funds are needed. Commercial paper, bonds, stock, real estate, etc., may be bought. Real estate is not a good investment for a bank, because it cannot be liquidated easily, so in many countries the law prohibits the purchase of it. The buying of stocks is often prohibited, also, because of the fluctuation in their value.

Our bank has $135,000 in cash, and its liabilities that are subject to payment amount to only $64,900. It can safely invest $100,000, for the remaining $35,000 is an ample reserve to carry against its deposit liabilities. Suppose it buys bonds to that amount, and that its condition is therefore this:

RESOURCES		LIABILITIES	
Cash	$35,000	Capital	$100,000
Furniture, fixtures, etc.	10,000	Deposits	64,900
Loans and discounts	20,000	Undivided profits	100
Bonds	100,000		
	$165,000		$165,000

If the bank needs more cash at any time it can sell some of its bonds. Great care must be taken to make sure that only salable securities are bought. However good securities may be, they cannot take the place of a cash reserve, for they cannot be paid out over the counter to meet the demands of creditors for cash.

The question of accrued earnings comes up with investments, just as it does with loans and discounts.

11. *Issuing bank notes.*—A depositor may come in at any time to cash a check for, say, $1,000. Bank notes do as well as gold for him unless he has some special need, such as the necessity of sending money abroad. Suppose he takes notes. Deposits decrease, and a new liability appears in the form of notes, thus:

RESOURCES		LIABILITIES	
Cash	$35,000	Capital	$100,000
Furniture, fixtures, etc.	10,000	Deposits	63,900
Loans and discounts	20,000	Undivided profits	100
Bonds	100,000	Notes	1,000
	$165,000		$165,000

The bank has merely changed one kind of liability for another. Since the notes may be presented for redemption at any time, a cash reserve must be carried against them, just as against deposits. Ordinarily it is not necessary to carry as large a ratio of reserves against notes as against deposits, for the reason that their redemption is not demanded as rapidly as is that of deposits.

The issue of notes is usually hedged about by legal restrictions. This question does not concern us here, and we have assumed that the bank has no restriction but its own judgment to act as a brake upon its action. Note-issue will be discussed in detail in a later chapter.

12. *Other transactions.*—We have traced the most common and fundamental transactions thru the balance sheet of the bank. Others might be explained, but the reader can easily think them out for himself. The working out of this kind of problem is one of the best exercises that can be devised for one who is beginning the study of banking.

13. *Bank statement.*—No attention has been given to the proper arrangement of the items on either side of the statement. In fact, statements of different banks vary widely, not only as to the order in which the various items appear, but also as to what items shall be included in the general balance sheet.

The statement is worked out for the purpose of showing the condition of the bank at a given time. The law usually requires that certain items be given, but the requirements vary with different communities and with different kinds of banks in the same community. Many banks go beyond the legal requirements and give out statements in detail; others condense as much as possible.

So far as mere arrangement of items is concerned, the best practice for a bank to adopt is to follow the custom prevalent among other banks of the same kind in the community. The ideal plan would be to arrange the items on both sides of the statement in the order of currency, and to place cash, easily liquidated assets, etc., at the head of the resources column, and deposits, notes, current obligations, etc., at the head of the liabilities column. All down the statement it would be well to place opposite each other those items which are ordinarily compared. Capital, surplus and undivided profits would then come at the foot of the liabilities column; and they should, for they merely show the difference between the total actual liabilities of the going concern and the total of the resources. Quick assets and current liabilities, the items of greatest interest, would appear at the head of the statement, where they would catch the eye immediately, and where they could be easily compared.

In the next chapter, a statement of one of the largest national banks in the United States will be given. The arrangement is that followed ordinarily by the national banks. Each item will be explained, except where explanation, for the time being, seems unnecessary or undesirable.

REVIEW

What is the nature of the legal requirements of the United States and Canada in regard to the amount of a bank's capital?

How does the liability of a bank stockholder differ from that of a stockholder in other corporations?

Explain the effect upon the bank's balance sheet of the following operations: receiving deposits, making loans and discounts, making investments, issuing notes.

What is the best order of arrangement for the items of assets and liabilities in the statement of a bank?

CHAPTER III

THE BANK STATEMENT

1. *Purpose of a bank statement.*—It is a peculiarity of the banking business that it may have a complete report of its condition at the end of each day. As stated in the preceding chapter, the purpose of a statement is to show the condition of a bank at a given time. The preparation and publication of such a statement may be voluntary or compulsory. National banks are required to report to the Comptroller of the Currency at least five times a year, and they never know exactly when they are going to be called upon. State banks must make reports to their respective state banking departments. In the old state banking systems, reports were required on certain days fixed in advance. Just before the date for reporting, banks were acustomed to arrange their business so as to make a favorable showing. This practice, which is called "window dressing," was common thruout the country in the early days of banking.

The Comptroller of the Currency combines the statements of national banks into a composite statement, which shows the condition of the national banking system as a whole. Combined statements for different classes of national banks and for banks in different sections of the country are also published.

These statements are significant and are watched closely by bankers and business men all over the country.

2. *Sample statement.*—The following is a statement which represents the condition of the National City Bank in New York City in the late months of 1916. It will serve to illustrate the elements which enter into a bank statement, tho it contains some items which are not met, or which are met infrequently, in the statements of other banks.

RESOURCES

1.	Loans and discounts		$341,311,834.96
2.	Customers' liability under letters of credit		6,582,677.54
3.	Customers' liability account of acceptances		8,419,473.28
4.	Overdrafts secured and unsecured		391.39
5.	U. S. bonds to secure circulation		1,799,150.00
6.	U. S. bonds loaned		2,820,500.00
7.	Bonds, securities, etc.		52,912,949.21
8.	Stocks, other than Federal Reserve Bank stock		40,957.44
9.	Stock of Federal Reserve Bank		1,500,000.00
10.	Banking house, furniture and fixtures		5,000,000.00
11.	Due from banks and bankers		34,678,400.74
12.	Due from foreign accounts		448,779.87
13.	Due from branches		12,281,370.64
14.	Exchanges for Clearing House		37,981,673.85
15.	Checks on other banks in this city		1,399,006.54
16.	Country checks, other cash items and fractional currency		1,121,597.15
17.	Notes of other national banks		109,000.00
18.	Federal Reserve notes		1,261,500.00
19.	Lawful reserve, viz:		
	Specie in vault	$54,218,040.52	
	Legal tender notes in vault	3,090,000.00	
	Deposit in Federal Reserve Bank	34,948,955.20	92,256,995.72
20.	Gold bullion		377,256.24
21.	Redemption fund and due from U. S. Treasurer		140,957.50
	Total		$602,444,472.07

LIABILITIES

22.	Capital stock paid in	$25,000,000.00
23.	Capital set aside for foreign branches	3,000,000.00
24.	Surplus and undivided profits	39,650,897.91
25.	Reserve for taxes accrued	371,802.55
26.	Reserve for all interest accrued	129,000.00
27.	National bank notes outstanding	1,796,850.00
28.	Due to banks and bankers	239,238,839.23
29.	Dividends unpaid	1,195.00
30.	Individual deposits subject to check	243,886,456.00
31.	Demand certificates of deposit	4,692,403.50
32.	Certified checks	10,526,228.99
33.	Cashier's checks outstanding	4,972,967.62
34.	Time certificates of deposit	7,903,260.00
35.	Time deposits	1,210,280.60
36.	U. S. bonds borrowed	4,616,400.00
37.	Bills payable, including obligations representing money borrowed	2,350.00
38.	Letters of credit	6,582,677.54
39.	Acceptances based on imports and exports	8,419,473.28
40.	Other liabilities	443,389.85
	Total	$602,444,472.07

3. *Changes in bank balance sheet.*—The fact that the figures for the resources and liabilities of a bank are equal has no bearing whatever on its solvency. The last statement given out before a bank fails, invariably shows that the resources are equal to the liabilities. In the event of a failure, the discrepancy must be looked for in some of the items. Either the resources have been entered at a valuation above their real worth, or some item of liability has been omitted or reduced. Nearly always it is discovered that loans and discounts contain items which are worth far less than the figures indicate.

Under resources are entered all the items of property owned by the bank and all funds to be paid to it in the future. Under liabilities are placed all the debts payable by the bank and all items representing the equity of the stockholders in the property.

The items on the resources side may increase or diminish without any transaction taking place and without any changes having been made in the liability side, and vice versa. Some of the loans may prove to be bad and uncollectible, or some of the real estate or bonds may increase in market value. Profits may be made, or losses incurred. It is impossible to adjust constantly all values given in a statement to correspond with actual market conditions. In some banks the adjustment is made periodically; in others, only when it is discovered that the alteration in value is permanent. In some it is never made.

4. *Concealed assets.*—It happens frequently that where the items of property have enhanced in value the figures on the statement are allowed to remain absurdly low, creating what are called "concealed assets." A great many bankers consider it conservative to list at a low figure property worth much more than its book value. No objection to this practice can be raised so long as everyone understands the real condition and knows that the statement is fictitious. A possible bad result is that some of the stockholders may not realize the full value of their stock and may be induced to part with it at a price which they would not even consider if they knew the actual equity it represented.

5. *Items in resources.*—We shall now take up each

item separately with such explanations as are necessary to indicate the transactions by which it was created. The items are identified by the number which is shown opposite.

1. "Loans and discounts" consist chiefly of promissory notes and bills of exchange against which the bank has made advances to borrowers. The figure includes bills discounted and time, call and demand loans. Some loans are secured by collateral of one kind or another; others are unsecured.

2. "Letters of credit" are explained fully in the Modern Business Text on "Domestic and Foreign Exchange." A brief discussion is given in the following two sections of this volume.

3. For a discussion of "acceptances" see Chapter IV, Section 13, and Sections 10 and 12 of Chapter XVI.

4. "Overdrafts" appear in nearly all bank statements. According to strict business principles they should not be there at all, but it sometimes happens that a depositor overdraws his balance by mistake. In such a case the bank's officers pay the check if they consider the man's character and resources to be good. Until the overdraft is made good, it is properly reckoned as an unpaid debt among the bank's resources.

In some localities loans are made by giving the depositor the right to overdraw his account up to a certain amount, the overdraft being secured by a deposit of collateral with the bank. Interest is charged on the amount overdrawn. This practice is followed very little in the United States. The borrower usually makes a loan and takes credit at once for the full amount needed.

5. "United States bonds to secure circulation," will be discussed in the chapter on the National Banking System. This item represents bonds owned or borrowed by the bank, and deposited at Washington as security for circulating notes. It may be noted that this amount is nearly offset by the outstanding circulation, item twenty-seven under liabilities.

In some statements, these bonds will be listed at par and an item, "premium on bonds," will appear to represent the difference between par and market value.

6. Banks do not always own all the bonds which they use as a deposit against circulating notes. Apparently, this bank has loaned bonds for this purpose. That it has also borrowed is shown by item thirty-six.

7–9. The item, "bonds, securities, etc.," embraces bonds, stocks, chattel mortgages, judgments, claims and other similar securities. The securities which are deposited by borrowers as collateral for loans do not appear in the statement, because they do not become the property of the bank unless a default is made on the note. Under the law, national banks are not permitted to own corporation stocks unless it is necessary to take them in connection with a debt. An exception to this is the provision in the Federal Reserve Act which permits and requires national banks to own stock in their respective Federal Reserve banks. These items, therefore, represent practically the bonds owned by the bank. The purchase of bonds has increased greatly within the last few years, because under normal conditions there is a ready market for bonds, and the banks regard them as a form of secondary reserve which can be converted into money almost immediately in case of emergency. Then, too, many banks are dealers in bonds and hold them pending their sale to customers.

10. "Banking house, furniture and fixtures" are proper assets of a bank. A bank must either own its house or pay rent. Often when building an office, extra floors are added and rented to tenants. This frequently gives a bank its quarters at very low cost. The investment may even show a profit after allowing for all expenses. Some of these large office buildings have been erected by separate companies, composed of the stockholders, and the bank pays a rent to the separate company.

11–12. One of the principal duties which a depositor expects a bank to perform is to collect checks deposited by him and payable at other banks. Some of these checks are payable in other cities or even abroad. A large bank makes arrangements with banks in various parts of the world to collect these items. A small bank makes its arrangements thru some large bank or banks having foreign connections. In the case of the bank under consideration, these items consist primarily of two kinds of claims; first, checks on out-of-town banks which have been forwarded to correspondent banks for collection and charged against them; second, a considerable amount in bills of exchange and balances due from foreign bankers.

13. This bank has evidently exercised its option under the Federal Reserve Act to establish branches abroad.

14. "Exchanges for clearing house" are checks, drafts and other claims which are to be presented thru the clearing house on the day following.

15. This item includes checks and drafts on banks in the city which are not members of the clearing house and do not clear thru it.

16. In addition to fractional currency and a few small advances such as salaries paid in advance, carfare, telegraph charges, and other petty cash payments to be charged to expense in one amount, this item includes checks on out-of-town banks which have not been forwarded for collection. As soon as they are forwarded and charged to correspondent banks, they will appear in item "due from banks and bankers" which is (11) above.

17. A national bank is not allowed to count the notes of other national banks as part of its lawful reserve. It is to its interest, therefore, to have as few of them on hand as possible. Consequently, they are paid out before any other form of currency, except the bank's own notes which it is anxious, of course, to keep out. Notes of other banks may be sent to Washington for redemption.

18. These notes have been obtained by payments made to the bank or by rediscounting at the Federal Reserve Bank. They will be discussed in connection with the Federal Reserve Act.

19. "Lawful reserve" includes all kinds of money on hand which the bank is permitted to count as part of its required reserve. Specie includes gold and silver certificates, as well as coins, because they represent actual coin deposited for their redemption on demand. Legal tender notes include greenbacks and Treasury notes of 1890. The latter are now scarce.

Every bank that is a member of the Federal Reserve system is required to carry at least a certain part of its required reserves in the vaults of the Federal Reserve bank of its district. These reserve requirements are discussed elsewhere.

20. Gold bullion is usually obtained by importation. If it is not needed for re-export it is sent to the Federal Treasury and exchanged for coin or certificates.

21. Every national bank is required to keep on deposit with the Treasury of the United States a fund equal to five per cent of its outstanding circulation. Before the passage of the Federal Reserve Act this deposit could be counted as part of the lawful reserve which the banks must carry against deposits; now, the deposit must be maintained, but it may not be counted as part of the reserve. Since the total reserves have been lowered materially, this requirement works no hardship on the banks.

The item "due from the United States Treasury" includes any amounts due from the Treasury other than the five per cent fund. Money is constantly passing between the bank and the Treasury. Subsidiary coins and bank notes are sent in for redemption, money is sent for exchange into subsidiary silver, bonds are sent in for redemption and other transactions are carried on.

6. *Liabilities: letters of credit.*—In the bank whose statement we are considering, there are items both in the resources and in the liabilities which have to do with letters of credit. These are items which are not commonly well understood; and, before proceeding with a discussion of the successive items of liabilities in the bank's statement, it seems desirable to make clear the nature and function of these instruments.

The letter of credit can be explained best by an illustration. Duggan buys a quantity of goods in India. He is not known there and the goods will not be shipped on his credit. On the other hand, he does not want to pay before the goods are sent. He goes to the bank and applies for a letter of credit, which is nothing more than a paper issued by his bank instructing its correspondent bank, say, in London, to "accept" a draft, drawn by the Indian merchant up to a certain amount and under certain conditions. The conditions, with regard to attaching the bills of lading, insurance certificates, etc., to the draft, are all specified in the credit.

The London banker is informed that the credit is drawn against him and the letter is sent to the merchant in India, who proceeds to ship the goods. The merchant insures the goods and puts them on board ship or train. With his insurance certificate, bill of lading and letter of credit he then goes to his local banker and sells a draft drawn against the London bank. The incident is closed so far as the shipper is concerned.

The draft with all papers attached is next sent to London where the Indian bank is credited and the New York bank debited for the proper amount. If the draft is drawn at, say, four months' sight, it is expected that Duggan will hand his New York bank the funds within four months after the draft is accepted in London and that, in turn, the New York bank will put the London bank in funds. Duggan gets his goods and has four months from the date of "acceptance" in which to pay for them. He may be able to sell them and take his profits in that time. Of course, the goods cost him a little more when bought with credit than if he paid cash.

7. *London's part.*—Why carry the transaction thru London in such a round-about fashion? First, a draft on Duggan would not be good in India; second, a draft on the New York bank is not as good as a draft on the London bank. The dollar draft is not as good as one in sterling, because ordinarily it must be held until maturity before it can be realized upon. Since there is no discount market in the

United States, it is not readily salable in case of emergency.

The intention here is to show how the letter of credit is used, not why we must go thru London or some other foreign financial center. The reason will appear as the reader gets further into this book and more particularly when he comes to the study of foreign exchange. American banks do make acceptances now on their own account, but the volume of this business can never be great until we develop a discount market in which accepted drafts can be readily sold.

8. *Items in liabilities.*—Let us now examine the nature of the bank's liabilities.

22–24, 29. For present purposes, the items which concern capital stock, surplus and dividends unpaid need no further comment, as they were discussed sufficiently in the preceding chapter.

25. Each national bank is required to pay a Federal tax on its average outstanding circulation, equal in amount to one-fourth of one per cent each half year on such notes as are secured by the deposit of the United States bonds bearing interest at two per cent per annum. The tax is one-half of one per cent each half year on notes which are secured by bonds bearing a higher rate of interest. National banks are also subject to certain other taxes. These taxes are often provided for by monthly accruals.

26. Interest accruals are provided for in the same way.

27. National bank notes will be discussed in the chapter on the National Banking System.

28. The item "due to banks and bankers" consists primarily of three kinds of claims. First, banks outside of New York City are accustomed to deposit a part of their required reserves with some bank in New York. State banks in New York do this regularly by permission of the state law. National banks located outside the three central reserve cities—New York, Chicago and St. Louis—were permitted under the National Banking Act to deposit a part of their legal reserves with national banks which were approved as reserve agents. The Federal Reserve Act required that these reserve deposits be withdrawn gradually and placed either in the banks' own vaults or with the Federal Reserve banks in the various districts, all to be withdrawn by the end of 1917. At the time of this statement, reserve city banks—national banks located in reserve cities—were permitted to carry four-fifteenths of their required reserves on deposit with approved reserve agents in central reserve cities; country banks—all national banks outside of reserve and central reserve cities—were permitted to carry one-fourth of their legal reserves on deposit with approved reserve agents in either reserve or central reserve cities.

Second, banks all over the country carry balances with New York banks against which they draw drafts for exchange purposes.

Third, at certain seasons of the year excess cash is also deposited with New York banks which can always make use of the funds for call loans in Wall Street.

30. "Individual deposits" represent the amount due to individuals and corporations. The deposits are payable on demand.

31. "Demand certificates of deposit" are a specialized form of deposit not subject to check. They are used for remittances or for payments by travelers within the territory in which the bank is known. These certificates are particularly convenient for making remittances to localities on which drafts are not obtainable.

32. A certified check is an ordinary check drawn by a depositor, which has been certified by the cashier or other appropriate officer and which becomes a liability of the bank until it has been presented for payment. When the bank certifies a check, the amount is taken from the account of the depositor and placed in the certified check account. By this act it becomes a direct obligation of the bank, the same as a promissory note. If the holder of a check has it certified and the bank fails before it is presented for payment, he has no recourse against the original drawer. The holder, by having it certified instead of demanding payment at the bank, throws the risk of non-payment upon himself. If the maker of the check has it certified, his liability for payment is the same as in the case of an ordinary check.

33. "Cashier's checks" are checks drawn by the

cashier upon his own bank in payment of expenses or other matters.

34. "Time certificates of deposit" are issued to those who have deposits with the bank for a stated period. A low rate of interest is paid by the bank on these deposits.

35. Time deposits are left for stated periods and are not subject to check.

36. Bonds borrowed have already been discussed in connection with bonds loaned. (Item 6.)

37. These are usually small expense items.

38. Letters of credit, acceptances and miscellaneous liabilities need no discussion here.

9. *Interpretation of a bank statement.*—Does the statement show that the bank is in sound condition? The most significant thing to be noted is the relation of reserves to deposits. A calculation of this ratio shows that the bank holds lawful money reserves considerably in excess of the amount required by law. When this report was rendered, national banks in New York, as well as in other central reserve cities, were required to maintain 18 per cent reserves against demand deposits and a part of these had to be on deposit with the Federal Reserve bank of the district. All national banks are required to carry a five per cent reserve against time deposits.

10. *Bank statement not an infallible indication.*—One point must be clearly understood, namely, that, while a statement will sometimes indicate weakness

in a bank's condition, it can never be taken as absolute proof of the soundness of the institution. In the first place, the statement may be a deliberate misrepresentation of the facts. Even if the statement is true, we must get back of it and into the operations of the bank before we can be sure of the bank's condition. For example, suppose that half the individual deposits belong to a few large depositors and that they should suddenly check them out. This operation alone would more than wipe out the entire reserves of the bank, and it would have to close its doors unless it could quickly dispose of some of its assets for lawful money. In panicky times the best of assets cannot be converted into lawful money without serious loss. Now, suppose a large loan has been made to one man who becomes unable to pay for some reason. Evidently many contingencies, which will force the bank into an unsafe position, may arise and not be revealed in the statement.

11. *Statement as an advertising medium.*—At one time, bankers, like physicians, considered advertising to be a breach of professional ethics. The more progressive bankers today advertise in one way or another. One of the most common methods of publicity is the circulation of bank statements among business men in the community. It is dignified and at the same time it attracts attention.

The Corn Exchange Bank of New York City issues periodically a condensed statement with the items arranged so as to be easily understood by the average depositor. It means a great deal more than a bald statement would to the ordinary man who sees it. Here is a copy of the bank's statement for November 1, 1916:

The bank owes to depositors payable on demand		$127,995,404.74
	A conservative banker always has this indebtedness in mind, and he arranges his assets so as to be able to meet any request for payment.	
For this purpose we have:		
I.	Cash (Gold, bank notes and specie) and with legal depositories returnable on demand.	27,336,047.94
II.	Checks on other banks Payable in one day.	16,853,912.94
III.	Loans to individuals and corporations Payable when we ask for them, secured by collateral of greater value than the loans.	23,795,432.98
IV.	We own bonds Of railroads and other corporations of first quality and easily salable.	21,227,310.50
V.	We have loans Payable in less than three months on the average, largely secured by collateral.	44,819,947.14
VI.	We own bonds and mortgages and real estate	1,090,365.76
VII.	Our sixteen banking houses All located in New York City.	3,167,720.14
	Total to meet indebtedness	138,290,737.40
VIII.	This leaves a surplus of Which becomes the property of the stockholders after the debts to the depositors are paid, and is a guarantee fund upon which we solicit new deposits and retain those which have been lodged with us for many years.	$10,295,332.66

We feel that this statement should enable our depositors to invite new accounts with perfect confidence.

REVIEW

Examine the statement of resources and liabilities of any national bank, and explain the meaning of each of the items.

In what respects would the statement of resources and liabilities of a national bank differ from that of a state bank? A trust company? A savings bank?

Explain the workings of a letter of credit. How do they affect the bank's statement?

Explain the method of stating resources and liabilities adopted by the Corn Exchange Bank of New York and apply it to the statement of some other bank.

CHAPTER IV

LOANS AND DISCOUNTS

1. *Duration of loans.*—Shall a bank make loans for long periods of time or for short periods? This depends upon the kind of liability the bank is assuming against its loans—whether it is giving demand deposits or time deposits or cash in exchange for them. A trust company or savings bank which has long-time deposits can grant loans for relatively longer periods. Most of the loans of a commercial bank must be made for periods of not more than from thirty to ninety days.

It is also important that a bank should arrange its loans so that the maturity dates may rotate evenly, or in such a way as the business of the bank may dictate. It is important for an ordinary bank to have a certain proportion of its loans constantly coming due. When a bank does a seasonal business, as is the case with summer resort banks, its loans should mature when the heaviest demands come from its depositors. Such a bank usually finds it advisable to invest part of its funds in securities which can readily be sold at the right time. Sometimes a bank will find it necessary to borrow from another bank, perhaps in a different community. It will tender to the lending bank certain of its securities as collateral. Often the logical thing would be to sell the promissory notes which it has discounted for its customers. This practice is called rediscounting.

2. *Time loans.*—Time loans, as their name implies, are loans that have a definite maturity date. They make up the bulk of the loans of almost any bank. The bank usually wants some kind of security, for no matter how well the officers may know the borrower they do not feel justified in subjecting the bank to any more risk than is necessary. Stock and bonds, real estate mortgages—where the law permits—warehouse receipts and various other kinds of collateral may be presented. The nature of collateral and the kinds which a bank may safely accept are important subjects in the study of banking. Sometimes the bank takes no collateral at all but relies upon the honesty and business ability of the borrower.

3. *Demand loans.*—Demand loans are usually made at rates nearly equal to those on time loans and they are made on similar collateral. There is a mutual understanding between borrower and lender that demand for payment of the note will not be made until some time which is convenient to the borrower. This kind of loan often runs for six months or a year or even longer. It is made to accommodate borrowers who wish to undertake some enterprise but who cannot determine in advance just when the transaction will be consummated so that payment can be made.

Demand loans should not form too large a percentage of a bank's portfolio, for they are comparatively non-liquid. Payment of part, if not all, of the loan should be demanded at fairly regular intervals. If this is not done, there is danger that the loan will be used by the borrower as permanent instead of working capital.

4. *Call loans.*—Call loans are so named because the bank reserves the right to call for payment of the loan at its pleasure. They are confined almost entirely to traders on the stock and produce exchanges in Wall Street and in other financial centers. The borrower reserves the right to pay the loan whenever he wishes.

The bank cares very little what broker has the loan so long as the security is adequate. Other things being equal, however, the bank prefers to lend to those who have no claim upon it and upon whom it can call for repayment without apology. There are a few brokers who keep in touch with the banks and know just where, and how much call money can be obtained and at what rate. As soon as the clearing house results are reported the officers of the bank know whether or not they have any surplus cash for loan on call. If they have, they communicate with the brokers who make a practice of loaning on the floor of the exchange. These brokers offer the money to brokers who need it and inform the bank of the names of those who have borrowed. The method just outlined is the one followed in Wall Street. It is used with some modifications in the other markets where call loans are made.

Banks are cautious even with such liquid loans as Wall Street call loans. The reason for this wariness will be clear when it is shown in a later chapter how call loans have so often proved uncollectible in panicky times, and how the fear of a general call for payment has often precipitated trouble in the Street and even in the whole country. The chief points that are watched are the kind of security, the bank's title to the security and the margin of value of the security over the loan.

5. *Kind of security.*—Borrowers on call are always anxious to use as many industrial stocks for collateral as the bank will allow. Bankers usually require, however, that at least 60 per cent of the securities be railroad issues, because they are less speculative. Loans should not be made on the stock of a company which has not demonstrated its ability to make money, or on stocks which have no market.

A loan on mixed collateral is more desirable than a loan on one kind of stock or bond, for if the bank is compelled to sell the securities it will receive better returns on small lots of several securities than on a large block of one security. In the same way a loan on a low priced active stock is better than one on a high priced inactive stock.

6. *Bank's title.*—The question of the bank's title to the securities involves many important points, and it is of as much interest to banks in the outlying districts as to those in Wall Street.

In the first place, the bank must be in a position to obtain legal title to the security in its possession, in case of default.

This necessitates the indorsement of the securities in blank, and this must be done in proper order. In the case of Wall Street call loans, the banks require that the securities be a good delivery under the rules of the New York Stock Exchange. These rules include technical points in which the country banker or the business man is not particularly interested.

In the second place, a man cannot hypothecate something he does not own. If he produces a certificate of stock, drawn to the order of some other person, and requests the bank to make a loan upon this stock, the stock is of no value to the bank even tho it is apparently correctly indorsed in blank, unless the borrower files with it a certificate or agreement signed by the person in whose name the stock is drawn giving the borrower the right to hypothecate the stock. This certificate, or agreement, is known as an hypothecation certificate.

7. *The margin.*—A business man should not go to the bank and expect to get a loan to the full extent of his security, even if he presents government or first-class railroad bonds. In most states, banks are required by law to have a margin over and above the amount of the loan. This margin must be maintained at all times. In addition to this, when the bank examiner calls he may instruct the bank to reduce the loan by a charge to profit and loss in order that the security may be worth more than the loan by the re-

quired margin. Of course, the market value and not the face value is taken into consideration for this purpose.

The margin ordinarily required is 20 per cent. That is, the loan may not exceed 80 per cent of the market value of the collateral deposited. A second test which is applied in New York is that the loan must have a ten point margin, that is, that it must be $10 a share less than the market value of the collateral. The ten point test falls heavily upon any security that is selling at less than $50 per share. Under the 20 per cent rule, the loan on a stock selling at $40 could be as high as $32; under the ten point rule, it could not exceed $30. The latter rule is not often applied outside of New York.

8. *Investment loans.*—Mr. William Law, vice-president of the Central National Bank of Philadelphia, in an unpublished address, divides borrowers into four classes: investment, industrial, capital and mortgage borrowers.

Investment borrowers are those who borrow to invest the proceeds in certain securities or property which they wish to carry with a view to resell at a profit, to hold until funds can be accumulated to pay for the purchase, to enable the holder to gain certain control of influence, or otherwise to accomplish some object external to the transaction. These are loans ordinarily granted to brokers, investment bankers and market operators. These loans are usually secured by the deposit of collateral and can readily be realized upon in proportion to the convertibility or salability of the securities deposited. Under normal conditions, such a borrower will pay his loan at one bank from the proceeds of the transaction, by selling the securities pledged there or by borrowing from another bank. If loans of this character are the obligations of active and capable men, they are an excellent investment for a portion of the funds of a bank. This is especially so if they are payable on demand and secured by well-distributed and properly margined collaterals possessing a broad market. However, when money is abundant, such loans yield a comparatively low rate of interest and they are often open to the dangers of call loans, which will be discussed in a later chapter.

9. *Industrial loans.*—A second class is made up of automatic or seasonal borrowers. By these terms it is intended to describe the operations of manufacturers, merchants, farmers, drovers and other similar borrowers who require temporary accommodation during a period of production, transportation, distribution or collection. These are the ordinary commercial loans which have been described.

The rediscounts of other banks are a favorite form of this sort of loan, especially if the borrowing banks are located in sections where seasonal borrowing is the usual rule and are, therefore, themselves seasonal or temporary lenders. The risk is slight and the proceeds of rediscounts are likely to remain on credit with the lending bank in much larger proportion than the proceeds of ordinary loans. A bank usually borrows to increase its reserves; a firm usually borrows for spending purposes.

Until recently, rediscounts were looked upon with disfavor in the United States. Borrowers did not like to see their paper peddled about by the banks and thought that an attempt to rediscount was a sure sign of weakness on the part of the bank. Nevertheless, banks, especially those in the South and West, did a considerable amount of rediscounting in secret. In order that the rediscount operation might not be betrayed by the bank's indorsement, a paster bearing the indorsement was attached to the note and removed before it was returned to the original maker. This prejudice against rediscounting was unreasonable. The commercial paper which a bank holds should be one of its most liquid assets, and the sale of the paper is no evidence of weakness. As explained elsewhere, rediscounting forms one of the most valuable features of the great European banking systems.

The two classes just mentioned are considered the most desirable loans; the two following are less desirable.

10. *Capital loans.*—A third class is composed of capital borrowers. This phrase is intended to describe the borrowing of permanent capital to be repaid from profits as they accumulate. This is a financial loan and it is likely to lead to continuous loans and over-trading. For instance, the president of a manufacturing corporation, constructing a new

plant, finds that its cost exceeds the capital subscribed by the stockholders. He borrows the necessary money by making notes which are discounted by a friendly bank. This loan can be extinguished only by borrowing elsewhere, by continuous operation at a profit, or by the sale of the plant.

The weakness of this position would quickly be made manifest should manufacturing operations cease. All capably managed banks discourage such loans in any substantial measure unless conditions are unusually favorable for continued high earnings which can be applied to reducing steadily such a loan within reasonable time. Capital for requirements of this character should be provided by the additional subscriptions of stockholders or by bond issues. That is to say, the funds should be held in the form of a permanent or long-term borrowing at the option of the borrower thru bonds secured by mortgage.

This idea is expressed concisely by the advertisement of a prominent Chicago bank: "Conservative banking consists in caring for many interests, while capitalizing none." The statement of a strongly organized manufacturing corporation or firm indicates convertible, quick assets sufficient to protect all quick liabilities. Of course, from the standpoint of the manufacturer engaged in a highly profitable line of work, there is an alluring temptation to endure for a period the sacrifices, buffetings and annoyances of carrying what is termed a plant debt, for the borrower knows that he will be enabled thereby to maintain permanently a low capitalization and thus render the task of earning dividends lighter for all time to come when the plant debt shall have been finally extinguished out of earnings.

Not all financial loans are necessarily bad, but they should be made by a bank only after the most painstaking investigation. As a rule, they run for a considerable length of time and thus are not a suitable form of loan for commercial banks.

11. *Mortgage loans.*—Long-time or permanent borrowers on mortgage constitute the final group in Mr. Law's classification. To this class belong the holders of improved and productive central real estate in the larger cities. Because of the length of the loan and the difficulty of finding a ready market for mortgages in times of emergency, this class of loans has not been considered suitable for commercial banks. They are generally placed with corporations controlling trust or permanent funds, such as insurance companies, savings banks, trust companies and mortgage, loan and investment corporations.

Before the passage of the Federal Reserve Act, national banks were prohibited from taking mortgages, except to secure a previously existing debt, and they were severely criticised when they took mortgages indirectly. Any national bank not situated in a central reserve city may now make loans secured by real estate under certain restrictions which are explained in the chapter on The Federal Reserve System.

Real estate and other forms of permanently invested capital are bad collateral for a commercial bank, because it is difficult to realize upon them quickly.

12. *Single and double-name paper.*—Single-name paper bears the name of the maker only. A credit instrument on which the names of more than one person, firm or corporation appear, either as makers or indorsers, is called double-name paper. At first thought it would appear that each additional indorsement that goes on a paper makes it all the more secure, and that, therefore, two- or three-name paper is better than single-name paper. This would be true if the paper bearing two or more names originated in the same way as single-name paper. This is seldom the case, and the best paper in the United States is generally of this latter class. An examination into the source of the two kinds of paper will reveal the reason for this apparent contradiction.

A retailer buys a bill of goods which he intends to sell in ninety days. Not having a sufficient amount of capital to pay for the goods at once, he arranges with the wholesaler to carry him for the period, and turns over his note for ninety days. The wholesaler, in turn, indorses the note over to his bank and pays the manufacturer from the proceeds. Thus the bank gets double-name paper. Many of the strongest wholesale houses, however, have adopted the custom of carrying their customers on their books without taking a note. They discount their own notes directly at the bank, in order to get funds with which to meet their obligations. Banks usually scrutinize the borrower's business carefully before granting this kind of loan. Strong retailers also often discount their notes directly at the bank, so that they may take advantage of the usual discount for cash. Custom has thus made single-name paper the stronger in the United States, for the simple reason that it is put out by stronger houses.

Much is to be said in favor of using double-name paper as it is used in Europe. If a wholesaler makes a legitimate sale, he can discount his customer's note or accepted draft at the bank more readily than he can obtain a loan upon a mere financial statement, whether his own condition is exceptionally strong or not. On the other hand, it is noted that retail purchases are made in small amounts and that if a note were put on the market for each purchase the market would be filled with small notes drawn for odd sums with varying dates of maturity. This would complicate bookkeeping transactions. Yet it is desirable that wholesalers should take promissory notes, rather than carry their customers on book account, but it seems equally desirable that the transition to such a practice should not be made so suddenly as to embarrass traders who have become accustomed to the single-name paper system.

13. *Acceptances.*—In American finance, acceptance is a comparatively new term. We must look to Europe to find a well-developed system of accept-

ances. Mr. Paul M. Warburg, in an excellent monograph on the subject entitled "The Discount System in Europe," points out that we have given our permanent investment securities a nation-wide market thru the creation of the corporation and the transformation of the old unsalable partnership shares into bonds and stocks, which are readily negotiable. But our promissory notes, or temporary investments, still retain their primitive form and have only a local market. In Europe, the "bill of exchange" is in general use and great discount markets have been created where these bills can be exchanged freely at any time.

It must be understood that we are dealing here with bankers' acceptances. Trade acceptances have already been discussed in the Modern Business Texts on "Credit and the Credit Man," and "Corporation Finance." The discount of such acceptances at a bank offers no peculiar features which call for comment. Let us see how the bankers' acceptance arises. Suppose Jones buys a bill of goods from Smith for which he wishes to pay at the end of ninety days. He arranges to have his banker accept a draft drawn for the amount, payable in ninety days, and instructs Smith to draw the draft, furnishing him with evidence that the bank has agreed to accept. Smith easily discounts the bill with his banker, who forwards it to Jones' banker for acceptance. When Jones' banker stamps the word "accepted" across the face of the bill, he transforms it into a virtual promissory note of the bank and gives it wide negotiability. It can now be readily traded in the market and it serves as one of the many substitutes for money. The accepting bank, of course, charges a commission for its service, the average charge being from one-fourth to three-fourths of one per cent for three months, according to the conditions of the case. Acceptances form a most desirable kind of investment for bankers, as they have a ready market thruout a wide territory.

The Federal Reserve Act permits member banks to accept bills or drafts drawn upon them when arising out of certain kinds of transactions, under restrictions which are explained in a later chapter. These acceptances may be rediscounted at the Federal Reserve banks. New York State has passed a law permitting state banking corporations to make acceptances on domestic as well as on foreign bills. The authorization of rediscounts and acceptances is a notable step forward for American banking.

14. *Loan on warehouse receipts.*—After stocks and bonds, the next great class of property which may be used for collateral is merchandise and materials representing the investment of that form of capital which it is the legitimate function of banks to provide. If the calculations of the owner are not amiss, this property will be prepared for the market and sold within the near future. Accordingly, it embodies the best quality of collateral security in that it will be liquidated naturally and thus provide funds with which to repay the debt.

Certain difficulties present themselves, however. Merchandise and materials cannot be delivered to the bank in the same manner as stocks and bonds. If they are left in the possession of the borrower, they may disappear, or substitution may be made, or they may deteriorate thru neglect. These risks can be avoided only by placing the goods in the possession of a third party, who acts as trustee for all concerned and who is required by law to conform to certain rules which make fraud and loss impossible. The trustee issues a certificate, called a warehouse receipt, which contains a description of the property deposited. This receipt forms a legitimate collateral for bank loans.

Loans on warehouse receipts have increased to a marked degree in recent years. The growth is accounted for largely by the standardization of various kinds of merchandise used for the purpose, by the development of warehouse insurance, and by the passage of uniform laws by several states. At first, such loans were looked upon as a species of pawnbroking, but most banks now look upon them with favor. Some banks still prefer not to accept receipts for warehouse goods as collateral at all. Instead, they require a transfer to themselves on the books of the warehouse, taking a non-negotiable receipt therefor.

15. *Loans on open book accounts.*—Some bankers lend funds to business men on the security of the open book accounts of their customers or on instalment contracts which are assigned to the bank as collateral.

This business is strongly discountenanced by the more conservative bankers, who class banks engaging in it with pawnbrokers. They say that under the present conditions of banking competition any business man can borrow all the bank funds to which he is entitled on his general credit, and that those merchants who can get funds only by assigning and hypothecating their book accounts are undeserving of any bank credit at all. A description of the methods of obtaining and granting such loans is found in the chapter entitled Divisions of Credits in the Modern Business Text on "Credit and the Credit Man."

16. *Loans on insurance policies.*—A banker is often requested to make a loan on the security of a life insurance policy. If the policy has a cash surrender value it is a safe loan so far as the security goes, but it may be a hard one on which to realize. Such loans have usually a sufficient amount of sentiment connected with them to induce the banker to make the loan. In most cases, the policy is accepted by the banker more as a moral than an actual security. George Rae in his book "The Country Banker" says regarding life insurance policies as collateral security: "But the inability to pay a sum owing to a bank has not ordinarily a fatal effect on the life of the debtor; it is frequently quite the reverse." If the loan is made at all, the bank should make sure that premiums on the policy are paid promptly.

17. *Loans on chattels.*—It is a rare thing to find loans on chattels among a bank's assets. The writer

knows of a loan which was secured by a pledge of wedding silver. The silver lay in the bank's vaults for years, and while there was enough of it to secure the loan, it is doubtful whether the entire lot could have been sold for one-quarter of its original value. Loans on horses, wagons, and similar equipment are sometimes made, but the cases are so rare that they hardly need to be described at length. Chattels are not valuable as bank collateral.

Chattel mortgages are frequently recorded by those who dispose of goods sold on the instalment plan. A reference to the local official record will indicate the character of selling of this type that is being practised in any community. It will also be of much interest to the business man. The recording of a chattel mortgage is always a signal to creditors. Dealers are accustomed to watch the record of assignments closely. Careful bank officers, doing local business, watch these official records just as closely as the business men do. This is the chief reason for referring to a record of chattels.

18. *Specialization in loans.*—Bankers are beginning to specialize in a few kinds of loans. They become accustomed to certain types of transactions, get to be expert in handling them and find their greatest profits there because they build up special facilities for carrying them on. Other classes of business drift away or, at least, are not sought. A national bank located in the lower end of New York City had most of its customers in two lines of business. A few years

ago nearly all the houses in one line began to move up-town. The bank, not being permitted by its Federal charter to establish branches and not wishing to move away from its other line of customers, was forced to send out messengers to collect deposits and to offer all kinds of inducements to hold its old business.

It is unwise for a bank to carry specialization too far, whether it be in certain maturities, classes of loans or lines of business. In any event, a bank should not lend too great a proportion of its funds to one person or to a single industry. In the words of an old proverb, it should not carry all its eggs in one basket.

The National Banking Act limits specialization somewhat by requiring that the amount which a national bank can loan to one person or firm shall not exceed ten per cent of its paid-up capital and surplus or 30 per cent of its subscribed capital.

REVIEW

Distinguish between a call loan and a demand loan. What are the weak features of each class?

Into what different classes may bank borrowers be divided? What classes of loans are regarded most favorably and why?

A in New York purchases goods from B in Chicago. A wishes to pay for the goods in ninety days thru the medium of a bank acceptance. State the steps in this transaction. What parties are liable on the acceptance?

What does a warehouse receipt represent? Who issues it and how does it safeguard the banker?

What is the general practice followed by wholesalers in financing their operations? To what sort of paper does this give rise?

Specify the various classes of collateral accepted by banks. How do they rank in respect to desirability from the banker's viewpoint? What are your reasons for ranking the securities as you have done?

CHAPTER V

ESTABLISHING BANK CREDIT

1. *Opening an account.*—Every young man should open a bank account as early in life as possible, pay his bills by check, and learn to transact his business in the systematic way that the keeping of a bank account requires and facilitates. The bank usually expects that a fair sized deposit be built up before any loan is made, or at least that the customer shall have been carrying a deposit account for some time. This enables the officers to become acquainted with the depositor and to pass more quickly on his application for credit when it is made. The first step in opening bank relations is to become known at the bank and to gain the confidence of the officers. It is wise to arrange for an introduction by some well-known and important depositor.

2. *The first loan.*—The building up of confidence is slow and tedious work, and a single mistake may tear down the result of long effort. The first loan should be secured as soon as possible, and great care taken to make sure that it can and will be paid promptly at maturity. The best piece of information that a bank can have about a customer is that he has borrowed frequently and has always paid on time.

When a young man knows that he can meet a moderate obligation at his bank in sixty, ninety or even one hundred and twenty days, he should make an application for a loan. Let him buy a thousand dollar bond or some preferred stock of a good safe industrial concern or a railroad, paying $800 down on it and leaving the rest as a loan. Before buying the bond, he should consult his banker for advice as to the best bond to buy and for assurance that the bond will be accepted as collateral by the bank. The average banker will be glad to help in this way.

If the borrower is sure that he can pay $200 at the end of four months he should draw a note, leaving the bond as collateral. The banker may be willing to carry the loan on demand and permit monthly reductions. The bond or stock which is bought should have a higher yield than the rate charged by the bank if this is possible, otherwise the transaction will net a loss to the borrower. Even a small loss is justified in order to establish a relationship with the bank. Many a less valuable acquaintance costs more. It will not take more than two or three such transactions to establish a reputation with a banker, provided the loans are made and paid in a business-like way.

Many business houses have followed the same plan and have made applications for loans when not in pressing need, and established borrowing relations in this way with their banks which served them well in time of need.

3. *Applying for a loan.*—In making an applica-

tion for a loan, the borrower should always remember that a bank makes its profits primarily by loaning and that for this reason, a banker is always anxious to make a safe loan if he has funds on hand for the purpose. All that is needed is convincing evidence that the proposition is safe.

On the other hand, a banker knows that the refusal of a bad loan not only saves the bank from loss, but that it may also turn out to be a good advertisement. A stockholder of a certain bank applied for a loan of $1,000. He was not worthy of credit for any amount, and if the loan had been granted, it would have proved a total loss. The loan was promptly declined. The applicant left the bank and at once told some people that the bank was not serving the community and that it was "no good" because it would not grant him a loan. In less than thirty minutes from the time he left the cashier's desk another stockholder and depositor came in to see the cashier and congratulated him on refusing the loan. He said that if this particular application had been granted he would have withdrawn his balance and sold his stock. As the bank was new, this one withdrawal and sale of stock would probably have done it serious injury. The result of this particular refusal was worth hundreds of dollars to the bank. It gave the community confidence in the management.

4. *Making a statement.*—A properly prepared statement creates a good impression. A false statement, overestimating the worth of the borrower, is

fatal if discovered. There have been cases where two sets of books were kept, one for show purposes, the other for practical use in the business. Such a thing cannot go on forever. A statement revealing the exact condition of the business in simple and direct terms, showing that provision has been made for accruing expenses, depreciation and such items, is of the greatest importance in securing a loan.

An amusing incident is told of a storekeeper who applied for a loan, but who did not understand how to prepare a statement of his affairs nor why the bank officer asked so many questions. The officer wished to assure himself that the man had assets of real value and, therefore, called at the store. Among other questions, the officer asked, "How much of this stock do you own, Mr. Stiggles?" "Oh," said the storekeeper, "is that what you have been trying to find out? Well, now," as he paced along in front of the shelves, "I owe Libby, McNeil & Libby $50 for that canned stuff; I owe the National Biscuit Company $40 for that stuff; I owe Bill Jones $160 for the last supply of sugar, flour and coffee, and the rest is all mine."

If an officer is shrewd enough to pick up the odds and ends, such as other assets and liabilities, the amount of money due, including taxes, etc., he will know more about the man's net worth than the borrower himself.

In dealing with one's bank the value of a good accounting system cannot be overestimated. One of the first requisites for a good business man is that he have a thoro knowledge of his own business.

5. *Knowledge of one's business.*—A business man should approach the question of borrowing from his bank in the same way that he approaches any other business problem. When he buys $100,000 worth of raw materials, he knows that he will be able to store them until needed, that his men and machinery will be able to work them up properly and that his salesmen will be able to dispose of the finished product at a profitable figure. He investigates the entire matter before placing his order.

When he goes to his banker for a loan, he should be just as well informed about his financial standing. He should be able to state his case clearly and simply. Except in rare emergencies, he should never rush to the bank in a hurry for a loan. There are many things for a banker to consider before deciding whether or not to make the loan, and he should be given ample time. Of course, occasions arise when a business man is "caught," when he simply must have the money at once. At such a time he may be almost certain of receiving the loan without delay, if he has had the foresight to build up a credit standing at the bank. Otherwise, he cannot reasonably expect it.

6. *Credit department.*—The credit department in any bank is an evolution. It grows as the bank grows. In a small country bank, the president does not keep any record of the worth of his borrowers.

It is not necessary, since he and the other members of the board of directors are intimately acquainted with every one who does business with the bank. If statements of condition are taken, they are seldom detailed. As the bank grows, however, comparative records of a man's financial responsibility become absolutely necessary. Then statements of condition are required and analyzed and these are made the basis of further investigation.

When a concern seeks to open borrowing relations with a large city bank, its officers are asked to prepare a statement, usually in the form shown in Figure 1, pages 72, 73, if the applicant represents a corporation, or as in Figure 2, pages 74, 75, if he represents a firm. These forms were prepared by a committee of the American Bankers' Association after mature deliberation. The forms are often modified to meet local conditions. The statement is usually handed to an officer, who gives it a cursory examination and then turns it over to the credit department for analysis, additional investigation and report.

7. *Credit analysis rules.*—Invariably a borrower seeks to show a solvent liquid condition when making a statement to a bank. To do so, he should make the statement at a time when liabilities are lowest. When examining a statement the character of the business must be kept in mind. Furs and raw silks, for example, are sold on a six to ten months' note and woolen goods on a sixty to ninety days' open account. Now, if a credit man should find a large amount of

bills receivable in a statement of a raw silk or fur concern, he would not raise a question; but if he should find the same condition in the statement of a woolen manufacturer, or in the statement of a department store, which should sell for cash or on monthly accounts, he would understand that the notes represented slow and possibly bad accounts.

As a general rule, each item in the statement should bear the proper ratio to annual sales. Merchandise should be in the proportion of one to five or one to three of the amount of annual sales. Accounts receivable should be about one-sixth of the sales, where the terms are sixty days; in a department store they would be about from one-tenth to one-twelfth of the sales; and in a woolen business, one-third of the sales on four months' time. The ratios between sales and the various accounts referred to, differ in different businesses. Where purchases are made on sixty days, accounts and bills payable should equal about one-sixth of the sales; where they are made on six months' terms, about one-third to one-half of the sales.

If the statement is taken at the season when the borrower's assets are in the most liquid condition, the amount of quick assets should be about twice the amount of current liabilities. A smaller proportion would indicate that the business is in danger of over-expansion or embarrassment during the heavy season.

In a manufacturing business the total volume of sales should be about one to three times the amount of capital; in a jobbing business, four to five times the

CORPORATION

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON *Dec. 31st* 19*16.* WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIALLY UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT, THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME SUCH FURTHER CREDIT IS REQUESTED.

ASSETS					LIABILITIES				
CASH		5	421	16	NOTES PAYABLE		55	000	
BILLS RECEIVABLE (NET)		3	619	40	ACCOUNTS PAYABLE		11	216	41
ACCOUNTS RECEIVABLE (NET)		94	248	03	DEPOSITS		7	306	03
MERCHANDISE		63	934	19	BONDED DEBT				
LAND		10	000		MORTGAGES		15	000	
BUILDINGS		32	400		ACCRUED LIABILITIES		1	619	24
MACHINERY—FIXTURES		71	926	03	TOTAL		90	141	68
					CAPITAL		150	000	
					SURPLUS—PROFITS		28	901	14
					RESERVES		12	505	99
TOTAL		281	548	81	TOTAL		281	548	81

CONTINGENT LIABILITIES. ON BILLS RECEIVABLE DISCOUNTED *7561.25* OTHER *none*

CASH. ON HAND AND IN BANK, $ ________ NAMES OF BANKS *First National*

BILLS RECEIVABLE. ANY OVERDUE OR DOUBTFUL? *No* ANY FROM OFFICERS, DIRECTORS, SUB-COMPANIES OR SIMILAR SOURCES? *No*

ACCOUNTS RECEIVABLE. STATE AMOUNT DOUBTFUL, NOT FROM CUSTOMERS OR IN ANY WAY NOT REALIZABLE WITHIN IMMEDIATE FUTURE *none*

MERCHANDISE. FINISHED *15910.20* UNFINISHED *4530.60* RAW *42493.39* VALUED AT COST OR MARKET? *cost* IS ALL SALABLE? *yes*

LAND. DESCRIBE BRIEFLY *Plant—four acres* ASSESSED VALUE *9000* MARKET VALUE *15.000*

BUILDINGS. COST $ *50.000.* AGE *12 years* DEPRECIATION *5%*

MACHINERY AND FIXTURES. COST $ *110.000.* DEPRECIATION *10%* CONDITION *Kept up fully*

SAMPLE FORM

OTHER ASSETS.

ARE ANY OF ASSETS UNAVAILABLE FOR PAYING DEBTS? *no* LOSSES *2100*

INSURANCE. STATE KIND AND AMOUNT *160.000 fire*

NOTES PAYABLE. TO OWN BANKS *25.000* THROUGH BROKERS *30.000* OTHERWISE *none*

ACCOUNTS PAYABLE. TERMS OF PURCHASE? *2/10/60* DO YOU DISCOUNT AND ANTICIPATE? *Discount*

DEPOSITS. TIME OF DEMAND? *time* FROM WHOM? *relatives* INTEREST *5%*

BONDED DEBT AND MORTGAGES. DUE? *1920* RATE *5%* ON WHAT ASSETS A LIEN? *plant*

ACCRUED LIABILITIES. ITEMIZE *labor and taxes*

CAPITAL. PREFERRED AUTHORIZED $*50.000* ISSUED $*50.000* DIVIDENDS *7%* COMMON AUTHORIZED $*200.000* ISSUED $*100.000* DIVIDENDS *8%*

RESERVES. ITEMIZE *Merchandise 9310.25 - Accounts receivable 3195.74*

NET SALES.

LAST FISCAL YEAR		538.610.30
COST OF SALES		493.850.60
GROSS PROFIT		44.759.70
INTEREST, TAXES, DEPRECIATION, ETC.	15.692.25	
DIVIDENDS PAID	11.500.00	27.192.25
SURPLUS FOR YEAR		17.567.45

HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT? *yes* IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT? *A. B. Audit Co. 12/31/16*

CORPORATE NAME *City Manufacturing Company*

G. T. Brown President
(STATE OFFICER'S TITLE)

DATE SIGNED *February 3, 1917*

OFFICE ADDRESS *200 Broadway* NATURE OF BUSINESS *Manufacturers of Hardware*

LOCATION OF PLANTS AND BRANCH OFFICES

OFFICERS **DIRECTORS**

PRESIDENT

VICE-PRESIDENT

TREASURER

SECRETARY

FIGURE 1.

FIRM

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON Dec. 31st. 19 16. WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIALLY UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT, THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME SUCH FURTHER CREDIT IS REQUESTED.

ASSETS		LIABILITIES	
Cash	510 60	Notes Payable	22 171 49
Bills Receivable (net)	42 694 06	Accounts Payable	175 361 32
Accounts Receivable (net)	10 940 36	Deposits	1 524 37
Merchandise	130 662 41	Mortgages	5 000
Land	25 000	Accrued Liabilities	21 619 42
Buildings	134 736 24		
Machinery—Fixtures	148 619 46	TOTAL	225 676 60
		Net Worth	258 941 12
		Reserves	8 545 41
TOTAL	493 163 13	TOTAL	493 163 13

CONTINGENT LIABILITIES. ON BILLS RECEIVABLE DISCOUNTED 132.619.20 OTHER none

CASH. ON HAND AND IN BANK, $ NAMES OF BANKS First National

BILLS RECEIVABLE. ANY OVERDUE OR DOUBTFUL? 30.294.70 ANY FROM MEMBERS OF FIRM OR SIMILAR SOURCES 3619.20

ACCOUNTS RECEIVABLE. STATE AMOUNT DOUBTFUL, NOT FROM CUSTOMERS OR IN ANY WAY NOT REALIZABLE WITHIN IMMEDIATE FUTURE 1516.45

MERCHANDISE. FINISHED 102.650. UNFINISHED 9643.20 RAW 18369. VALUED AT COST OR MARKET? cost IS ALL SALABLE? yes

LAND. DESCRIBE BRIEFLY plant—three acres ASSESSED VALUE 10.000 MARKET VALUE 25.000

BUILDINGS. COST $ 140.000 AGE 10 years DEPRECIATION none

MACHINERY AND FIXTURES. COST $ 160.000. DEPRECIATION 11.408 CONDITION fair

OTHER ASSETS.

ARE ANY OF ASSETS UNAVAILABLE FOR PAYING DEBTS? *no* LOSSES *6310*

INSURANCE. STATE KIND AND AMOUNT *70.000 fire*

NOTES PAYABLE. TO OWN BANKS *10.000* THROUGH BROKERS *none* OTHERWISE *12.171.49*

ACCOUNTS PAYABLE. TERMS OF PURCHASE? *7/30-four months* DO YOU DISCOUNT AND ANTICIPATE? *no*

DEPOSITS. TIME OF DEMAND? *demand* FROM WHOM? *relatives* INTEREST *6 %*

MORTGAGES. DUE? *1918* RATE *5%* ON WHAT ASSETS A LIEN? *plant*

ACCRUED LIABILITIES. ITEMIZE *Chattel Mortgage on Machinery and Merchandise*

NET WORTH.

GENERAL PARTNERS			SPECIAL PARTNERS		
NAME	AMOUNT CONTRIBUTED	OUTSIDE NET WORTH	NAME	AMOUNT CONTRIBUTED	UNTIL
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

DATE OF PARTNERSHIP? — DATE OF EXPIRATION?

IS THE FIRM, OR ANY MEMBER THEREOF, CONNECTED WITH ANY OTHER LINES OF BUSINESS? *members own mining company.*

RERSERVES. ITEMIZE *general reserve*

NET SALES.

LAST FISCAL YEAR		*373.520.70*
COST OF SALES		*350.270.25*
GROSS PROFIT		*23.250.45*
INTEREST, TAXES, DEPRECIATION, ETC.	*29.730.95*	
WITHDRAWALS BY PARTNERS	*23.543.20*	*53.274.15*
Loss ~~GAIN~~ FOR YEAR		*30.023.70*

HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT? *no* IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT

ADDRESS AND DATE *N.Y. February 3 1917* **FIRM NAME** *Brown and Black*

BY *A.B. Brown.*
(MEMBER OF FIRM)

FIGURE 2.

capital; and in a raw product or brokerage business, from five to twenty times the capital.

A good manufacturer's statement should show a cash balance of about twenty per cent on the notes discounted at the concern's own bank, in order to maintain good bank credit.

These are only a few of the credit analysis rules known to all credit men. They are not inflexible but they serve as guides in the study of a particular situation. Experience and knowledge of all the circumstances in a given case are essential.

The importance of the statement of affairs as a means of obtaining credit is fully discussed in the Modern Business Text on "Credit and the Credit Man." Whether a business concern is seeking credit from a dealer or from a bank, the same principles hold true. Forms of statement are analyzed at some length in the Text referred to, and some of those which are there discussed are addressed to banks. The brief summary given here and the two statements introduced will serve to refresh the memory of the reader, but any extended analysis of these statements would be superfluous.

8. *Information from bank's records.*—The records of the borrower's account with the bank furnish much information of which the average business man is not aware. For example, the average balance indicates the general trend of the depositor's business. Then, again, much information may be derived from a record kept by the receiving teller of the items de-

posited by the borrower over a given length of time, the names of the makers of the checks, and the places where they are payable. As a rule, when a borrower applies for a loan he gives as reference a list of picked concerns, which he has paid most promptly, but omits those who will not speak favorably of him. The credit man can find out the names of others to whom he may write for further information, however, by running over the paid vouchers. The overdraft record also enters into the analysis of a depositor's account.

The analysis of a borrower's affairs along the lines indicated gives the credit man a clear insight into the condition of the borrower. When these analyses are compared year with year, still further information is disclosed. Banks that have efficient credit departments call for statements at frequent intervals and make direct comparisons of them. The value of such comparative credit records is apparent.

9. *Dun's and Bradstreet's.*—As a rule, banks call upon Dun's and Bradstreet's for special reports and make careful note of the ratings given to the borrower by these concerns. A loan would hardly be granted on the strength of an agency rating or report. Nevertheless, such reports reveal certain facts which are of value to the credit man. A man whose business is in good condition will do himself no harm by treating the representatives of credit agents courteously and giving the information they wish. Their report, if favorable, will be particularly

valuable to him when his credit is questioned at some distance from the community in which he lives.

10. *Trade relations.*—The credit department also investigates the borrower's trade relations, as implied above. If a prospective borrower has done business with men in the city where the bank is located, the bank seeks information from the credit men connected with these concerns. Of course, the credit man of the bank always holds himself ready to reciprocate the favor when he is in a position to do so. When necessary, he secures credit information from out-of-town concerns by writing to them. The replies may be indefinite because of a fear on the part of the concerns that their names will be used, even tho they write in strict confidence. The wording of the letters is usually very guarded, but the capable credit man is able to read between the lines.

11. *Credit man's report.*—After the credit man has gathered all his information, he makes a report to the officers and recommends the acceptance or refusal of the application. His report carries much weight in any further discussion by the officers or the members of the executive committee on the application in hand.

The reports made by the credit department are usually accompanied by the complete data secured, so that if the officers wish to do so they may refer to the original documents and form their own opinion as to whether or not the credit man has drawn the correct conclusion.

After the final determination of the executive committee or the officer in charge of loans, the papers are returned to the credit department where they are put into envelops of suitable size and filed in alphabetical order. After a file has once been started, all matters of credit importance are put into the envelop or folder, together with such memoranda as may be necessary. Newspaper clippings referring to the borrower and any matters of importance that come to the attention of the officer or credit man are also noted and filed.

12. *Value and care of credit.*—A man who has once established credit with a bank should appreciate its value. He should realize that his credit standing is a part of the character of his business and that it is something that may stand him in very good stead in times of stress. There are certain unforgivable sins in banking, which a depositor should never commit if he would keep his credit standing good. The four most important of these are: (1) kiting, (2) not taking care of one's paper when due, (3) overdrawing one's account, and (4) drawing against uncollected funds. They are of importance in the order given.

13. *Kiting.*—It is surprising how many business men permit themselves to be drawn into that foolish expedient, kiting. It is the most self-evident attempt ever made to bolster up an account and when once discovered, it is never forgotten. The officers, and all clerks who have to do with the account keeping,

are warned by the circumstance itself to keep on the lookout for further trouble.

Kiting consists in drawing checks between allied concerns, especially between those in different cities. A, in Louisville, draws a check in favor of B, in Dallas. B reciprocates by sending a check on this local bank to A. They deposit the checks and use the proceeds before they are collected.

Figuratively speaking, the kite always gets caught in the bookkeeping wires at both banks. No account can draw heavily against uncollected funds without calling the bookkeeper's attention to the fact. His first impulse is to analyze the deposit against which the check is drawn. Invariably he finds that a check was deposited, drawn on an account in the bank which has sent in for collection the item he is holding in his hands. There are many banks in the country which will immediately ask a kiting depositor to withdraw his account, and will not even give him a chance to explain the matter. Some people try to cover a kite by taking three concerns at different places into the transaction. This is a little harder to detect, but in the end it is just as sure to be found out as the simplest one. Every draft against uncollected funds must meet the eye of the bookkeeper who has all the information at hand to detect the danger.

14. *Overdue paper.*—It is careless, to say the least, to allow one's note to become due without giving it attention. Such an act of carelessness leaves a bad impression upon those who can judge a borrower only

by his acts. Past due paper enters into a special file and is presented to the discount clerk and officer every day until the matter is adjusted. If the borrower once forgets to give attention to his loans on or before the proper date, a black mark is registered, which is almost as indelible as the record of a kite.

15. *Overdrawing.*—Overdrawing one's account has been referred to already. No man can afford to take this chance with his bank.

16. *Uncollected funds.*—Drawing against uncollected funds is equally bad. Every depositor should remember that cash is the only kind of deposit he can make which the bank can put to immediate use. Clearing house checks must pass thru the clearing house. Checks drawn on out-of-town points must be sent there for payment.

Sometimes the returns are made by drafts on clearing houses. Many business men think that if it takes two days to go to a certain city, a check on that place should be paid and in the bank's hands within four days. They do not realize that under our system of independent banks, each one must make arrangements for the most advantageous collection of out-of-town items and that sometimes, even with the best of arrangements, it may take five days to collect an item payable at a town that can be reached in two days. The item must be received and passed thru the books of the bank to which it is sent. The depositor should give the bank plenty of time to collect all items before issuing checks against the deposits.

It is the only safe way. The bookkeepers are charged with the responsibility of referring to the officers all checks that are drawn against uncollected funds and this is a fact which the depositor should bear in mind.

The length of time required for collecting out-of-town checks is discussed at some length in the chapter on the Clearing House.

17. *Accommodation indorsement.*—"He that is surety for a stranger shall smart for it; and he that hateth suretyship is sure."

It would be well for a business man to bear in mind this proverb when trying to decide whether or not he should lend his name to help a friend. In the eyes of a banker, accommodation indorsement is an undesirable security. Let us examine a situation in which a request for accommodation indorsement might arise, and see how the entire transaction appears to the banker.

A dealer in hardware has used up all his credit in the trade, that is, he has bought all the goods that he can buy from the house from which he usually makes his purchases. His account at the wholesaler's is due, but he has an unusual demand for new stock. He is therefore compelled to pay cash. He has no borrowing account at the bank, since he has always preferred to hold off his creditors as long as possible rather than borrow to discount his bills. He must have the money, however, and so he goes to one of his neighbors whose credit is never used up and who is in good standing at the bank, and asks him to assist in raising the needed money by indorsing his name on a note. The neighbor does not like to make himself liable in this way and tries to decline. The hardware man feels that the unwillingness to indorse his note is a criticism of his standing in the community, and ill feelings are the result, even before the note goes to the bank.

At last the hardware man persuades his neighbor to give the required indorsement and he goes to the bank with the coveted piece of paper. An accommodation indorser is liable on the note to all parties except the person accommodated. The fact that he has received no consideration does not make any difference. He has indorsed to lend his credit to the paper and he may be held even by those who know his indorsement to be an accommodation and without consideration. Altho the banker knows the maker's condition, and knows that there is a possibility that he may not be able to pay the note at maturity, he does not wish to offend the indorser. After due hesitation he makes the loan to the hardware man, but notifies the neighbor that he is held responsible for the note.

It may be stated as a general rule, that accommodation paper of any class is not a desirable bank asset. The bank depositor who values his credit-standing will remember the proverb quoted, as well as the fact that this practice does not raise him in the estimation of his banker.

18. *Inquiries at the bank.*—Bank credit is valuable for a business man, especially in a community of

moderate size, where every man is acquainted with his neighbor. Banks are frequently requested to give information regarding the credit-standing of their depositors. While they guard carefully against giving details about a man's business, they must, of course, give some answer to the inquiries made. The value of a person's account with the bank, the nature of his business, his business methods and his general standing in the community, all have an influence on the banker when he makes his estimate. Even a small account, if properly handled, is well spoken of by the banker. When a depositor files a statement, the banker is always in a position to give information based on facts, if he has made a complete investigation of the borrower's credit-standing.

No man can prevent his creditors from asking questions about him, nor can he prevent his banker from telling what he knows. Suppose a business man should go to his banker and say: "Of course, you are called upon from time to time to answer inquiries regarding your depositors, and I know that you are careful not to divulge confidential information, but I wish that hereafter you would refuse to give any information or to express any opinion whatever regarding me." Then, suppose that a creditor of this business man follows him to the cashier's desk and makes a direct inquiry, to which the banker should reply, "Well, Mr. Credit Man, I would like to oblige you by giving you the information, but I have been instructed by Mr. —— to say nothing about him or his credit-standing. If you will ask me about any other of our depositors, I shall be pleased to help you all I can." The credit man would make every effort to find out what the banker knew about the credit-standing of this merchant, and if he failed, he would report to his house and instruct them not to ship any more goods to Mr. Merchant until he should have an opportunity to make further investigation.

One's credit-standing at the bank should be guarded with care. Misunderstanding, however insignificant, should not be allowed to open a breach between the banker and the depositor, for the changing of an account may hurt the depositor as much as it does the banker.

REVIEW

Make an analysis of the statement given on pages 72 and 73. In this analysis give particular attention to the following items: comparison of bills payable with accounts payable; comparison of finished goods, unfinished goods and raw materials; turnover of capital; relation of cash balance to amount borrowed; ratio of quick assets to current liabilities.

Make a similar analysis of the statement on pages 74 and 75.

What specific reasons, besides the results of the comparisons indicated above, would lead you to grant or refuse credit to either of these concerns?

Give an instance of check-kiting involving three parties in the transaction. What are the dangers to each of the parties?

A wishes to buy ten shares of stock in a good company, but has not cash enough to pay for them. What two possible methods may he adopt to obtain the money? How may the bank help him to use one of these methods?

Give the chief rules for analyzing a statement, with particular regard to ratios of volume of sales to capital, cash balance to notes discounted, merchandise to annual sales, accounts receivable to net sales, quick assets to current liabilities.

CHAPTER VI

BANK NOTES

1. *Definition.*—A bank note is the promise of a bank to pay money to the bearer on demand. At one time it was the custom of banks in the United States to issue notes payable at some fixed time in the future. Such notes were called "post notes" and, at the time, there was a reason for their issue. Payments to distant parts of the country had to be sent by way of the slow-moving mails of the day, and robberies were not infrequent. Notes payable only at a given time and at a given place were not a tempting spoil for the highwayman.

The Bank of England makes a small issue of post notes, "seven-day bills," for the purpose of making remittances thru the mails. In this country, however, we would consider the issue of post notes as an attempt of the bank to borrow on time, and would interpret it as evidence of unsoundness in the bank's condition. Undoubtedly the post note offers peculiar temptations for unsound banking, and its issue by national banks has therefore been prohibited.

Bank notes are a form of credit money in the community or country where they are generally acceptable. Like all other credit money they should not bear interest. Otherwise, their value would vary from time to time as interest-due dates approached. The first notes of the Bank of England bore interest and were inconvenient, as their value had to be figured whenever they changed hands.

Bank notes should be issued in uniform style, for round sums, and in such denominations as are convenient in daily transactions. They should be transferable without formality, and without recourse on the part of the holder to any previous holder except the issuing bank. Bank notes do not come under the statute of limitations. A note issued a hundred years ago is a valid claim today if the issuing bank is still in existence.

2. *Evolution of the bank note.*—The modern bank note is a product of slow development. Few countries, even today, have a perfectly satisfactory system of bank note issue. MacLeod finds that certificates representing deposits of gold and silver were issued in China, under the Chang dynasty, as early as 807. Credit instruments bearing some of the characteristics of bank notes were issued by the goldsmiths of London in 1670. All these notes were fully "covered"—i.e., they were backed sovereign for sovereign with a reserve of standard money. As these notes were more convenient to handle than the coins, which were of varied issues of differing weight and fineness, the custom of issuing them grew until the issuers began to print blank forms to be filled in with the names of depositors and the amounts due to them. Finally,

notes were printed in round sums ready for issue, and these were made payable to bearer or to his order, according to the wishes of the depositor.

After a while persons and firms of well-known credit began to issue notes which were not entirely covered by a metallic reserve. These notes were more convenient than the ordinary promissory notes of small merchants, because the makers were well known, the notes were issued for even sums, and were payable on demand. As they were paid promptly, they soon came to form an important part of the circulating medium. Finally, the advantage of having them non-interest bearing was seen, and they became even more convenient.

In the beginning any one could issue these notes and put them into circulation if people were willing to accept them. This was true in the early years of banking in America. In the course of time, it was found that unregulated note issue was fraught with danger to society, and the practice has been hedged about with certain restrictions.

3. *Cash reserve against notes.*—We have just seen that bank notes should be redeemable on demand in gold, or at least in some form of money that can be readily converted into gold. Since 1879, government credit money in the United States has been convertible into gold, but not always without inconvenience to both the bearer and the government. There can be no serious objection to making bank notes redeemable in legal-tender credit money as well as in

gold so long as the easy convertibility of the legal tender is assured. But the utmost care must be taken to maintain this convertibility, and there is always some danger that it may disappear. Easy and sure redemption in gold is the first requisite of a good bank note, and it will remain so as long as gold continues to be the standard medium for settling international debts.

In order to secure this feature of easy and sure redemption it is necessary for a bank to keep on hand a certain amount of gold or of convertible credit money. The proportion which the reserve should bear to outstanding circulation depends upon the customs of the people—upon the rapidity with which notes are brought in for redemption. This rapidity is found out by experience, and it may differ widely in various countries and even in different banks in the same country.

Each bank aims to carry as small a reserve as is consistent with safety, because money stacked away in the vaults earns nothing and requires storage space that is expensive. On the other hand, a good banker is always anxious to maintain a sufficiently large reserve, as otherwise he would suffer in the loss of popular confidence and eventually in the ruin of his business. Not all bankers, however, are wise enough to carry adequate reserves, and governments have often found it necessary to make certain reserve requirements. In such cases, the ratio of reserve is usually made the same for all banks of a particular class.

This forces some banks to carry a larger reserve than necessary, and for that reason it is unscientific. The burden is borne ultimately by the business public, and not by the banks. For these reasons, a legal requirement should not be made, unless it is absolutely necessary.

National banks are not required to keep in their own vaults any reserve against notes, but they must maintain a five per cent fund at Washington. Federal reserve banks are required to keep in their own vaults a reserve of 40 per cent in gold against outstanding circulation. Some foreign countries do not find it necessary to make a legal-reserve requirement. Other features of the reserve question, such as the combined reserve, will be discussed in connection with reserve against deposits. In the United States, we have had occasion to make more stringent legal requirements concerning reserves against deposits than in regard to reserves against note issue.

4. *Security for notes.*—Besides the maintenance of a cash reserve, various other means have been devised for insuring the note-holder against loss. So long as a bank is solvent and in operation, the prime requisite of its notes is that they be currently convertible into standard money on demand. But when a bank comes to wind up its affairs, whether for insolvency or not, note-holders are interested primarily in the question of ultimate redemption. It will be evident that some of the classes of security hereinafter mentioned may be used to insure current, as well as ul-

timate, redemption. They are primarily intended, however, for guaranteeing ultimate redemption, and must not be relied upon to any great extent for purposes of current redemption. The maintenance of an adequate cash reserve is the only way to insure current redemption.

5. *Guarantee fund.*—The establishment of a common guarantee fund, sometimes called "safety fund" or "circulation fund," is one of the means that have been devised to secure circulation. Under this system all banks contribute a certain amount to a common fund, which is used to redeem the notes of any banks that fail. The amount that each bank subscribes should bear a certain ratio to its outstanding circulation. When the fund is drawn upon to pay the notes of a bank that has failed, it should be built up again by a proportionate contribution from all the remaining banks. The objection may be made that this plan places a premium on bad banking by guaranteeing the notes of good and bad banks alike. The objection is valid. The establishment of a safety fund does not give any excuse for lessening the rigor of other methods of providing security.

A distinct advantage of the plan is that it causes each banker to watch all other bankers to see that nothing goes wrong. It undoubtedly gives an added security to the notes. The plan is being carried out successfully in Canada, but, as we shall see later, it is not the principal thing that gives Canadian bank notes their high standing. It was tried in New York

State before the Civil War and did not work well, but its failure is generally attributed to the fact that the fund was used at first to secure the deposits as well as the notes of failed banks.

6. *Bond-secured notes.*—Sometimes banks set aside a certain part of their assets as a special security against their notes. National banks, for example, are required to keep with the Treasurer of the United States a deposit of United States bonds equal in amount to their outstanding circulation. In case a bank fails, these bonds are sold, and the receipts of the sale are applied toward the redemption of its notes. Bonds may be withdrawn by the banks by retiring their circulating notes or by depositing in the Treasury lawful money to an equal amount. This feature, along with other methods of securing notes, places the ultimate redemption of national bank notes beyond the shadow of a doubt. No holder of national bank notes has ever lost a cent thru the fault of the system. The great defect of the plan is that it limits the amount of notes that a bank can issue to the amount of bonds it can buy at a price sufficiently low to make the transaction profitable. Moreover, the issue and retirement of notes is attended with too much time-consuming formality. Often the notes cannot be had when they are needed and, on the other hand, they may not be retired as soon as they have served the purpose for which they were issued. This defect is so serious that it renders the whole scheme undesirable.

7. *Notes issued against commercial paper.*—In some countries, banks are allowed to issue their notes in exchange for good commercial paper. In this case, ultimate redemption is secured by all the assets of the issuing bank, no particular class of assets being set aside for that purpose. It is evident that good, short-term commercial paper also serves as a kind of security for current redemption, since some of the paper in a bank's folio is constantly coming due, and the paper which is not due can usually be sold in the market. When times are dull or panicky, however, these sales cannot be made, and even the paper that is due may be uncollectible. At such times, a cash reserve is absolutely necessary if a bank is to continue to redeem its notes.

This plan has the great advantage of permitting a bank to issue notes as long as there is a real need for them, provided it can get enough lawful money for reserve purposes. An increase in the real demand for bank notes is always evidenced by an increase in the supply of commercial paper. There is, however, one danger to guard against. When times are good, every business is promising, and men are eager to borrow in order to extend their operations. Business men are likely to become too optimistic and to seek loans which are unwarranted by actual prospects. Even the bankers may be deceived. As a result, they will exchange their notes for commercial paper that is not so good as it looks, and the day of reckoning must come. The danger of over-expansion will be greatly minimized if all the bankers are strictly limiting their note issues to an amount against which they are able to maintain adequate cash reserves. Additional reserves become harder to get as over-expansion increases. When times are good and prices are rising above the level in other countries, the balance of trade goes against us, and gold begins to flow out of the country, thus reducing the supply of money available for bank reserves.

This plan of issuing notes against commercial paper, if intelligently carried out, is the best system of note issue.

8. *Notes a preferred debt.*—A further security is usually provided for note-holders by giving them a prior claim over depositors on the assets of a liquidating bank. If the assets of a failed bank are insufficient to pay both the note-holders and the depositors, even after the stockholders have contributed the extra amount for which they are liable under the double-liability provision, note-holders are paid before depositors. For various reasons the law gives note-holders better protection than depositors. In the first place, measures for protecting them are more obvious and more easily applied. Legislatures, moreover, have a way of thinking that notes form a kind of liability different from that of deposits, altho they are similar in many respects. It is, however, undoubtedly true that depositors, as a class, are better informed of the bank's condition. They can protect themselves more easily, and so they have less claim

on the protection of the law. Notes circulate among the poor as well as among the rich, and also among people who live at a distance from the issuing bank. The poor are often not in a position to judge the worth of a particular bank's notes; and if they were able to do so, in many cases they could not refuse to accept them, for fear of losing their jobs. For these reasons it is right that note-holders should be given a preferred claim to all or some part of the assets of a liquidating bank.

9. *Government guarantee of notes.*—To furnish a final security for bank notes, the government sometimes steps in and guarantees their ultimate redemption. If the credit of the government is good, this feature immediately gives the notes a wide range of acceptability, which is desirable. The objection to this plan is that it places too great a burden on the government. If the banking system breaks down, the credit of the government is affected. The banking system should be made so sound that government support will be unnecessary. If the system is in this condition, its notes will be accepted quickly enough. It may be argued that the government will not be hurt if the system is a sound one. This is true, but in such a case government guarantee is unnecessary and, after all, the possibility of failure, like the sword of Damocles, is always suspended over the government's head. Moreover, if the credit of the government should decline, as was the case with the United States during the Civil War, the loss of con-

fidence in the government might be reflected in the credit of the banks, and the whole situation would be rendered infinitely more embarrassing.

These are the principal means that have been devised for directly securing the ultimate redemption of bank notes. Their security is made better indirectly thru certain regulations which the government sometimes imposes upon issue.

10. *Limit of issue.*—Bank note issue has been the subject of much legislation. Bank notes, because of their service as a medium of exchange, have a peculiar interest to all the people, and they should be issued only under such conditions as make for the greatest public good. This does not mean that their issue should be hampered by much legislation. It has often been well said that every restriction on good banking is a tax upon the public. A community that needlessly restricts the use of credit in any form voluntarily puts fetters upon its industries and places them at a disadvantage in competition with those of other communities, where credit is allowed to develop in a natural way. Only such regulations should be imposed as are absolutely necessary to insure sound banking. In general, it may be said that restriction of note issue should be designed to secure good quality, and not to regulate quantity. The quantity of notes should never be arbitrarily regulated, except when necessary for the guaranteeing of good quality. With these principles in mind, let us examine some of

the various regulations which are imposed by law on note issue.

The quantity of notes is limited in various ways. A bank may be allowed to issue a certain quantity of uncovered notes with the provision that all issues above that relatively small amount shall be covered dollar for dollar with gold. This is the case with the Bank of England. Notes issued under this requirement are nothing more than gold certificates, similar in character to our gold certificates, which the Federal Treasury exchanges for gold. While these notes are more convenient than gold and are undoubtedly safe, they are not a good form of bank note, because their supply cannot be increased except upon the deposit of gold. The supply bears slight relation to the needs of business.

An elastic limit may be placed on note issue, the law requiring that a tax be paid on all issues in excess of the ordinary amount. The German law imposes a tax of five per cent on the surplus issue. This element of elasticity is intended as a provision for an emergency issue, which will be retired as soon as possible because of the heavy tax. If a tax is to be levied for regulative purposes, it would be more scientific to base the tax on deficiency of reserve, instead of on excessive circulation. Such a tax would tend to regulate quality directly and it would, of course, indirectly regulate quantity. The Federal Reserve Act imposes a tax on deficiency of reserve.

An arbitrary limit may be placed on circulation. The issue of the Bank of France in 1913 was limited to about 6,000,000,000 francs ($1,200,000,000). This restriction, however, is more apparent than real, as the legislative body has always raised the limit whenever there was any prospect of its becoming effective. An arbitrary limit of this kind, placed upon ordinary circulation, would be absurd if effective.

The issue of national banks is limited to an amount equal to their paid-in capital. There is a good reason for this limitation when notes are issued by a large number of independent banks with no central control. The justification of this limit is to be sought in the other defects of the banking system, however, rather than in any inherent virtues of its own. In the case of small banks, it is proper that some definite ratio should be established between banking capital and note issues. The capital, especially when double liability is imposed on stockholders, is a kind of guarantee of the obligations of a bank in addition to the ordinary assets acquired in the course of business, and it should therefore bear some reasonable proportion to all the liabilities of the bank.

11. *Other forms of regulation.*—In addition to limitation of issue, two other kinds of regulation are ordinarily imposed. The first of these is the requirement of redemption. A good system of redemption serves various purposes. In the first place, it is a means of insuring the parity of bank notes with standard coin. It is a test of solvency. Another impor-

tant service is the retirement of notes as soon as they have performed the work for which they were issued. Every bank should pay out only its own notes, and should return all other notes to the issuing banks for redemption as soon as they are received. Such a system may be voluntary, as in Canada, or compulsory, as in the case of our Federal Reserve banks. Most of the national banks have seldom taken the trouble to return the notes of other banks. A good redemption system is practically impossible where so many independent banks of issue are scattered over as wide a territory as they are in the United States. The annual redemption of national bank notes has averaged about 50 per cent of the circulation. Under the Canadian system, with a territory almost as scattered, but with fewer banks of issue, the entire circulation is redeemed about twelve times in the course of a year. Under the Scotch system, the circulation is redeemed about twenty times during each year. Swift and easy redemption gives to the notes of the Canadian banks an enviable reputation for soundness. The details of the system will be explained in Chapter XIII.

One of the most important forms of regulation is the requirement of reports and the official inspection of accounts and of the method of operation. In the case of the large central banks of issue in Europe, publicity alone is usually a sufficient guard against careless administration. But where a banking system is composed of numerous small banks, as in the United States, it has been found wise to provide for frequent governmental inspection, in order to make sure that the published reports do not misrepresent the facts. National banks are examined at least twice during the year.

12. *"Banking" and "currency" principles.*—Two schools of thought have developed, which hold different theories regarding the volume of bank notes that a community needs. The issue was sharply drawn in England during the controversy over the Bank Act of 1844. Advocates of the "currency" principle believed that note issues should be fixed at a point where they would vary in amount exactly with changes in the supply of gold. They agreed that a small uncovered issue might be made, provided the amount of uncovered notes was so small that the demand for note circulation could never by any chance fall below it. All notes above that amount should be covered dollar for dollar with gold. The defect of this scheme has already been pointed out. The plan assumes that a country always has need for a limited amount of bank notes. This amount is ascertained by experiment. The issue may be based upon the bank's assets, and need not be covered by gold. Any issues above that amount will merely displace gold from circulation to the exact amount of the issue, as they are issued only upon deposits of gold. No changes in the total currency supply can be brought about thru changes in bank-note circulation.

Exponents of the "banking" principle admitted that the demand for money within a community at a given time is definite in amount, but they contended that this amount changes from time to time. If the price level and the rates of interest are to be kept steady, the money supply should be made to vary with the demands of trade. They pointed out that variation of the bank-note circulation is the best way of securing this elasticity.

13. *Elasticity.*—One of the most important features of a good monetary system is elasticity. The supply of exchange media, whether it be gold or credit, should vary quickly and easily with the changing demands of trade. The ability to expand when trade is growing is no more important than the ability to contract when business is becoming dull.

We know that there are wide variations in the demand for money and credit in the United States and Canada. The need varies from year to year. More important still, there is a marked seasonal variation, which is due to the call of the South and West for funds with which to defray the expenses of planting in the spring and of harvesting and crop-moving in the fall. Any lack of money and credit when trade is active leads to exorbitant interest rates and low prices, while too great a supply means over-expansion and all the evils that go with it.

14. *Limited elasticity of gold.*—Gold, which is the foundation of every important monetary system, lacks the quality of adequate elasticity. The supply of gold coin within a given country can be increased in only three ways: by increasing production; by melt-

ing down gold ornaments, etc., and coining the bullion; and by importing. The supply can be decreased only by throwing coins into the melting pot or by exporting. The production of gold does not vary sensitively with the demands of trade. Even if it did, the annual production is so small, as compared to the existing supply, that the result would not be adequate elasticity. The melting pot is used as a cure rather than a preventive. It is resorted to only after the evils of inflation or restriction have done their worst.

Importation and exportation play an important part if they are regulated wisely and effectively. It is not because the amount of gold shipped bears so large a proportion to the total supply of exchange media, but because gold acts as a basis for so much credit that even a small change in the amount of it possessed by a country means a great change in the total supply of exchange media. Unhappily, many countries—and notably the United States—have not been able so far to regulate gold shipments intelligently. Later in this Text it will be shown how America's gold supply has been preyed upon and replenished at will by every great European country, while we have looked on in almost utter helplessness.

15. *Inelasticity of government credit money.*—Since changes in the gold supply are felt effectively only thru the resulting changes in the supply of

credit, it is important that the credit system of a country be properly organized if elasticity is to be secured. One of the forms of credit most widely used is government credit money, such as the greenbacks of the United States and the Dominion notes of Canada. Government credit money cannot be made elastic, for the simple reason that no credit money can be elastic unless it is issued in exchange for commercial paper; and that, for obvious reasons, no government can go into the business of discounting and purchasing commercial paper. This practice would throw open the gates to such a flood of corruption, and would lead to such a state of governmental paternalism, that it is not to be thought of under our present political organization.

Since a government cannot make its credit money elastic, it should leave the issue of credit money to the banks under such conditions as will secure soundness. The issue of subsidiary coins does not meet with the usual objection that is made in regard to the issue of government credit money. Indeed other money issued in limited amounts does no harm so long as the amount so issued does not exceed the demand of business when at its minimum. Up to this minimum amount there is no need for elasticity, and there are many reasons why coins should be issued only by the government, or, at least, under strict governmental supervision. Credit above this minimum should be issued only by banks and by business men. As much of this credit as is intended for general circulation, as a substitute for money, should be issued by the banks.

16. *How bank notes can be made elastic.*—Bank notes can be made elastic only by permitting the banks to issue them in exchange for commercial paper. When a business man wishes to buy something and has not the necessary cash, he can always borrow at the bank if there is a good reason for making the purchase—that is, if his wish is backed up by real ability to pay the market price. The bank may give him a deposit in exchange for his promissory note. Bank notes can be had if checks cannot be used, and the business demand for a medium of exchange is satisfied, provided the bank is permitted to issue notes against the commercial paper. Many occasions arise when there is need for some medium having a wider acceptability than a check. The issue of notes on the basis of commercial paper is in accord with the "banking" principle of issue mentioned in Section 12.

We have already pointed out the danger of overexpansion and the safeguards that should be provided, viz., the maintenance of adequate gold reserves, the provision for swift and sure redemption, the intelligent scrutiny of all commercial paper that is offered, and a close observation of general business conditions. The use of any kind of credit contains an element of danger, but this fact is no argument that it should be abandoned entirely. We take the risk of using steam and electricity for the conveniences which they bring, altho the danger of death from an explosion or by electrocution is ever present.

In the next chapter there will be a discussion of the elasticity of bank deposits and of the credit issued by business men.

17. *Profits from issue.*—Some people are unable to see why banks should be allowed to issue and charge interest upon notes for which they pay no interest. When a merchant exchanges his promissory note for the note of a bank, why should his note be discounted when he accepts the bank's note at par? There are two reasons. In the first place, the bank's note is worth more to the merchant than his own note. The bank's credit is better known. Then it must not be forgotten that the merchant's note is a time promise, whereas that of the bank is payable on demand. This is the real basis for discounting paper.

The profit to a bank from the issue of notes results from the fact that under a simple reserve system, the loanable funds of the bank are increased, while under a system of bond-secured notes, the return on a given investment of capital is greater than if the same amount were employed in making loans only.

Suppose a bank is permitted to issue notes on carrying a 60 per cent reserve against circulation, and pays a tax at the rate of one-half per cent per annum. Profits, as shown in the following table, will result.

PROFITS FROM $50,000 CIRCULATION

Money at 6 per cent

Gross income:		
$50,000 circulation loaned at 6 per cent		$3,000.00
Less: Tax on circulation, ½ per cent	$ 250.00	
Interest foregone on 60 per cent reserves:		
$30,000 at 6 per cent	1,800.00	
Expenses	62.50	
Total deduction		2,112.50
Net income from circulation		$ 887.50

The $1,800 interest foregone would have been earned on the $30,000 if loaned outright. The profit of $887.50 is made over and above this, so that the bank's percentage of profit on the amount of capital tied-up, i.e., $30,000, is about 2.96 above what could have been made by simply loaning the money outright.

In the foregoing illustration, it is assumed that only the $30,000 could be loaned. This would be true if the bank's customers were demanding cash and could not use checks. In ordinary times, however, borrowers leave the proceeds of loans on deposit; and the bank finds it possible to loan, not merely $30,000, but even $150,000—assuming the proceeds of all loans to be left on deposit and a 20 per cent reserve to be held against deposits. Evidently, it is more profitable to loan $150,000 outright than to issue $50,000 in notes and loan them.

In ordinary times, then, which is the more profitable.

note issue or direct loans? The answer depends upon which ties up the larger ratio of cash, whether a larger reserve is required against notes or against deposits.

In our national banking system, the reserve against notes is only 5 per cent while that against demand deposits runs from 12 to 18 per cent. Note issue would be much more profitable than direct loaning if our banks were not required to use so much cash in the purchase of bonds. The following table illustrates the point:

PROFITS FROM CIRCULATION BASED ON U. S. REGISTERED 2'S, 1930

At 101 *and Interest, Less* 1/32

$50,000 2 per cent bonds would yield		$1,000.00
$50,000 circulation loaned at 6 per cent		3,000.00
		$4,000.00
Less: Tax on circulation, ½ per cent	$250.00	
Sinking fund to retire premium on bonds, to be set aside each year	12.61	
Expenses (plate, express charges on notes returned, etc.)	62.50	325.11
Net income with circulation		$3,674.89
Net income from loaning $50,484.38 (cost of U. S. bonds at 101 less discount) at 6 per cent		$3,029.06
Increased income with circulation over loaning cost of bonds		$ 645.83
Less interest at 6 per cent foregone on 5 per cent redemption fund		150.00
Net profit from circulation		$ 495.83

In spite of the small profit and the risk involved, national banks find it worth while to issue notes.

Even under the conditions assumed in the first illustration, it would be profitable to issue notes at certain times. Business men may demand a medium of exchange which has a wider acceptability than that possessed by the check. If so, they will begin to draw cash out of the bank and to deplete its reserve. Under these circumstances, the ordinary reserve against deposits is not nearly sufficient. If a run is actually made, the bank may need cash up to 75 or 80 per cent of its deposits. The bank can protect its cash reserve by issuing notes, for notes do as well as gold unless foreign payments are to be made. When business men demand some kind of cash and will not leave their funds on deposit, the bank gains by issuing notes to protect its reserve so long as the amount of cash tied up in the operation does not equal the amount of notes issued.

REVIEW

What plans have been devised to secure the holder of a bank note against loss? Which are of value for the purposes of current, and which for ultimate, redemption?

What is the best plan of issuing notes? What are its dangers, and how may they be avoided?

Enumerate and discuss the various regulations imposed by law upon note issue.

What relation does the redemption of notes in the United States bear to their circulation? In Canada?

What is the difference between the "banking" principle and the "currency" principle? Which makes for the more elastic currency? Why?

In the table of profits given on page 107, assume that the amount of notes to be issued is $100,000, the price of U. S.

2's of 1930 is 100, and the expenses of issue \$100. Figure the bank's net profit from circulation. How much does the profit on the amount invested exceed the yield to be derived from a simple loan?

CHAPTER VII

DEPOSITS AND CHECKS

1. *Special and general deposits.*—There are two kinds of deposits, special and general. A special deposit may consist of anything of value left with the bank for safekeeping. The relation between the depositor and the bank in such a case is much the same as if he had stored furniture in a storage warehouse. The title to the deposit does not pass to the bank, but rests with the depositor. The bank must use ordinary care in protecting it, but if it is stolen without negligence on the part of the bank, the owner must bear the loss. The banker must return to the depositor the identical thing deposited. If the bank accepts a consideration for keeping the deposit, it is held by law to the exercise of greater care. Safety-deposit business does not present any perplexing problems to the student who views banking as a whole.

General deposits are obligations of the bank to pay money. They may be payable on demand or at a stated time in the future. The great bulk of commercial bank deposits are payable on demand. They create between the bank and the customer the relation of debtor and creditor; the title to the deposit passes to the bank, while the depositor acquires a right to receive a stated sum of money. The bank may satisfy a depositor by the payment of legal tender, no matter by what form of money or credit instrument the deposit was created, or how much the legal tender may have depreciated. During the Civil War the legal-tender greenback issues permitted the banks to pay their depositors depreciated paper money, even if gold had been deposited. At the time, when gold payments were desired, it was customary to make special contracts wherein this was specifically agreed upon.

2. *Origin of deposits.*—Bank deposits are created in various ways. Money may be turned over to the bank, checks or other cash items may be deposited and, finally, the proceeds of loans and discounts may be left on deposit with the bank. The bulk of bank deposits are formed by the last two methods. Most of the checks and drafts that a business man receives in the course of the day's business are sent to the bank for deposit instead of being cashed. Because of this custom, checks serve as a more effective substitute for money than other credit instruments of limited acceptability. The ordinary credit instrument of limited acceptability, such as the promissory note, does not necessarily economize the use of money, since it calls for the ultimate payment of money. The need for money is merely postponed. With the check the case is different. While checks call for money in the same way, they usually go back to the bank for deposit, and not for cash. If there is only

one bank in the community, it is easy to see that one deposit is drawn down only to build up another, and no money changes hands. Where there are many banks the matter is more complicated, but the results are the same, as will be seen when the clearing house is discussed.

Borrowers usually leave a large proportion of the proceeds of their loans on deposit with the bank. Otherwise the banks could not lend as freely as they do. It is not uncommon for a banker to ask a prospective borrower how much of the loan he intends to leave on deposit. The borrower who does not deposit is not considered a desirable customer. In the same way, a depositor who habitually draws out large sums at unexpected times is an embarrassing customer for the bank.

3. *Reserve against deposits.*—A bank must carry a reserve against deposits for the same reason that it must carry a reserve against circulating notes. The problem is peculiar in the United States. We have seen that national banks do not need to carry any special reserve against circulating notes, except the five per cent redemption fund at Washington, because of the slowness with which notes come back for redemption. With deposits it is different. It has been estimated that while the average dollar of money in the United States is exchanged only twenty-one times in the course of a year, the average deposits are turned over fifty times in the same period.

It must not be assumed that the bank has to pay out money each year to an amount equal to fifty times the total deposits. We must remember that in most cases a withdrawal of one deposit means an addition to another.

How much reserve shall a particular bank carry against deposits? The answer to this question depends upon the nature of the bank's business—upon the amount of money that is called for from day to day. The amount will vary with different banks and at different times of the year. Experience and foresight are the only guides.

As a rule, a bank which has a large number of small depositors does not need so heavy a reserve as the bank which has a small number of large depositors, any one of whom may be able to withdraw enough to cause the bank embarrassment. The bank with small depositors can figure on averages, and it is on a better basis, altho this principle should not be carried too far. If the deposits are too small, bookkeeping expenses and other overhead charges connected with them may be so great as to wipe out all the profits. This is especially true in a large city where an expensive clearing system must be maintained. There is a golden mean for each bank.

Reserves must be increased at certain seasons when the demands for cash are especially heavy. When the people of one community are sending money to another community a much smaller percentage of the checks and drafts are redeposited than is the case in ordinary times. Money not only leaves the bank, it leaves the community, and there is no prospect of its returning to the bank at an early date.

Wo to the bank which is confronted with such a situation when its reserves are low. The fall demand for money for crop-moving purposes forces such a situation on our eastern banks every year. The difficulty has not always been met successfully, as the wrecks of many crises testify.

4. *Reserves in the United States.*—Because of the great number of small banks thruout the United States, it has been found necessary to fix by law a minimum reserve requirement. As has been said before, any such blanket regulation can only approximate the reserve which each individual bank should hold. The minimum is higher than some banks find necessary if left to work out their own policies. On the other hand, some banks find it too low and at times voluntarily carry excess reserves.

For the purpose of reserve requirements, banks which are members of the Federal reserve system are divided into three classes. Those located in the central reserve cities (New York, Chicago and St. Louis) are required to maintain a reserve, in lawful money, of 13 per cent against demand deposits. In certain other cities, called reserve cities, the amount is 10 per cent. All other national banks, called country banks, must carry a 7 per cent reserve. All member banks are required to carry a three per cent reserve against time deposits. All required reserves must be deposited in the Federal reserve bank of the district.

There is no legal requirement as to the amount of cash which a member bank shall carry in its own vaults. The details of this plan will be explained in a later chapter.

The various states establish by law the reserve requirements of the banks chartered by them.

5. *Profits on deposits.*—Bankers everywhere are anxious to build up their deposits, because these are indirectly a source of profit. It must be remembered that deposits generally originate in two ways: the proceeds of loans are left on deposit; or money, checks and other cash items are left with the bank. When a borrower leaves a part of or all the proceeds of a loan on deposit, the bank has already made a profitable trade. It has given its promise to pay (the deposit) without interest, for the borrower's promise to pay with interest.

But the transaction described above cannot be carried out by the bank unless it has a supply of cash on hand, for its promise is to pay on demand, whereas the borrower waits until a specified time. Where does the bank get the cash with which to back up its loans?

The bank's cash is derived from capital subscriptions, earnings, sales of investments, loans paid back, etc., and from cash deposits. It is because cash deposits can be made the basis of further loans that banks are so anxious to get them. They are worth more than the average banker thinks they are, or at least more than he will admit. An illustration will make the point clear.

Suppose $1,000 in cash is left with the bank. The statement stands:

RESOURCES		LIABILITIES	
Cash	$1,000	Deposits	$1,000

Assuming that this deposit will be drawn out about as rapidly as other deposits are drawn upon—and there is no reason for assuming otherwise—a 20 per cent cash reserve will be enough to carry against it. This means that only $200 of the cash is needed for reserve against this deposit. Against the remaining $800 a loan of five times the amount, or $4,000, can be made safely, assuming that the proceeds will be left on deposit. The statement will be:

RESOURCES		LIABILITIES	
Cash	$1,000	Deposits	$5,000
Loans and discounts	4,000		

On the basis of the original $1,000 cash deposit, for which the bank pays little or no interest, $4,000 of interest-bearing loans are made. If the bank pays no interest on deposits, and charges 6 per cent on loans, it makes a gross profit at the rate of $240 a year.

6. *Inducements to depositors.*—There is keen competition among banks for deposit accounts. In return for the use of the general deposit, which is so profitable, banks have been led by competition among themselves to offer many valuable inducements to depositors. Among these are the following:

(a) Checks—The bank pays the checks of the depositor, taking the risk of their being genuine and assuming that the money is paid to the person designated by the depositor or by his order. This service is of great value to the depositor, for it saves him the inconvenience and the expense of making cash payments.

(b) Collections—The bank collects the checks and all other items of credit for the depositor, often at considerable expense. It offers the depositor a cheap and easy way to collect amounts due by drawing sight drafts on his debtor and collecting them thru his bank. Since the establishment of the custom of sending local checks in making small payments to creditors located in the larger cities, the associated banks in several of the larger cities have been compelled to charge a uniform fee for collecting out-of-town checks, the rate being usually one-tenth of one per cent, with a minimum charge of ten cents per check. Even this cost to the depositor has been lowered thru the federal reserve clearing system.

(c) Safety—The bank relieves the depositor of the risk of caring for his money.

(d) Loans—The bank usually feels under obligation to lend to a depositor on more advantageous terms, and usually with less rigid requirements, than to others. It can do so because it is more or less acquainted with the affairs of the depositor and can accept personal credit when collateral security would be required of non-depositors. The greatest advantage, however, comes in time of panic, when funds are needed most and when all the banks are refusing to lend except to their depositors.

(e) Increased credit—The bank connection frequently increases the credit of the business man. A good banking reference is often of great advantage in business. The banks must be constantly on their guard against persons who use their connection with the bank to gain unmerited credit.

(f) Interest on balances.—Sometimes the banks pay interest on the daily balances. This practice was an innovation of the trust companies and was due to the fact that the deposits in the banking department of the earlier trust companies were practically time deposits. When the character of the deposits gradually changed to demand deposits, the custom still prevailed. Competition of trust companies is forcing many commercial banks to pay interest on the daily balances of their larger depositors.

7. *Should interest be paid on deposits?*—Some of the reasons advanced by those who think interest should be paid on deposits are the following:

First, because it is right to share with a depositor the profits earned on his deposit.

Second, because interest must be paid in order to compete with trust companies and private banks and bankers. This is a convincing argument. Many business men carry two accounts, one with a trust company, at interest; the other with an ordinary bank, without interest. Of course, the cream of the deposits, the ones least often disturbed or used, go to the trust company. This may turn out to be a short-sighted policy for the depositor. If his banker finds it out, he may lose favor, and justly so. A time may come when he will have to call on his regular banker, and not on the trust company, for some accommodation.

Third, in foreign countries bankers uniformly pay interest. Why should ours refuse?

Fourth, banks depositing with other banks demand and obtain interest. Is it not illogical for them to refuse interest to depositors who are furnishing the very funds which are redeposited?

An argument advanced against paying interest is that banks will take greater risks in lending in order to earn the interest they have promised. The argument has much truth in it, and for this reason some states forbid or regulate the payment of interest.

Banks that pay interest will not do so much to accommodate their depositors in the way of making loans. This thought prevents many depositors from demanding interest. In Europe, where interest is demanded, the depositors are not so dependent on the banks for loans as are business men in the United States. European borrowers take their notes to the bill-brokers, who, in turn, negotiate them with the banks or sell them in the general market.

On the whole, it appears that the depositor who carries a large balance steadily can justly ask for interest. It will be shown in the next section that the small depositor is in no position to ask favors. In practice, it may often be wise for even the large depositor to forget the interest payment. Our depositors get from the banks many things for which they pay nothing. When they are as independent of the banks in borrowing as Europeans are, they may begin to demand interest with some prospect of getting it. Many banks now find it wise, even necessary, to pay interest on their more important accounts.

8. *Minimum balance.*—In recent years, banks have been paying more attention to the cost of carrying accounts than they did formerly. They now insist that accounts be maintained on a profit-making basis. In New York City, some banks have gone so far as to set a minimum average balance to be maintained, and to charge a depositor when the balance falls below that figure. Some banks simply refuse to carry small balances. This interests the depositor of personal funds more than it does the depositor of business funds. The minimum balance is usually set so low that it does not affect the business man even if the volume of his business is small, provided his account is carefully managed.

Some bankers deal with the problem in a general way. They hold that since a bank receives its charter from the state, it is a public institution, and that, therefore, it should conduct its business as a lawyer or a doctor conducts his, taking every account that is offered, except those of depositors who would abuse the privilege, and making the good accounts offset those which carry only a small balance.

Other bankers believe that it is not the amount of balance maintained, but the amount of work that an account gives the bank, which should determine whether or not the account is profitable. They endeavor to find out the actual cost of carrying the accounts and to settle each case on its merits. The number of bankers who hold this view is increasing yearly.

Accounts differ in the amount of trouble they give and in their worth to the bank. An account maintaining a balance of $10,000 is worth many times as much as the account that carries a $1,000 balance. On the other hand, it may happen that the small account will wield ten times as much influence as the large one in connection with other accounts.

9. *Inter-bank deposits.*—Three reasons are primarily responsible for banks making deposits with one another. The first is that banks want balances in other cities against which they may draw drafts. As will be shown in the Modern Business Text on "Domestic and Foreign Exchange," New York exchange is the business man's money in the United States. A Louisville buyer sends a New York draft to his creditor in Seattle. Because of the demand for drafts on New York, banks all over the country carry balances with some bank or other in New York City. The New York banks, in turn, send to their depositing banks items for collection in their vicinity. The banks that do business with one another in this way are called correspondent banks. The larger banks have foreign as well as domestic correspondents. If

a bank has a great number of branches, as, for example, the Canadian banks have, the need for correspondents is lessened.

Banks often deposit with other banks funds which they regard as reserves, but for which there is no immediate need. Under the Federal Reserve Act, national banks are no longer permitted to deposit any of their required reserves with other national banks. They may deposit excess reserves, however, and state banks may deposit a part of their legal reserves. Most of these deposits go to New York City banks. The reason for this, and the results of the practice, will be explained in a later chapter.

A bank often finds itself with more cash than it needs for loaning purposes in its own community. It has made all the loans it can make with safety and at a profitable rate of interest. To loan more may mean either or both of two things, loaning to speculative and risky enterprises, or bringing the local rate of interest to a point so low that the business will not be profitable. After the rate has once been lowered it may not be easy to raise it again. The way out of the difficulty is to send the funds to some other community that can use them.

10. *Need for a discount market.*—Unhappily, it is not always possible for such a bank to find the community which has the greatest need for the surplus funds. The cash may be wanted again within a few weeks or even within a few days. Many of these funds find their way to the big cities, especially New

York, where they can be loaned on call. The cities get the funds at a low rate of interest, usually two per cent, altho there may be many smaller towns where business men would be glad to pay a much higher rate. Under our banking system, it is almost impossible to learn about the small town demands. At any rate, the cost of looking up the matter is too great to warrant the business.

This condition could be improved in two ways. If our banks had branches thruout the country, it would be easy to shift funds to the points where they are needed most. Apparently, we are definitely committed against a branch banking system. Even without branch banks, the question would be simpler if we had a large, steady market for commercial paper. Paper from all parts of the country would then get into the market and banks everywhere could buy it, knowing that it could be sold quickly if cash should be needed. A Massachusetts banker might hold the note of a manufacturer in Oklahoma, and so the surplus funds of the East would be made available for use in the West.

At present, we have only a few banks that really deserve to be called national banks—banks that do a nation-wide lending business, or have information about credit conditions thruout the country. Our bankers for the most part are local money-lenders. They cannot be anything else when there are 27,000 of them thruout the whole country, working independently and competing with one another. A good market for discounting commercial paper would do much toward bringing them together. The Federal Reserve system may do something by means of its rediscount function.

11. *Guaranteeing deposits.*—A movement has long been on foot in the United States for the guarantee of bank deposits by the Federal government or by the states. The plan has been tried in Oklahoma, Kansas, Nebraska, South Dakota and Texas, and has been urged elsewhere. Bank failures and consequent losses to depositors have been so small in the past that it is estimated that the levying of a small assessment on each bank would create a fund large enough to pay the depositors of all insolvent banks. If such a fund were created, the banks would command implicit confidence, and they would not be liable to "runs."

The plan has been vigorously attacked, however, by the banks. Their theory is that the system would place a premium upon incompetent and dishonest banking. Under present conditions there is little doubt as to the correctness of the contention. The strong bank would be taxed to pay the depositors of the bank that failed, and it would also lose the prestige that ordinarily results from its strength. Under such a system depositors would pay little attention to the stability of a bank, because their deposit would seem as secure in one bank as in another. They would be governed largely by the inducements offered by the various banks, and in spite of strict regulations it would be very difficult to keep unwise inducements from being made without the knowledge of the authorities. The inevitable result would be the establishment of many new banks, expansion of credit, speculation and, finally, collapse.

The advocates of the plan claim that these conditions can be prevented by frequent and searching examinations. This would be possible only if such examinations were possible, and it has been the experience of the country that they are not. Many banks have failed only to have the receivers discover that they have been insolvent for a long time without the knowledge of the authorities who have examined them. This would be particularly true if a national system of guarantees were adopted to cover 27,000 banks operating under different conditions. Whether or not effective examination is possible in a single state where banking conditions are uniform is an unsettled question. The experience of those states which are experimenting with deposit guaranty will be watched with interest because, if the experiment proves successful, it may be generally adopted as a great advance in the science of banking.

12. *Deposits used as currency.*—The deposit, in the form of checks, acts as a medium of exchange and a substitute for money. So far as a bank is concerned, it constitutes a liability which is in every way like a bank note, except that it circulates less widely and for a shorter time. A check passes thru com-

paratively few hands before it gets into the bank upon which it is drawn. Consequently, bankers find it necessary to carry a larger reserve against deposits than against notes. This is particularly true in the United States, where bank notes are not returned to the issuing bank for redemption but are paid out again over the counter by the banks that receive them.

13. *Need for a central bank.*—So long as a bank is able to extend loans it can furnish its customers with deposit accounts which serve the purposes of a medium of exchange for most ordinary transactions. But the bank may reach the limit of its loaning power. The cash may get so low that it cannot risk the assumption of any more deposit liabilities. Borrowers with urgent and legitimate demands may come only to be turned away, unless the bank can find some way out of the difficulty. The logical thing for the bank to do at such a time is to take some of the commercial paper in its portfolio and rediscount it with another bank. But all the banks may be in the same position.

If this is the case, the only thing that can save business from a credit and currency stringency is the establishment of a great central bank to which all the banks can go to rediscount. But even the resources of such a bank would soon be exhausted if it should pay out gold during a crisis. The central bank should be given power to issue notes in exchange for the paper which it rediscounts. The banks can then pay out these notes and hold their reserves.

Of course, there should be a limit to the amount of notes which the central bank can issue, for it must be able to redeem on demand. The volume of rediscounting must then be regulated according to the gold reserve held by the central bank. In later chapters it will be shown what steps are taken by the great central banks of the world to protect their gold reserves and even to build them up when necessity arises.

14. *Relation of business credit to bank credit.*—We have attempted to show how the loans of a bank are related to the liabilities that it assumes against them, whether those liabilities happen to take the form of notes or of deposits; and how the liabilities in turn are related to one another, to the gold reserve, to the rediscounting bank and to a general discount market. It remains to be shown how the credit which business men extend to one another is related to the credit extended by banks.

A typical example will serve to illustrate the point: White, a piano manufacturer in Philadelphia, sells to Tyson, a wholesaler in Massachusetts, offering a liberal discount for cash, as he needs working capital. If Tyson is a good merchant he will borrow from his bank and pay White cash so as to take advantage of the discount. If Tyson cannot borrow, White may have to borrow the funds necessary to cover the transaction, and carry Tyson on his books. If neither can borrow, Tyson must either wait for the goods until he can pay cash, or do without them altogether.

Suppose White borrows and carries Tyson on his books. Tyson sells the pianos to various retailers and carries them; and they, in turn, sell to their customers on the instalment plan. Hard times come, and the instalments are not paid promptly. Retailers cannot pay Tyson, he cannot pay White, and White fails to meet his note at the bank. This is rather an extreme example, but it illustrates conditions in the piano trade and, to a certain degree, it illustrates conditions in all business.

Of course, it may be said that White, Tyson and the retailers should all carry a heavy cash reserve if they are engaged in that sort of business. They may do it in ordinary times, but a temporary period of prosperity may make them unduly confident. They may not foresee the impending stringency in time to prepare for it. Consequently, they and their bankers too, for that matter, may go along living in a "fools' paradise" until they are caught in the final crash.

At such a time it is highly important that the bank be able to extend White's note. If it cannot, it may spell ruin for White, and perhaps for Tyson and the retailers as well. The bank is likely to have a number of notes defaulted at the same time. Other banks may be in the same position. Unless they have a strong central bank to fall back upon, a general crash in business may result. In the last analysis, business credit is absolutely tied to the banking system.

So far, in discussing the need for an elastic credit system, we have laid emphasis upon the side of expansion. In later chapters, especially in those on the

Canadian banking system and the Federal Reserve system, there will be a discussion of the importance of contractability and of the means by which it can be secured.

REVIEW

From what different sources does the bank obtain the cash that it loans?

Explain the similarity between the bank's liability to its depositors and its liability to noteholders.

What standards are applied by banks to determine whether or not accounts are profitable?

In case a bank finds itself with funds for which it has no immediate use, what does it do with them?

CHAPTER VIII

THE CLEARING HOUSE

1. *Primary functions.*—The essential function of a clearing house is to simplify and facilitate the daily exchanges of items between banks and the payments of balances due to and from one another. Other important functions have been added gradually until the clearing house is more than a mere collecting machine —it is a cooperative association of banks working for the common good of its members in many different ways.

In Canada both bank notes and checks are sent thru the clearing house. Notes are not cleared in the United States, because the function of issue has had only a rudimentary development in our banking system, and hence little importance is attached to note liabilities. The growth of the deposit business, however, has put into circulation an enormous number of checks. Most of these are deposited in banks other than those against which they were drawn. The bank receiving checks naturally wishes to collect from the drawee banks as soon as possible.

Before the organization of clearing houses, it was necessary for each bank to send by messenger, to all the other local banks, claims to be cashed. Huge sums of money were carried thru the streets at great risk of accident and theft. Two banks would have large sums on the way to each other at the same time when a small remittance one way or the other would have settled the balance. The whole system was cumbersome and expensive.

2. *An illustration.*—To illustrate the advantages of a clearing house, suppose four banks in a town send in items as follows:

No. 1 checks on No. 2....	$208,500	No. 2 checks on No. 1....	$212,000
No. 1 checks on No. 3....	150,250	No. 2 checks on No. 3....	125,200
No. 1 checks on No. 4....	87,360	No. 2 checks on No. 4....	98,500
	$446,110		$435,700
No. 3 checks on No. 1....	$156,200	No. 4 checks on No. 1....	$119,500
No. 3 checks on No. 2....	153,460	No. 4 checks on No. 2....	106,000
No. 3 checks on No. 4....	73,000	No. 4 checks on No. 3....	69,440
	$382,660		$294,940

The sum of all the checks sent in is $1,559,410. By crediting each bank with the checks sent in by it, and debiting it with the checks sent in against it, we obtain the following balances:

	Dr.	*Cr.*
No. 1 owes a balance of	$41,590	
No. 2 owes a balance of..........................	32,260	
No. 3 has a credit balance of		$37,770
No. 4 has a credit balance of		36,080
	$73,850	$73,850

The payment of $73,850 into the clearing house by the debtor banks and out again to the creditor banks saves the exchange of $1,559,410 between the banks. The percentage of cash required to total the clearings is about 4.76. Imagine fifty banks clearing $300,000,000 by a double transfer of $13,680,000, and you have an idea of the enormous saving in trouble and expense made by the New York Clearing House in a single day.

3. *New York Clearing House.*—The New York Clearing House was organized in 1853. A description of its work should be interesting, as it is the most important institution of its kind in America. It was located originally in a basement room at 14 Wall Street. From there it moved from place to place until its present quarters in Cedar Street were completed in 1896. Mr. James G. Cannon in his "Clearing House" describes the interior of the building as follows:

> The clearing room of the New York clearing house is a beautiful and commodious apartment, 60 feet square, surmounted by a dome rising 25 feet above the walls. Light enters through the glass forming the upper part of the dome, and, when necessary, additional illumination is secured by the use of electric lights, which encircle the base of the dome. Four rows of desks occupy the floor, with sufficient space between for an easy movement of the clerks in delivering the exchanges. Each member has his own numbered desk, separated from those on the right and left by a network of wire. At the east end of the room is a manager's gallery, elevated sufficiently to command an easy view of the scene of operations. It is made accessible in front by steps, and in the rear by an elevator.

4. *Process of clearing.*—Mr. Cannon also gives a detailed account of the process of clearing, which may well be quoted here:

Each business day, at 10 o'clock, the exchanges take place between the banks. About fifteen minutes before the hour designated, the clerks begin to arrive. Formerly it was the custom for each member to send only two clerks, but so numerous and cumbersome have become the exchanges of many of the banks that it is now necessary to send one and sometimes two extra clerks to assist in transporting the items to and from the clearing house and in delivering the packages.

The two essential representatives of each bank are the "delivery clerk" and the "settling clerk." The former delivers the packages brought, and the latter receives the return packages from the messengers of the other banks.

Each member sends its items for the other banks made out separately and inclosed in envelops, with the amount listed on the "exchange slip" attached to the exterior. On their arrival at the House, the settling clerks furnish the proof clerk, sitting at his desk in the manager's gallery, with the "first ticket," upon which is entered the "amount brought" or "credit exchange," and which the latter transcribes on the clearing-house proof under the head of "Bank Cr." The total of the amounts thus brought by the several clerks constitutes the right-hand main column of that sheet. If each messenger has a package for each of the other banks, there are 2,500 in all to be delivered.

As a fact, in all other respects than the quantity of packages, this is the number of transactions between the clerks, for it is found in practice better to use a blank slip than to omit a slip merely because there is no amount to put upon it. This plan saves doubt and unnecessary searching when looking after the proof. The stationery used by each of the several banks is put up in sets in numerical order, and this is a reason why it is easier to use all the slips than to discard those which happen to have no items. Accordingly, as the delivery clerks pass the desks, as is described farther on, it is the rule to deposit the "small ticket" with the receiving clerk in each case, whether there is a package corresponding to it or not. When the settling clerks come to make their summing up, first checking back by the small tickets, they find that the blank spaces in their sheets are justified by the blank tickets of corresponding numbers, and are in this respect assured of the correctness of their work.

When the hand of the clock points to a few minutes before 10 o'clock the manager appears in his gallery, usually surrounded by a group of visitors. At one minute before 10 he sounds a gong as a signal for each of the clerks to station himself in his proper place. The settling clerks occupy their separate desks on the inside of the counter, while the delivery clerks form on the outside with their exchanges either on the left arm or carried in a box or case of some light material. The delivery clerks arrange themselves in the consecutive desk order, and stand ready for delivery as they pass along the counter. They carry "delivery clerks' receipts" containing the amounts for each bank arranged in order, upon which the several settling clerks, or their assistants, give receipts for the package delivered.

All are now in position for the exchange. The manager calls "ready," and promptly at 10 o'clock he sounds the gong again and the delivery of the packages begins. He looks down upon four columns of young men moving simultaneously like a military company in step. At the start each advances to the desk in front, where his first delivery is to be made. He deposits the package of items and also the receipt slip, on which the assistant of the settling clerk (or, in the case of small banks, the settling clerk himself) writes his initials opposite the amount of the package delivered, in the blank space provided for that purpose. At the same time, in an opening in the desk, provided for that purpose, he deposits a "small ticket" containing the amount of the package. If correct, it must agree with the amount listed on the "exchange slip." This process is repeated at the desk of all the banks, each clerk making the complete circuit in ten minutes to the point from which he started.

Being now at liberty, each delivery clerk takes back to his bank the exchanges deposited by the other messengers, while the settling clerks remain until the proof is made.

The settling clerks, immediately upon the completion of the exchange of packages, sum up, as quickly as possible, the amounts entered on their statements under the head of "Banks Dr." Upon ascertaining the total they make out a "second ticket," containing the credit and debit exchanges and the balance, and send the same to the "proof clerk," who transcribes the debit exchange under the head of "Banks Dr." (the credit exchange having been already entered), and the balance on the credit or debit side, as the case may require.

While this is being done the settling clerks are checking back from the small tickets to ascertain whether the amounts agree with the amounts listed on their statements from the exchange slips. By this time the proof clerk has footed the four columns on his sheet, namely, the debit and credit exchanges and the debit and credit balances. If the former two agree with the latter two the work is correct, and the result is announced by the manager, who calls off credits and debits.

As he calls off these balances, which are named in thousands of dollars, the hundreds and fractional parts being omitted, the clerks list the amounts on a special slip provided for the purpose, and thereby secure a general report of the balances of the day to take back with them for the inspection of their several cashiers. By these reports the managers of the several banks are informed of those who have balances to be paid to them by the clearing house, and also of those who are to pay amounts into the clearing house.

The time elapsed, since the manager sounded his gong for starting the work, up to the time of the completion of the proof, is perhaps forty-five minutes, or possibly a little more. Three-quarters of an hour is the limit before fines are in order against those who have made the errors that prolong work, but it is not often that it becomes necessary to impose fines. The record time is thirty-five minutes, altho the dates when the proof has been reached in thirty-seven to forty minutes from the time the delivery clerks started on their rounds are numerous. When a particularly good showing in this regard has been accomplished, the announcement of the result by the manager is very likely to be greeted with applause.

But suppose, as not infrequently happens, there is a discrepancy. The proof sheet does not balance, which clearly indicates that there is an error in the work of one or more of the clerks. The manager immediately announces the difference and the clerks proceed to search for it.

Various methods are resorted to, according to the nature of the difference. Usually the manager calls for an exchange of sheets, to the right or to the left, for examination of footings, and in cases of apparent error in entry the amounts are called back. This is the final method of revision, and if the additions are correct it must make the proof.

Thus far, no money has entered into the transaction. Checks, notes, drafts and other items have passed through the exchanges, but as yet no occasion has arisen for the use of a single penny. Evidently, however, the clearing is not yet complete. Each member has in his possession paper drawn upon himself, which the other members have credited on their books, and likewise each member has given in exchange to each of the other members the paper drawn upon them, respectively, and which he has credited upon his own books. But the possibility is very remote that the amounts of the items delivered by any member to the other banks will exactly balance the sum total of the items received from them. Indeed, so slight is the chance of such an agreement that in the whole history of the association there has not been a single instance of this kind, altho, as we shall see, the approach on one occasion was within one cent of an exact exchange. Hence, each day after the exchange the general proof will show a debit on the part of some of the banks and a corresponding credit on the part of others. To complete the clearings, therefore, it is necessary for the banks to settle these balances.

Accordingly, before half past 1 o'clock each debtor bank, in compliance with the requirement of the constitution, pays into the clearing house the amount of its debit balance and obtains a receipt for the same, signed by the assistant manager. After half past 1 o'clock the creditor banks receive at the clearing house their respective balances, and give their receipt for the same in a book provided for that purpose; but in no case can a creditor bank receive its balance until all the debtor banks have paid in.

5. *Settlement of balances.*—There are various ways of settling balances. Most clearing houses settle their balances in money; some require gold coin exclusively; and others accept any kind of money except small silver and minor coins, which are excluded, because of their bulk and weight, when counted in large quantities.

Some clearing houses settle their balances by means of manager's checks on the debtor banks. The creditor banks send to the clearing house for these checks, which may be drawn on any debtor bank. The clerks then present the checks to the debtor banks and secure the money. If the amounts are small, the checks are carried over until the next day and put thru the exchanges, just the same as any other check. When this is done, the liability of the manager of the clearing house for their payment ceases at the close of business on the day when the checks are issued, and the creditor bank assumes the risk for carrying them over.

In some cities, the debtor banks borrow the credit balances from the creditor banks before actual settlement, and thus minimize the amount of cash to be handled. The borrowing banks usually pay interest for the amounts loaned.

Clearing house gold certificates are sometimes used. The clearing house provides adequate vaults in which gold coin is deposited, and issues receipts in favor of banks that make deposits. The banks then indorse these receipts and use them in settlement of balances at the clearing house. The clearing house pays out these certificates the same as actual gold or currency. They are recognized by the National Banking Act as equivalent to gold, and may be counted in the reserves of the national banks. They are issued in large denominations, usually $5,000 and $10,000, and are valuable only in settlement of balances between clearing house banks. The system makes a safe and convenient method of having gold coin in a non-negotiable form available for the payment of large balances.

6. *Clearing house loan certificates.*—Loan certificates are issued in times of financial crisis to help the weaker banks, which might otherwise be unable to meet their obligations. If the public should suspect that the reserves of a particular bank were getting dangerously low, a run would be started, which might spread to the other banks and cause general embarrassment. At such a time, the clearing house banks make a special agreement whereby any member may deposit certain types of security as collateral with the clearing house loan committee and receive loan certificates. The ratio of certificates issued to the

amount of collateral deposited has varied all the way from 50 to 100 per cent.

Usually the certificates are intended for use only in settling clearing house balances; but in some communities, especially where payroll demands are heavy, they are issued in small denominations and put into general circulation. Whether used in one way or the other, they serve the bank just the same as so much cash, for they are paid out to the clearing house or over the counter in place of cash. Denominations have varied from twenty-five cents to $100,000, according to the use intended. Interest at the rate of from five to ten per cent is charged against the borrowing bank in order to insure cancellation of the certificates as soon as possible. The interest received is paid to the banks which hold the certificates as a result of credit balances at the clearing house.

The issue of loan certificates is a signal to the public that the banks are standing together, and the usual result is restored confidence. The clearing house often refuses to publish the names of banks applying for certificates. In fact, the stronger banks sometimes take out certificates which they do not need at all, simply to create a general impression in favor of the practice. The plan has been devised as a substitute for the issue of currency against rediscounted paper. It would probably never have been resorted to if we had had an elastic credit system with some central rediscount agency. The Federal Reserve system may render it unnecessary in the future.

7. *Examination of members.*—Most clearing houses require periodical reports from members. Some go so far as to conduct examinations, from time to time. Much can be said in favor of clearing house examinations. They often reveal bad investments in time to prevent serious loss and act as a check upon mismanagement. It has been urged against them that they place too much information about member banks in the hands of the manager and the officials of the clearing house. This may well be true. The St. Louis Association provides in part against this danger by contracting with the examiner that he shall not accept any position in a bank within 300 miles of St. Louis within a period of three years after leaving the employ of the clearing house, unless with the consent of the committee on management. Banks, in many cities, have so far been unwilling to submit to clearing house examination.

8. *Other activities.*—We can mention here only a few of the activities of clearing houses in different parts of the country. The associations of New York and Boston aided the government with large loans in the dark days of the Civil War. Some clearing houses have fixed uniform rates of interest to be paid by member banks to depositors, and in a few cases the minimum rate on loans has been agreed upon. A common practice is to fix uniform rates of exchange. In some clearing houses, members report the names of customers who violate the ordinary rules of business integrity. In some cities, advertisements for all

members are placed thru the associations. In others, the members are forbidden to solicit business from the customers of another member. Various other rules are agreed upon. Some of them are of doubtful merit. They are mentioned here merely to indicate the extent to which cooperation thru the clearing house has been carried.

9. *Collecting country checks.*—The clearing of country checks has not been mentioned so far because it belongs more properly in the discussion of domestic exchange. The methods employed thruout the country are so generally unsatisfactory, however, and the system used in a few of the cities has proved so excellent, that it may be well to explain briefly how the work is done in one of the cities.

The wastefulness of the collection methods employed is strikingly illustrated by Mr. Cannon in his story of the journey of a check drawn on a bank in Sag Harbor, N. Y., and payable to a firm in Hoboken, N. J. This check, after being deposited in Hoboken, finally reached Sag Harbor after going thru New York, Boston, Tonawanda, Albany, Port Jefferson, Far Rockaway, New York (again), Riverhead and Brooklyn. Under an efficient system the check would have gone straight home thru New York, with a great saving of time, postage, clerical labor and stationery.

A check is booted around the country in this fashion because a bank finds it less troublesome to inclose it with other items sent to some regular correspondent near the drawee bank than to hunt up the proper special correspondent for it alone. The bank saves something by shifting the job to another. This bank, in turn, passes the check along by a chance method until it finally reaches home. The amount of funds constantly tied up in transit between banks in the United States is enormous.

10. *Boston plan.*—The plan of the Boston Clearing House for collecting country checks is the most noteworthy. The department having this work in charge, called the Foreign Department, began business in 1900. Each day, the banks sent in checks on country banks for collection. Those checks were mailed out the same day and, on the morning of the second day following, the amounts were credited to the collecting banks. City banks were thus able to collect funds on country checks with only one more day's delay than was required for city checks. Some exceptions had to be made to this rule in the case of checks drawn on banks located at a considerable distance, but the exceptions amounted to only five per cent of the total, and for them only one more day was required.

About 90 per cent of all New England banks were included in the system. Any bank which did not enter saw its checks go to a discount in Boston. The cost of collection averaged about seven cents per thousand dollars. The work of the Foreign Department has been taken over now by the Federal Reserve Bank of Boston.

In the chapter on the Federal Reserve system there is a discussion of the clearing system which is now being operated by the Federal Reserve banks.

11. *Significance of clearings.*—Bank clearings are properly considered one of the best barometers of trade conditions. Over 95 per cent of the nation's business is done by check. Not all these checks pass thru the clearing houses, and therefore the volume of clearing is not equal to 95 per cent of the total trade; but the percentage of checks cleared to checks drawn may be assumed to be fairly constant. If this is true, an increase in bank clearings is one of the best indications that business is picking up. On the contrary, a drop in the amount of clearings indicates that business is becoming dull.

The total of the figures must be analyzed before any reliable conclusion can be reached. In the first place, it must be remembered that the price level changes. When the average price of goods goes up, more money and credit is required to carry on even the old number of exchanges. One hundred bushels of wheat bought at $1.80 swells the clearings more than will one hundred bushels bought at $1.10. If clearings increase ten per cent during a period when the level of prices is also rising ten per cent, it is evident that we cannot draw the conclusion that the number of exchanges has increased ten per cent. It may not have increased at all.

Another thing necessary, if reliable conclusions are to be drawn, is a study of the figures for separate sections of the country. Clearings at New York are ordinarily over half of the total for the country. A boom in the stock market may swell them several per cent. The remainder of the clearings may not change. Any one who examined only the total figure for all the clearing houses might be misled into the belief that general business thruout the country was on the increase. The following figures for clearings during the years 1909, 1910 and 1911 will illustrate this point:

BANK CLEARINGS

(Last six figures omitted)

Year	New York City	United States, exclusive of New York City	Total United States
1909	103,589	62,249	165,838
1910	97,274	66,821	164,095
1911	93,026	67,183	160,209

New York was losing while the remainder of the country was gaining. The total clearings were falling off. A number of financial publications record the volume of bank clearings and list them for separate cities. One of the most satisfactory compilations is found in the *Commercial and Financial Chronicle,* published in New York.

REVIEW

Suppose the clearing between the four banks described in Section 2 takes place during a financial crisis. What means may be adopted by the clearing house for the settlement of the balances due?

Will any penalty to debtor banks follow the use of this method of settlement? What are its advantages?

What is the significance of a steady increase in bank clearings thruout the country? Of an increase in New York City, but a decrease in the rest of the country?

Plot a graph showing the trend of bank clearings in the financial center nearest to you.

Compare this graph with one showing the trend of clearings thruout the country. What conclusions about local and general business conditions may be drawn?

Prepare a diagram showing the routing thruout the New York Clearing House. What are the various tickets and slips that are used?

CHAPTER IX

BANK ORGANIZATION AND ADMINISTRATION

1. *Charter.*—A bank is ordinarily incorporated, and its first requirement is a charter. The steps which must be taken before beginning business are set forth clearly and explicitly in the National Banking Act and in the laws of the various states. An association of a certain number of incorporators, usually five or more, is required. They unite for the purpose of establishing the bank and of making their application for a charter. Application must be made to the Comptroller of the Currency, when a national bank is contemplated, or to the State Banking Department, when a state charter is sought. Application blanks may be secured from these offices.

The application must give the name of the proposed bank, its location, the names of the incorporators, the amount of capital and the number of shares into which it is to be divided and other information. The requirements which must be satisfied before beginning business vary widely in the different states. Anyone interested should inquire at the proper office and follow minutely the instructions as given in the law and in the rulings of the administrative authorities.

When the application is filed, certain advertising is required and an examination is made by the authorities to make sure that the incorporators are acting in good faith and that the bank will have a fair chance of success. One of the most important requirements is that a certain amount of capital be paid up in cash at the beginning of business. If everything is found to be satisfactory, the bank is authorized to go ahead with its organization.

2. *Board of directors.*—The next step is to adopt a set of by-laws and elect a board of directors. The Comptroller of the Currency and most of the state banking departments furnish model by-laws which will serve as a guide. The law usually requires that there be at least five directors and that each director own a specified minimum amount of unpledged stock.

The chairman of the board may, or may not, be the president of the bank. There is a growing tendency among the larger banks to elect one of the principal stockholders as chairman without imposing upon him any responsibility for the routine work of the bank. A retiring president is sometimes elected to this position. The chairman may be vested with considerable supervisory power.

The work of the board is done thru various committees, of which the most important is the loan committee. This committee passes upon loans and discounts. It usually delegates to officers of the bank the power of making loans up to a maximum amount and it expects the officers to warn it when the line of credit to one individual or firm, or even to a single industry, is becoming too large.

The amount of authority delegated to the officers varies with different banks. The best policy is to choose the officers carefully and then give them extensive powers. Even when an officer has power to make a given loan, he will refer it to the committee if he has reason to doubt the wisdom of making it. Often, he will refer a loan, which he is convinced the bank should not make, simply to save himself the embarrassment of refusing it personally. The loan may never be actually brought to the attention of the committee, but the applicant is told that his request has been denied. Frequently, a man who is told that his application will be referred to the committee might as well set out to find another bank, especially if the amount he seeks is small.

In many banks, the work of the loan committee is done by the executive committee. It is unnecessary to name any of the other committees, for the real daily work of the bank is done, not by the board, but by the officers it has chosen.

3. *President.*—The president is usually one of the directors. He may be merely a figurehead or he may be the active dominating force in the bank. In small banks, he is usually the chairman of the board. He may be a successful farmer or business man who has retired, become the principal stockholder in a bank and taken the presidency as an honor. Sometimes, such a man, without any previous experience in prac-

tical banking, undertakes to run the bank. The result may be satisfactory but it is often calamitous. Most of the good bank presidents come up thru the ranks, altho there are many notable exceptions to the rule.

A president who takes an active part in the inside work of his bank is in charge of everything as long as he retains the confidence of his board. He delegates the routine to subordinates and busies himself with questions affecting the general policy, the getting of new business, large matters of internal organization, the making of important loans and investments, etc.

4. *Vice presidents.*—Next in rank to the president is the vice president, or vice presidents, if there are more than one. In a small bank, the vice president usually has little to do except when he is called upon to act for the president. Even in large banks, vice presidents are often elected from among the large stockholders and given little to do in running the bank. Some of the vice presidents in a large bank, however, are likely to have important duties on the inside. They act as heads for various departments or they may represent the bank away from home. They may be chosen for business-getting ability. This is especially true in the large city banks which seek deposits from other banks all over the country. A well known and popular banker from the Southwest may be taken to New York or Chicago as vice president for the sole purpose of pulling business

from his acquaintances. For this reason, it is often said that the shortest road to an important position in a big city bank is thru country banking experience.

5. *Cashier.*—In a small institution, the cashier is often practically the whole bank. He makes the loans, receives the deposits, pays out cash, keeps the books, sometimes even sweeps the floor. He usually holds some stock and is often the dominating member of the board. In large banks, the cashier is not so important relatively, for he usually has an active president over him, and there may be a large number of active vice presidents. Even here, however, his work is heavy. He keeps the minutes of board meetings, makes reports of various kinds, keeps the record of stock transfers, sees that the reserve is kept up to the required standard, signs checks, approves expense items and employs the clerical staff. In general, he is the executive officer.

Where assistant cashiers are employed, much of the cashier's work is divided among them. One may be given direct supervision of the loan department, another of the transit department, another of the bookkeeping work. The cashier and his assistants answer all questions regarding the practical work of the bank, and give official sanction to all unusual transactions arising in the daily routine.

6. *Chief clerk.*—Two important men whom the customers of a bank rarely meet are the chief clerk and the auditor. The chief clerk is responsible to the cashier for the successful management of the clerical

staff. He shifts the clerks from one department to another, as occasion requires, consulting the cashier before making any important changes. He sees that each department has enough men to finish the work within reasonable hours and that the men are kept busy. He employs all clerks and sees that the messengers serve each department efficiently, that the proper amount of stationery is purchased and accounted for, and in general, he relieves the cashier of all duties in connection with the clerical staff and the routine work of the bank.

7. *Auditor.*—The office of auditor is becoming increasingly important. The work is of much more value in a trust company than in a bank, or perhaps it would be more correct to say that it is better appreciated in a trust company than in a bank. The complicated work connected with the various departments of the trust companies has compelled them to create this office. The auditor must be well versed in accounting procedure and he should be in complete control of the accounting methods, with power to add, change or substitute such books, forms or memoranda records as he considers necessary to make the affairs of the institution clear to the officers and directors. He prepares all statements required by the officers and directors, and certifies to their correctness. He makes frequent audits of all the departments, and performs such other duties as come within the scope of his office.

The functions of the bank's own auditor should not be confused with those of the outside auditor. The latter is usually a certified public accountant or a firm of public accountants, chosen by the board of directors to check up the books of the bank periodically to see that all is well and as represented. This audit is made primarily for the sake of stockholders and clients of the bank.

8. *Paying teller.*—The paying teller ranks next to the cashier. He is usually custodian of the bank's cash and has charge of paying it out. In some large banks, the cash is placed in charge of one or more of the officers and handed over to the paying teller as it is needed. One of the main duties of this teller is to pay checks drawn on his bank and presented over the counter. In order to do this, he must keep a record of all depositors' signatures and of all stop payment orders. He must be quick to recognize a counterfeit or a forgery and ever cautious, resourceful, tactful and pleasant. He deals not only with the bank's own customers but with the general public as well. A mistake is costly. He may pay a forged or improperly drawn check, overpay, pay the wrong party, pay a post-dated check, a stale check, an overdraft, or he may over-certify. None of these errors are easily corrected unless the customer is honest, for the cash is gone before the mistake is discovered. The work of the paying teller is perhaps the most exacting in the whole bank.

Certifying checks is one of the important duties of this department in a large bank. The work is often so heavy that a special window is provided for it. Some of the other duties are shipping currency to the bank's correspondents and to Washington, making up payrolls, settling clearing house balances (in some banks) and making arrangements with Washington for the issue and redemption of bank notes, etc.

9. *Payrolls.*—Banks are always glad to help their depositors in connection with the preparation of payrolls. It is no easy task to be prepared at all times to meet any demands that may be made for the various kinds of currency and silver that are needed to make up the amounts. Some banks find it difficult to secure small bills and, in order to do so, they are compelled to pay express charges from their New York or other important correspondents. The depositor who demands large quantities of small bills and silver should remember this, and not think too harshly of his bank if it should happen that it is impossible for it to fill an unusual demand.

The preparation of a large payroll with odd amounts of each denomination of gold and silver requires much time. The depositor should never present a check for a large payroll during a busy time of the day, or just before the closing hour on Saturday. The teller is usually trying to deliver the money as quickly as possible, and since the paying of money is a trying task in any event, he should not be worried by the thoughtless depositor who might secure his money just as well at some other time of the day.

Most concerns having large payrolls realize the advantage of making arrangements to have them prepared beforehand. The payroll clerk of a company informs his cashier just how much money he needs, and in what denominations, so that while the cashier is drawing a check and arranging to have it signed he telephones the bank and makes known just what he requires. When he gets the check signed and goes to the bank, he finds his money ready and waiting for him, and the whole transaction takes no more time than the cashing of a ten-dollar check. The teller is able to make up the payroll at his leisure and the danger of error is thus minimized.

10. *Receiving teller.*—The receiving teller is the one who comes in contact most frequently with the customers of a bank. Consequently, he has the best opportunity for making friends or enemies for his institution. His first duty is to take in deposits, prove the deposit tickets, receipt for amounts received, sort the checks and currency, and turn the deposits over to the proper departments. Cash goes to the paying teller, or to the officer in charge of the cash. Checks on members of the local clearing house go to the clearing house department, items on other local banks to the collection department and out-of-town items to the transit department. He must count his deposits and make the pass book entries accurately, look out for counterfeits, examine indorsements, watch for post-

dated checks and prove his accounts at the close of each day.

11. *Kind of indorsements.*—Indorsements may be of four kinds: (1) blank, (2) special, (3) restrictive, (4) qualified.

A blank indorsement is one that assigns title to the instrument without qualification. It is made by the mere signing of the payee's name and its effect is to make the check negotiable in the hands of any holder.

A special indorsement is one that specifies the person to whom or to whose order the instrument is made payable.

A restrictive indorsement is one that makes the indorsee the holder of the instrument, but not the beneficial owner of it. This gives him possession but does not transfer to him the ownership of it. One form of restrictive indorsement gives the indorsee only the right to negotiate the instrument for the benefit of the party named in its indorsement. The forms are "Pay X or order for account of A," or "Pay X or order for credit of A."

The usual form of restrictive indorsement is "Pay X or order for collection," or "Pay X or order for my use." In the foregoing forms, X is merely the agent of the indorser. The New York Clearing House has prohibited the use of this indorsement unless the paper is guaranteed by the bank presenting it. The prohibition dates back to a certain draft for $8 which was drawn by a Connecticut bank upon the National Park Bank of New York. The check was raised to $1,800 and deposited in the Eldred Bank of Pennsylvania. This bank indorsed it "for collection for the account of the Eldred Bank" and sent it to the Seaboard Bank of New York, which in turn presented it for payment thru the Clearing House. About a month after paying it the Park discovered the error and sued the Seaboard to recover the excess payment. The suit was lost in as much as the Seaboard did not own the check, but was acting merely as agent for the Eldred Bank. (See 114 N. Y., 28.)

A qualified indorsement is one which limits the ordinary liability of the indorser. He becomes the mere assignor of the title. It relates only to his liability and does not affect the negotiable character of the instrument. Such an indorsement is found in the addition of the words, "without recourse," to the regular indorsement. The words, "without recourse," mean that a person so indorsing wishes to incur no liability as an indorser, but wishes simply to transfer the title. Another form, less generally used, is found in the words, "at the indorsee's own risk." [1]

12. *Discount clerk and note teller.*—The functions of the discount clerk and note teller are often combined and placed under the note teller. The two are so closely related that they may be described together.

Every bank has at all times many promissory notes in its possession. These may be notes which it has

[1] The reader who is particularly interested in this subject will need to study the law of negotiable instruments.

discounted or notes which represent loans made to borrowers. They may be notes left for collection by individuals and correspondent banks, or they may be notes drawn by its own customers, made payable at the bank and paid by the bank at maturity upon presentation by the holder. The last named class of notes become the property of the bank as soon as the bank pays them for its customers. It will pay any notes marked payable at its place of business if the drawer of the note is a customer, has a deposit sufficient to cover the amount and has not notified the bank that payment is not to be made. A note so drawn becomes in effect an order on the bank as soon as it reaches maturity. It is customary for the bank to call upon the drawer for a check in exchange for the note.

The discount clerk takes charge of all the notes. Each day, the notes that come due are turned over to the note teller. Borrowers come in to take up their notes, leaving cash or checks. At the close of each day, the note teller turns over to the discount clerk all the checks and cash received and hands back the unpaid notes. Notes which are not paid promptly are presented thru a notary public at the place of business of the maker or wherever they may be payable. If not paid then, they are protested.

The note teller may be charged with the care of notes as well as with their collection. He proves at the close of each day. In addition to unpaid notes, he, or the discount clerk, as the case may be, will have on hand cash and checks on both local and out-of-town banks. The cash is turned over to the paying teller. Checks go to the proper departments—clearing house, collection or transit.

If the note teller honors notes made payable at the bank, payment may be made by cashier's check, clearing house due bill or an acceptance payable thru the clearing house the next day. Custom in this respect varies with different parts of the country and with different banks.

13. *Bank bookkeeping.*—While the bookkeeping of a bank is simple when compared with that of a manufacturing or mercantile concern, it is too complicated to be described minutely here. All that can be done is to show the general nature of the accounting methods. The practice is essentially the same in all banks, altho the size of a bank and the nature of its business may necessitate some records of detail that are adapted only to that particular institution.

The purpose of the accounts is three-fold, namely: to provide a chronological record of all transactions that cause increase or decrease in values; to show the financial condition of the bank at a given time; and to reveal the profit or loss for a particular period.

Certain books are kept by all banks. Some of these are the corporate minute book and the books in which records of ownership and transfer of stock are shown. The main books of record are the journal, ledger and statement book. The journal contains the chronological record of transactions. The ledger shows the transactions taken from the journal and sorted into their various classes. All the accounts come together in the statement book, which shows the condition of the bank. A statement of condition is made out at the end of each day for the purpose of proving whether all assets and liabilities have been accounted for correctly (except in the rare case of counter-balancing errors) and of giving the officers information to guide them in the conduct of the bank's affairs.

A bank, like any business concern, may carry its accounts into almost unlimited detail. There is a point beyond which the cost of getting additional detail is greater than the value of the information secured. Business houses sometimes carry cost accounting to an absurd extreme. Banks seldom err in this respect. Few banks can tell how much profit is being made on the account of a particular depositor. The practice of requiring a minimum balance of depositors is growing, but most banks have no way of determining what is the minimum profitable balance. Such questions as this are investigated by some banks and ignored altogether by others.

14. *Figuring required reserves.*—A large volume would be necessary to explain the methods of figuring the reserve required for various banking institutions by the Federal Reserve Act and by the laws of the states and territories. Under the Federal law, and many state laws, the requirement differs according to the size of the city in which a bank is lo-

cated. Moreover, a distinction is made between trust companies, saving and ordinary banks. If it is not possible to get instructions from the department having supervision, showing just how the reserve should be figured, the law itself should be studied and a chart prepared.

Below is given a reserve calculation for a national bank located in a central reserve city.[1] The bank is required to carry a reserve of 18 per cent against demand deposits. Of this amount 6/18 must be in the bank's own vaults, 7/18 with the Federal Reserve bank of the district, and 5/18 either with the reserve bank or in the bank's vaults. Against time deposits, a reserve of five per cent is required. In practice, the full eighteen per cent reserve is figured against 5/18 of the time deposits. The result is the same, and an extra set of figures is eliminated.

CALCULATION OF RESERVE: CHICAGO NATIONAL BANK

1.	Due to banks other than Federal Reserve banks	$1,946,416	
	(a) Less due from banks other than Federal Reserve banks [2]	1,969,152	
2.	Dividends unpaid		$ 107
3.	Demand deposits		21,707,411
4.	Five-eighteenths of time deposits ($481,000)		133,611
5.	Gross amount (add items 1, 2, 3, 4)		$21,841,129
	Deduct:		
6.	Checks on other banks in same place	$ 200,303	
7.	Exchanges for clearing house	700,660	900,963
8.	Net amount against which reserve is calculated		$20,940,166
9.	Total reserve required (18 per cent of item 8)		3,769,229

[1] Based on requirements of the law as originally passed.

[2] Should the aggregate "Due from" exceed the aggregate "Due to" banks, both items must be omitted from the calculation.

10.	Reserve required in vault (6/18 of item 9)....		$ 1,256,409
11.	Reserve required with reserve bank (7/18 of item 9)		1,465,812
12.	Reserve required either in vault or with reserve bank (5/18 of item 9)		1,047,008
13.	Legal reserve held in vault	$2,320,686	
14.	With Federal Reserve bank	1,496,572	
15.	Total reserve (item 13 + item 14)............		3,817,258
16.	Excess in vault over amount required (item 13—item 10)		1,064,277
17.	Excess with Federal Reserve bank over amount required (item 14—item 11)..............		30,760
18.	Excess over total required reserve (item 15—item 9)		48,029[1]
19.	Per cent reserve held (item 15 ÷ item 8)......		18.22

REVIEW

What officers does your bank have? From your study of the preceding chapter, plot the duties of each official in your own bank.

A check bears a rubber stamped indorsement, "Pay to the First National Bank of ———, A. B. Smith Co." What kind of an indorsement is this and what is its effect?

A makes a check payable to B, B indorses the check to C without recourse, C indorses it to you. The check is not good. Whom may you hold liable?

Take the statement of any bank not in a central reserve city. Calculate the various reserves required, in a manner similar to that given in this chapter.

What is the effect if a cashier certifies a check for more than the maker has on deposit?

[1] The foregoing calculation shows the methods in vogue before the passing of the Act of June 21, 1917. By the terms of that Act the entire reserve in any bank must be kept as an actual net balance on deposit with the Federal Reserve Bank. The amount of reserve required is reduced to 3 per cent on time deposits and 7 per cent on demand deposits for the country banks, 10 per cent for the reserve city banks and 13 per cent for the banks of central reserve cities.

CHAPTER X

BANKS AND THE GOVERNMENT

1. *Degree of control.*—In the first chapter of this book, it was explained that banking was once a common law right which could be exercised by any individual or group of individuals as they chose, and it was explained how people gradually came to realize the public nature of the business and to regulate it by law. The degree of regulation or control imposed by a particular government will be determined by the general policy of banking which is adopted. It may be said that there should be no more interference than is necessary to insure the soundness and harmony of the general policy.

The adoption of one principle will often necessitate a long train of regulations. The governments of the United States and of the several states have decided against branch banking and in favor of great freedom in the establishment of small banks. It was necessary at the outset to decide between these two plans. Branch banks and small independent banks cannot exist at the same time. The former will drive the latter out of business. If branch banks are not permitted, small independent banks must be authorized or the little towns and villages will have no banking facilities.

Now, a system of small independent banks needs more regulation than a system of large banks, since small bankers, no matter how good their intentions, will not be as thoroly trained nor will they have as broad a vision or as wide sources of information as bigger bankers. This is no reflection on small bankers, nor is it intended as an argument for or against a branch banking system. It is something to be expected in the nature of the case. It explains why the business of banking has been hedged about with more legal restrictions in the United States than in most other parts of the world. The government may have gone too far in some directions and not far enough in others, but a considerable amount of legal restriction is necessary to insure good banking among our twenty-seven thousand independent banks.

Canada adopted the opposite plan. She has only twenty-two banks with over three thousand branches scattered thruout the country and even in other countries. Each of the banks is powerful and is able to command the services of highly trained executives. The average head of a bank in Canada compares favorably with the best in the United States. Canada can leave details to the judgment of the bankers instead of regulating them by law.

The principal banking systems of the world will be described briefly in the following chapters. It will be seen that the degree of governmental control varies widely between the different countries. Some permit almost absolute freedom, some regulate, some operate a part of the banking machinery, while others even go so far as to own a share in certain of the banks.

It must be borne constantly in mind that the degree of control necessary or advisable will depend largely upon the size and number of banks in the system. When a particular bank or group of banks within a system is singled out for special regulation, the kind of control to be exercised will be determined by the objects which are to be accomplished, whether regulation of the credit supply, conservation of the gold reserves, aid to the government, or what.

2. *Capital and surplus requirements.*—The reasons for establishing by law a minimum capital requirement have been stated in a previous chapter. It may be well to summarize them here. First, the requirement makes sure that the organizers of a bank are staking a part of their own resources upon the success of the institution. If a part or all of the capital must be paid in cash before a bank opens for business, there will be some actual money on hand from the very beginning to meet the demands of creditors. Furthermore, capital acts as a guarantee to creditors that the bank will be able to pay its debts even if some of the assets acquired in the course of business should depreciate or become worthless thru mismanagement or some other unfortunate circumstance. This is especially true when double liability is imposed upon stockholders.

With the last named reason in view, the law aims to have the amount of capital required bear some reasonable proportion to the volume of business which the bank may be expected to do. A rough and unscientific approximation is sometimes made by varying the minimum requirement according to the size of the community in which the bank is located. A more scientific plan would be to limit the total liabilities which a bank might assume in some definite ratio to its paid-up capital and surplus, say from ten to twenty times the amount paid in. Of course it is still more important that the liabilities be limited according to the cash reserve held by the bank.

It is a common practice to require that a part of the earnings be set aside as surplus, instead of being paid out in dividends, until a minimum surplus has been built up. The principles involved here are the same as in the case of capital requirements. The only important difference between capital and surplus is that surplus may be paid out in dividends at the will of the directors unless the law fixes a minimum amount which must be kept in the business. It is a general principle of law that capital must not be reduced by dividend payments.

3. *Stock notes.*—One of the hardest struggles in the development of sound banking has been the fight to make stockholders actually pay cash for their shares. In the national banking system, at least 50 per cent of the capital must be paid in cash before the bank can begin business, and the remainder must

be paid in monthly instalments of not less than ten per cent each. This is almost the same as requiring that all the stock be paid for in the beginning. Some of the state laws are more lenient. A high capital requirement is sometimes made with the provision that only a small amount need be paid in. The remainder that is not paid for stands as a liability of the stockholders subject to call by the directors; or, at least, it must be paid if needed in case the bank fails. The unpaid stock and the double liability clause act as security for creditors in the event of insolvency, provided the stockholders are able to pay. If the stockholders have exhausted their resources in buying the stock actually paid for, creditors have no protection. Early payment of a reasonable amount of cash should be rigidly enforced by law.

In the early days of banking, stockholders were often permitted to give their promissory notes in payment for shares. These notes were called stock notes. The privilege was so flagrantly abused that it has been made illegal in most countries. Suppose a group of penniless but ambitious men desired to establish a bank. Even if initial payment of cash were required, the difficulty could be overcome in the following way: They would go to a friendly bank and borrow the funds necessary to pay for their stock; then they would buy their stock, paying cash, organize the bank, and elect themselves directors. One of the number would be president. The first act of the new bank would be to loan to each of the stockholders all, or nearly all, the cash which he had paid in. The stockholders would give their notes to the bank and secure them by depositing their stock in the institution as collateral. They would then take the cash back to the bank from which they borrowed and pay up their loans. If the new bank was a success, the dividends would more than pay interest on the stockholders' loans; if not, both the bank and the stockholders would be bankrupt. The organizers had everything to gain and nothing to lose except their reputation, which was probably an insignificant item. The whole thing was a pure gamble. Finally, laws were passed not only requiring the payment of cash for stock but also prohibiting loans to stockholders. The law is still evaded in some instances by having loans made to near relatives or friends of the stockholders. These loans are often unsecured, as banks are prohibited from accepting their own stock as collateral. It is the duty of bank examiners to look out for this sort of business. Any business concern which makes loans to stockholders or partners in the firm is looked upon with suspicion by bankers and creditors who learn of the practice.

4. *Restrictions on loans.*—Various restrictions are made with respect to loans. One of the most universal was described in the preceding section. Another common regulation is that a bank may not loan more than a certain amount to a single individual, firm or corporation. In the case of national banks and members of the Federal Reserve system, the

amount cannot exceed ten per cent of the paid-up capital and surplus or 30 per cent of the total capital subscribed. Some of the states are more lax. Some such provision is wise. A cautious banker will even limit the amount of loans in a particular line of industry.

In a system of small banks, one bad result comes from the necessity of making this rule. Many business concerns are so large that no single bank can offer them sufficient credit facilities. They are compelled to borrow from several banks at one time. Even small houses follow the same custom altho it is not necessary for them to do so. As a result, an adventurous or dishonest concern may borrow from each of several banks as much as it is justified in borrowing altogether before the bankers are aware of what is going on. One way of guarding against this practice is cooperation among bankers in the way of giving information about borrowers. Grave objections are raised to this plan. The problem is more vexing when a house is not only borrowing from various banks but also selling its paper in the general market thru note brokers. It has been proposed that a law be passed requiring the registry of all commercial paper so that any one can learn just how much a concern is borrowing in this way.

When we come to a discussion of the national banking system, we shall find that certain types of loans are singled out for special regulation.

5. *Usury laws.*—Any rate of interest higher than

that fixed by law is usurious. How then can New York bankers and money brokers charge forty or eighty per cent for call money? Before explaining how this is possible, let us see just what is meant by the legal and maximum rates of interest, as fixed by statute in most states. There is a very wide misconception of what is meant by the legal rate. Contrary to the usual impression, it is not always the highest rate that can be charged for borrowed money. Instead, it is essentially the rate that the court would impose if a judgment to collect an account "with interest" were entered. If the legal rate, in the state where the judgment was entered, happened to be six per cent, the defendant would have to pay six per cent. The maximum rate is the highest rate that can be charged for loans and any rate above the maximum is usury.

In some states, as, for example, in New York and Pennsylvania, the legal and maximum rates are the same — six per cent; in Alabama, both rates are eight per cent; in Illinois, the legal rate is five per cent, and the maximum rate seven per cent; in Kansas, they are six per cent and ten per cent respectively; in Indiana, six per cent and eight per cent.

Altho the maximum rate in New York State is six per cent, bankers can charge any rate of interest for call loans by reason of a section of the state banking law which says:

Upon advances of money repayable on demand to an amount not less than $5,000 made upon warehouse receipts, bills of lading, certificates of stock, certificates of deposit, bonds or other negotiable instruments pledged as collateral security for such repayment, any bank or individual banker may receive or contract to receive and collect as compensation for making such advance any sum to be agreed upon in writing by the parties to such transactions.

Thus on call loans for sums of $5,000 and over the banker can charge any rate that the borrower is willing to pay. On a time loan the interest cannot be higher than the maximum rate.

The law is easily evaded by purchasing borrowers' paper at a discount instead of loaning outright. The maximum rate in such a case acts merely as a moral force.

6. *Deposit regulations.*—The most important regulation with respect to deposits has to do with the reserve requirement. This is discussed in Chapters XIV and XVII. It is to be noted that some countries do not find it necessary to fix a minimum reserve by law.

In some states, banks are forbidden to pay out time deposits or loan against them as collateral until the maturity date arrives. The reason for this is that banks are not required to carry as heavy a reserve against time deposits as against demand deposits, or they may not be required to carry any at all. It is properly considered that the banks are making provision to pay only at a specified time and that, therefore, they should not be permitted to pay them out as if they were demand deposits. For a bank to loan against its own time deposits as collateral is merely an evasion of the law. If one has a certificate of deposit not yet come to maturity and is in immediate need of cash, he can usually go to some other bank and secure a loan by depositing his certificate as collateral. If necessary, title to the certificate can be transferred to the lending bank on the books of the bank which issued it.

Some of the states forbid corporations chartered in other states or in foreign countries to accept deposits within their borders. This is an indirect tax upon the importation of capital, for the business of lending is most profitable when combined with that of accepting deposits. A Massachusetts bank cannot loan in a western state at as low a rate as it could if it were permitted to accept deposits there. The same is true of a Canadian bank making loans in New York State. It is partly a question as to whether home banks and other lenders are to be protected against competition from outside bankers or whether home borrowers are to be provided with funds at the lowest possible rate regardless of where those funds come from.

7. *Restrictions on note issue.*—The principal regulations concerning note issue refer to the total amount to be issued, the percentage of reserve to be carried, and the kind of assets for which notes may be exchanged. All of these questions have been considered in Chapter VI.

The requirement that bank notes may not be issued in denominations below a certain figure has a significance which is not commonly understood. National bank notes and Federal Reserve notes may not be issued in denominations under five dollars. In ordinary times, the smallest Bank of England note is five pounds, which is almost twenty-five dollars. The reason for this is that small notes remain in circulation longer than large ones and, consequently, there is greater danger of inflation in their issue. Governments usually monopolize the privilege of putting out small circulating notes. The profit is handsome, and there is no decisive reason why the government should not make the profit so long as the issue is limited to the amount needed for making change in business.

The levying of a tax upon note issue for regulative or other purposes has been discussed in a previous chapter.

8. *Investments.*—Certain investments are prohibited to banks and others are regulated. National banks may not buy stocks, except stock in the federal reserve banks, because of the speculative element in their value. They may not buy real estate, above the amount required for the banking house, because of the difficulty of liquidating it quickly without loss. Investments of savings banks are regulated with extreme care. The theory behind all this regulation is that as soon as a bank steps out of the field of pure commercial credit, that is, buying and discounting commercial paper or lending against it, there is danger of either tying up its assets in some fixed form or dissipating them altogether in speculative venture.

9. *Examinations and reports.*—The average banker realizes that most of the provisions of the law are sound and that it would be to his interest to follow them even if he were not required to do so. Propositions of unusual attractiveness, but of doubtful legality, arise from time to time, however, and the temptation to "take a chance" is hard to resist. The danger is all the greater where there is a large number of small banks. Realizing this, our Federal government and most of the states have examiners who occasionally pay unexpected visits to the banks just to make sure that they are complying with all legal requirements. The examiners do more than merely enforce the letter of the law. They often point out practices which appear unwise altho they may be altogether within the law. Bankers usually heed the examiner's warning, as they do not wish to be put in a bad light with either the state banking department or the Comptroller's office. Inspections are usually made in a friendly spirit with the sole purpose of helping the banks.

Detailed reports are demanded by the authorities from time to time. These are assembled, and the combined figures serve as an indication of banking conditions thruout the country. It will appear that reserves are high or low in certain sections. The nature of loans will be revealed in a general way. The combined reports published by the Comptroller of the Currency and the various state banking departments are valuable to one who understands how to interpret them. They must be analyzed carefully and compared with preceding reports before any conclusions of value can be derived from them.

10. *Government aid.*—The government tries to help the banks in various ways. Usually the attempts are blundering and ineffective, for they are nearly always artificial. Our Federal government has adopted the policy of depositing funds with banks when their reserves are running low, for the purpose of supplying them with ready cash. The shortage may have been caused in the first place by the unscientific fiscal system of the government.

During the panic of 1907, the governors of two of the states declared legal holidays, for seven weeks in one case and eight in the other, in order that banks might be relieved from the necessity of paying their debts. It was simply a device for legalizing bank suspension. Something of a similar nature was done by most of the nations of the world when they declared moratoria at the outbreak of the European war in 1914. The suspension of payment on certain kinds of debts was legalized. Some countries went much further than others, but the idea was the same—to help banks and other debtors to tide over a critical period by legalizing delay in making payments.

Other less important examples of government aid might be given. On the whole it may be said that the banks give to the government more help than they receive from it.

11. *Control of banking in the United States.*—Much has been said already about the various ways in which governmental control is exercised in the United States. National banks operate under Federal charter and regulation. They are also subject to a certain amount of legal restraint by the states in which they are located. State banks, on the other hand, are regulated primarily by the laws of the respective states, but they are brought under Federal jurisdiction in certain matters. One of the most important is the Federal law imposing a tax of ten per cent upon state bank note issue, the result of which was the elimination of state bank notes.

If state banks enter the Federal Reserve system, they become subject to a great deal of supervision from Washington. Most of them have refused to join the system. Prominent among the reasons for this hesitation are unwillingness to submit to Federal supervision and uncertainty as to just how far the Federal Reserve Board might go in trying to regulate the business of state banks.

REVIEW

For what different purposes may the government exercise control over banks?

What is the legal rate of interest in your state? The maximum rate?

What are the disadvantages to a bank in making loans in a state where it cannot accept deposits?

In your state may trust companies hold real estate mortgages to a greater amount than national banks? What reason would you assign for this?

What are the strong features of a branch banking system?

CHAPTER XI

AMERICAN BANKING BEFORE THE CIVIL WAR

1. *Bank of North America.*—The Bank of North America was the first bank of importance established on the American continent. It was founded by Robert Morris at Philadelphia in 1781 in the hope that it would give financial support to the young Republic. Of the total capital of $400,000, the government subscribed $250,000, and of this subscription $200,000 was paid up, largely in specie which came from France.

Morris' idea in establishing the bank was that it would economize the use of cash. His task at the time was to finance the Revolution. He reasoned that the specie of the government and of other depositors could be made the basis of loans to the extent of two or three times the amount of cash on hand. This judgment was amply vindicated. Large loans were made to the government as well as to individuals. The bank prospered, paying dividends of fourteen per cent per annum.

When doubt arose as to whether Congress had power, under the Articles of Confederation, to charter a bank, the Bank of North America sought and obtained a charter from the State of Pennsylvania, and it continued to do business under this until 1785. In that year jealous parties forced a repeal of the charter. The bank contended that its charter was irrevocable and it continued to do business, but at the same time it took steps to get a new one from Delaware. The Legislature of Pennsylvania, fearing that the state would lose the bank, renewed its charter in 1787. This charter was renewed from time to time until the bank entered the national banking system. Because of its illustrious history, it was not required to use the word national in its title, but was permitted to enter the system without changing its name. It has enjoyed almost continuous prosperity.

2. *Bank of Massachusetts.*—The second bank of importance was the Bank of Massachusetts, which was established at Boston in 1784. It was chartered with no restrictions except a provision for examination by the state authorities. The right to issue notes was taken for granted, as the word bank was then understood to designate an institution whose chief function was issue. At the end of eight years certain restrictions were imposed, such as: (1) a requirement for semi-annual statements to the governor; (2) prohibition of dealings in merchandise or in the shares of any bank; (3) a provision that notes should not be issued in denominations smaller than $5; (4) limitation of outstanding notes and loans to double the paid-up capital stock; (5) fixing liability on the directors for losses incurred thru failure to comply with the law. The imposition of these regula-

tions illustrates the way in which the American people gradually came to realize the true nature of banking. The plan of banking was still crude.

3. *Bank of New York.*—The third bank to be established was the Bank of New York, which was founded by Alexander Hamilton in 1784 as an alternative to a land bank favored by Livingston. Hamilton saw clearly that land cannot serve as a proper basis for commercial banking. Banking in almost every country has had to pass thru a period of land bank craze. The Bank of New York operated successfully for seven years without a charter. Its loans were made for periods not exceeding thirty days and the interest rate was fixed at six per cent. Debts to the bank were payable in its own notes or in specie. As gold coins at that time were badly clipped and abraded, they were received by weight only. The bank was prosperous, but it became unpopular thru its refusal to allow borrowers to renew loans and its steady insistence upon prompt payment of debts. In 1791, a charter was finally secured which contained the following important provisions: (1) that the bank should not hold real estate, except such as might be necessary for its business or such as had been taken as security for loans previously contracted; (2) that its debts, above cash deposits held in the bank, should not exceed three times the paid-up capital; (3) that it should not deal in merchandise or public securities, except to sell such as were pledged to it as security for loans.

We can easily criticize these banking schemes in the light of principles already laid down, but we must be tolerant toward an institution which was in its infancy and which was striving to do business in an undeveloped country. The chief fault of early banking in New York State was its entanglement in politics. No new bank could be chartered except by special act of the legislature. Consequently, charters were handed out as political spoil. The establishment of the Bank of the Manhattan Company is an interesting incident in this connection.

4. *Bank of the Manhattan Company.*—Aaron Burr, knowing that he could never hope to secure a bank charter from a legislature controlled by the Federalists, hatched a scheme for procuring one by strategy. Taking advantage of a scourge of yellow fever which had just visited New York City and which was attributed to the bad water supply, he applied to the legislature for a charter for a $2,000,000 company which was to supply pure water to the city. Toward the end of the charter, which he drew up, an inconspicuous clause was inserted giving the company power to use any surplus capital, not required for the water business, in any moneyed transactions not inconsistent with the constitution and laws of the state or the United States. The charter slipped thru without anyone's suspecting the presence of an authorization of banking operations and, within a few months, one-half of the company's capital was being used in the banking business. The water works were

discontinued in 1840 and the bank, which never entered the national banking system, is still carrying on a large business under its state charter. Its charter is perpetual.

5. *First Bank of the United States.*—In 1791, the First Bank of the United States, as planned by Alexander Hamilton, received a charter from Congress. A question was raised as to the constitutionality of the act which established the bank. Jefferson considered it unconstitutional, but Hamilton convinced President Washington to the contrary on the grounds that the Act was necessary and appropriate for carrying out certain other powers conferred on Congress by the Constitution.

The capital of the bank was $10,000,000 and one-fifth of this was subscribed by the government. Private subscriptions were payable one-fourth in specie and three-fourths in government bonds bearing interest at six per cent. Payments were extended over a period of two years. The government shares were paid in ten equal annual instalments with interest at six per cent. One share was entitled to one vote, three shares to two votes, and so on, no shareholder having over thirty votes. Foreign shareholders could not vote by proxy, which meant practically that they could not vote at all.

The bank was permitted to lend on mortgages, but it could not hold real estate, except such as was required for the accommodation of the bank. Debts, above deposits, were limited to an amount equal to the capital stock. Directors were made liable for debts above the legal limit. This was, in effect, a limitation on note issue, and it was the only limit imposed on that activity. The Secretary of the Treasury was given the right to examine the affairs of the bank and to require statements as often as each week if he chose. Government funds could be deposited with the bank but no requirement was made. The bank was authorized to establish branches, and it did so in all the more important commercial centers. It was forbidden to buy government or state obligations, and to deal in merchandise. The rate of interest on loans could not exceed six per cent. Notes of the bank were receivable for all public dues so long as the bank maintained specie payment. The charter was granted for a period of twenty years and the Federal government was pledged to grant no charter to another bank during that period.

Altho partly owned by the government, the bank was under private control. The payment for stock in bonds was explained by Hamilton on the ground that the bonds could be gradually converted into money. We see in the charter a provision for stock notes which has already been criticized in a previous chapter. The bank was a success from the beginning and it performed many valuable services for the country. As fiscal agent of the government the bank collected the customs duties. By refusing to accept the notes of any bank which was not maintaining specie payment, it practically forced the banks of the country to redeem their notes in specie on demand. This was an incalculable benefit to commerce. The bank has been called the regulator of the currency, because of this service which it rendered.

The charter was to expire in 1811. In 1809, Secretary Gallatin recommended a renewal of the charter with an increase in the capital of the bank. A virulent opposition developed against the renewal. Jefferson still insisted that Congress had no power to grant a bank charter. The country was becoming inflamed against England and it was pointed out that foreigners (mostly English) owned over seven-tenths of the bank's capital stock. People said that the English had bought this stock so as to be able to throttle American credit in the event of war with England. They did not appreciate the fact that foreign stockholders had practically no voice in the management of the bank, or the more significant fact that to wind up the bank's affairs would necessitate the immediate exportation of over $7,000,000 in specie to these foreign shareholders. Many thought the bank was a great financial monopoly which was destroying the liberty of the American people. The state banks were especially vigorous in making this charge. The bill for renewing the charter failed to pass by a vote of sixty-five to sixty-four, and the United States entered the War of 1812 leaning on the state banks for support.

The result was disastrous. A mushroom growth of state banks sprang up thruout the country. Specie payments were suspended in the fall of 1814 by nearly all the banks outside of New England. Bank notes fell to a discount of from ten to thirty per cent. The government defaulted on the public debt.

6. *Second Bank of the United States.*—Various attempts were made to establish another national bank. Finally, in 1816, the Second Bank of the United States was chartered. In most respects the plan was similar to that of the First Bank. The capital was to be $35,000,000, and one-fifth of this was subscribed by the government as before. The government's subscription was payable either in specie or in its own bonds bearing interest at five per cent. As a matter of fact it was paid by a stock note, and the note was not fully paid until fifteen years later. The bank received an exclusive charter for twenty years. For this charter it paid the government $1,500,000. It was authorized to establish branches and was forbidden to pay dividends to stockholders whose shares were not fully paid up. There were twenty-five directors, five of whom were appointed by the President of the United States, and twenty elected by the stockholders who resided in the United States. Foreign stockholders could not vote either in person or by proxy.

The bank was authorized to issue post notes not smaller than $100 and payable within sixty days. No circulating notes were to be issued in denominations under $5. The bank's notes were receivable for debts to the United States. For failure to pay any obligation in specie on demand the bank was to pay a tax of 12 per cent per annum on the claim until it was paid. The requirement to pay deposits as well as notes in specie was a long step in advance. Banks, at a time when their own notes would not be accepted, were accustomed to pay depositors with notes of other banks that were maintaining specie payments. These other banks were frequently located at a considerable distance. Because of the expense of collecting these notes they generally circulated at a discount, driving the notes of nearby banks out of circulation. The Second Bank also acted as the fiscal agent of the government.

For the first three years the bank was in a perilous position. The charter provided that private subscriptions to stock might be paid in three instalments within twelve months. One-fourth was payable in specie and the remainder in specie or in United States bonds. When the second instalment of $2,800,000 came due, instead of $700,000 only $324,000 was paid in specie; for the third instalment only a small amount of either specie or securities was paid. It was discovered that many shareholders had bought the stock as a margin proposition, intending to sell on a rising market. Furthermore, the bank had discounted the notes of stockholders on the pledge of their shares to the amount of over $8,000,000. Dividends were paid on stock that was not fully paid for, in violation of the law. The president and cashier of the Baltimore branch defrauded the bank of $1,600,000.

When the bank had reached the verge of bankruptcy, Mr. Langdon Cheves of South Carolina was put in charge. He ran the bank on conservative lines and in a few years raised it to a point of great power. It established relationships with the great European banks and was of much assistance to the government. Nicholas Biddle became its president in 1823.

7. *The Bank War.*—Andrew Jackson came to Washington as President in 1829 at a time when the bank was at the height of popularity and strength. Early in his administration, some of his friends charged that the bank was using its influence against him politically. Jackson was already inclined to look upon any bank with suspicion and he lent a ready ear to these reports. In a message to Congress, he wrote that much deserved criticism was being directed against the bank and stated flatly that it had failed to give the country a uniform and sound currency. The latter statement caused much surprise to everyone, since it was the one thing in which the bank had been conspicuously successful. Various charges were brought against the bank only to be disproved by Biddle.

Finally, Biddle so far forgot himself, in his zealous defense of the bank, as to tell the Secretary of the Treasury that the federal government had nothing to say about the management of the bank and that he intended to run it as he pleased. Samuel D.

Ingham, Secretary of the Treasury, retorted that he had power to withdraw the government deposits and that he would do so as soon as he became convinced that the bank was exercising a political influence. This threat quieted Biddle for a while.

In 1830, Jackson recommended to Congress that a bank be established as a branch of the Treasury Department without power to exert any undue influence upon the public. The proposal was voted down. In the following year he sent another message, adopting a milder tone. Biddle took this as an indication that he was backing down from his original position and thought the time was ripe to strike for a new charter. On the eve of a presidential campaign, it was thought that Jackson would not dare to veto the bill. The opposing party proposed to make the bank an issue in the campaign. Against the advice of friends Biddle pressed the motion for renewal and it was passed by both Houses of Congress. To Biddle's surprise, Jackson vetoed it. An attempt to pass it over the veto failed. Nothing was left but to take the matter to the polls. Jackson was re-elected by an overwhelming majority.

The bank war continued. Early in 1833, Jackson decided to remove the government deposits. Mr. Louis McLane, Secretary of the Treasury, objected and was transferred to the State Department. The new Secretary, William J. Duane, refused to withdraw the deposits and was removed from office. Roger B. Taney was next placed at the head of the

Treasury Department, and he began to draw out the deposits and place the government funds in certain state banks.

This so weakened the position of the bank that it soon lost its prestige. With all hope for a renewal of the charter gone, the bank took out a charter in Pennsylvania. The government was paid for its stock at the rate of 115.58 and new stock was sold in its place, keeping the capital of the bank at the original figure of $35,000,000. This was too much capital for a bank with so small a territory as the bank now had and some of it was diverted into speculative ventures. The bank finally failed in 1841, and three years later Biddle died, poor and broken-hearted.

The misfortune of the bank was that it was under private control and excited the jealousy of the administration. Its failure constitutes a strong argument in favor of government control of a bank which is to have so much power. Proposals for a third bank were advanced later but they met with no success. After the Civil War, a system was established which was entirely different in character.

8. *Suffolk system.*—Much is to be learned from a study of the state banks. One of the most interesting developments was the Suffolk system. New England was flooded with the issues of country banks. Because of the difficulty of redemption, country bank notes circulated at varying rates of discount and drove better notes out of circulation. The situation was especially embarrassing to the Boston bank-

ers, who were hardly able to keep any notes in circulation and who were constantly subjected to the inconvenience of handling the notes of country banks which were deposited with them.

In 1818, the Suffolk Bank was incorporated in Boston, and it immediately endeavored to work out a plan by which it could make a profit from the redemption of country bank notes. It offered to make itself an agent of redemption for the country banks, agreeing to accept their notes at par provided a deposit was kept with it to pay for the trouble. At first only a small number of banks availed themselves of the privilege, but the Suffolk Bank retaliated by sending home for redemption the notes of all banks which did not adopt the plan. The final result was that all the banks in New England became members of the Suffolk system, which continued until the National Banking Act was passed.

It soon became a clearing house for bank notes and, just as the city clearing houses offset the credits and debits of the various banks against each other in such a way that only balances are paid in cash, so the Suffolk Bank canceled the bank note obligations of all New England. In 1845, the Massachusetts law was changed to provide that no bank should pay out any notes except its own, a provision which strengthened the Suffolk system because it made quick redemption necessary. All bank notes issued would circulate in the pockets and tills of the people as long as there was actual demand for them. When this demand subsided they would be deposited in a bank, and since they could not be paid out again they would be quickly redeemed at the Suffolk Bank.

During the greater part of the existence of the Suffolk Bank there was no provision in Massachusetts for keeping a specified reserve. The system worked so well, in fact, that specie was seldom demanded. In 1858, the Massachusetts legislature passed a law providing for a reserve of fifteen per cent against both notes and deposits. Both were thus recognized as liabilities of the bank, equal in every respect. The notes were not intended for permanent circulation but for redemption when the need for them disappeared, in the same way that our checks and drafts are redeemed today. Under this system the average life of the bank note was found to be about five weeks.

The operation of this plan illustrates the value of a system of quick redemption. New England bank notes were issued according to the banking principle, contracting and expanding in volume according to the demands of trade. During panicky times the banks of the Suffolk system were the last to suspend specie payment. Their notes acquired a wide circulation outside of New England and, in 1857, five hundred banks were included in the system.

9. *Safety-fund system.*—New York State furnishes two interesting experiments in the field of banking—the safety-fund system and the bond-deposit or free banking system. The first plan is espe-

cially worthy of note because of the light which it throws on the proposal to guarantee bank deposits. The second plan is of interest because it was adopted later as a model for the national banking system.

The safety-fund system was established in 1829. Each bank was required to contribute annually one-half of one per cent of its capital to a special fund in the hands of the state until contributions should amount to three per cent of its capital. Out of this fund all the debts of failed banks (except those due to stockholders on their stock) were to be paid after the assets of the bank had been exhausted. In 1837, the law was amended so that the notes of failed banks could be paid immediately, provided they did not amount to more than two-thirds of the money in the fund. In that year, several banks failed and their notes suffered no depreciation. After 1840, however, the number of banks which failed was so large that the safety fund was too small to meet all their obligations, both notes and deposits. Accordingly, in 1843, the law was again amended so that the fund was made applicable only to the payment of the notes of insolvent banks.

In 1838, the bond-deposit system was established and all banks which were incorporated after that date came under the new plan. This weakened the safety fund because there were no new contributions to it and the burden fell upon a constantly decreasing number of banks. In 1846, the new constitution of New York provided that note holders were to have a first lien on all the assets of a bank and that in case of failure stockholders were to be liable for an amount equal to their holdings of stock. It was provided further that no special charters, such as those under which the safety-fund banks operated, were to be granted or renewed. These were important developments in the field of American banking. The safety-fund system gradually died out with the expiration of the charters, and all claims against it were finally paid in full. The last charter expired in 1866.

10. *Free banking or bond-deposit system.*—The free banking law of 1838 authorized any person or association of persons who would deposit with the State Comptroller bonds of the United States, of the State of New York or other approved states, or mortgages secured by real estate worth twice the amount of the mortgage, to receive from the State Comptroller circulating notes to be signed and issued as money. This deposit of collateral was intended to insure the note holder against loss. No provision for actual redemption in specie was required. Anyone who possessed the necessary securities might enter the banking business, and it is evident that many of them did. Over 130 new banks were organized before 1840. Failures quickly resulted and it was found that in many cases the securities deposited were not sufficient to meet the notes. Real estate mortgages, however valuable, were not quick assets, hence the law was finally changed so that only the bonds of the

United States and of New York were available for deposit.

The notes circulated at first at considerable discount, but this was overcome to a certain extent in 1840 by an amendment to the law which necessitated redemption of the notes of interior banks in New York and Albany at a discount not greater than one-half of one per cent. This still gave an advantage to the country banker because of the profit he could make by lending his notes at par and redeeming them at a discount. Hence many banks in the cities issued their notes in the country towns. The business of some of these banks was solely to issue notes. They had no permanent banking house and received no deposits. In 1848, this condition was bettered somewhat by a law requiring banks of issue to become banks of deposit as well, but the law was never strictly enforced. The effect of these various amendments, however, and of the constitution of 1846 was to improve greatly the condition of the issuing banks, so that after 1850 failures were infrequent and in almost all cases the notes were redeemed at par. After 1860, there were no failures which resulted in loss to note holders.

This system was copied by eighteen other states, including Illinois, Indiana and Wisconsin, but with disastrous results. In none of these states did the system survive long enough to become perfected. In Illinois, for example, a large amount of the securities deposited were those of the Southern states, which became valueless at the outbreak of the war. The bank currency circulated at great discounts, varying with the reputation of the issuing bank. In 1857, there were one hundred and twelve banks in Illinois. In 1861, there were only seven and the holders of notes of the defunct banks had realized less than forty cents on the dollar.

The only advantage of this system over that of the safety fund is security. This was proved by the experience of New York after the list of acceptable bonds had been restricted to those of the United States and of New York. No currency could be more secure, that is, more certain of ultimate redemption. This, however, is not the only desideratum of a credit currency. Current redemption is as important as ultimate redemption, and in this the system was defective. Moreover, the system was rigid—when the banks deposited securities they were given the right to issue so many notes, and they could not issue additional amounts without first depositing more securities, no matter what the needs of business might be. In other words, the system was inelastic. This is an attribute which it handed down to our national bank note circulation along with that of security, and against which most of the attacks on the system have been directed.

11. *Indiana and Ohio.*—The Bank of Indiana was a successful institution. It was incorporated in 1834 with a capital of $1,600,000, one-half of which was subscribed by the state. It was given a monopoly of banking in the state and the right to establish

branches. Each branch was allotted a certain capital, and the issue of notes was restricted to an amount twice as great as the capital. The branch banks were required to accept the notes of other branches at par and to redeem their own notes in specie. During the first years of its existence the bank attempted to loan on real estate security, but the danger of this custom was soon realized and it was discontinued. Subsequently it loaned to farmers on their personal notes and on their crops, but the loans were always for short periods. In this way, it transacted business on sound banking principles and continued to thrive until 1866 when the Federal tax on state bank note issue forced it out of existence.

The State Bank of Ohio was likewise well managed and highly successful. It had a capital of $3,300,000 and had thirty-six branches. Note issue was restricted to an amount not greater than twice the capital and it was safeguarded further by a safety fund of ten per cent deposited with a board of control. The bank passed out of existence with the expiration of its charter in 1866.

Both these states secured an elastic and sound bank note circulation. They were especially fortunate in securing good officials for their banks.

12. *Louisiana.*—In 1842, the State of Louisiana passed a bank law which was worthy of imitation in some respects. The following were its principal features: (1) no bank was to have less than fifty shareholders, having at least thirty shares each; (2) di-

rectors were made liable for losses suffered thru violation of the law unless they could prove that they had voted against incurring the liabilities, if present; (3) directors were required to attend meetings or to resign after five succesive absences; (4) absence from the state for more than thirty days automatically retired a director from office; (5) specie reserve had to be equal to one-third of all the liabilities; (6) the other two-thirds of liabilities had to be represented by commercial paper having not over ninety days to run; (7) all commercial paper had to be paid at maturity and, if not paid, the account of the debtor was closed and his name sent to other banks as a delinquent; (8) no bank was to pay out any note but its own; (9) all banks had to pay their balances to one another in specie every Saturday under penalty of immediate liquidation; (10) all banks were to be examined by state officers, quarterly or oftener.

This was the first law passed in any state requiring a reserve against deposits. The amount required is larger than is now considered necessary. By 1860, Louisiana became the fourth state in the Union in point of banking capital and second in specie holdings. Not all the provisions of the law would be considered desirable today, but such as they were, they were conscientiously and intelligently enforced until the capture of the city of New Orleans during the Civil War.

13. *Banking in other states.*—The history of banks in which the various states were part owners was gen-

erally disastrous. Kentucky tried the experiment in 1806 and again in 1820. Alabama, in 1820, subscribed two-fifths of the capital of the Bank of Alabama, issuing bonds in payment. The original restrictions on loans were ample but they were constantly violated. Loans were made freely to members of the legislature and their friends, and in ten years the discounts increased from $500,000 to $20,000,000. The panic of 1837 found a large amount of these loans worthless and confidence in the notes disappeared. A period of business stagnation followed, and, in 1845, the charter expired and was not renewed.

Mississippi, Arkansas, Florida and Louisiana had similar experiences. The Union Bank of Louisiana was established in 1832 with a capital of $7,000,000 raised by a sale of state bonds. It failed ten years later, and was followed by the establishment of privately owned banks under sound laws. Missouri's experience was not so calamitous, altho the Bank of Missouri was never a great success, and the state's connection with it was severed in 1866.

As a rule the state banks did not fail for the same reason that caused the downfall of the First and Second Banks of the United States. While, in some instances, the banks became involved in politics, the failure was generally due to defects in organization and management.

14. *George Smith's money.*—George Smith came to America from Scotland about the time the State

Bank of Indiana was started. After buying some real estate in Chicago, he returned to Scotland and persuaded some friends to come to this country. In 1838, he conceived the idea of establishing a bank. Being unable to get a bank charter directly because of the prejudice in the Northwestern states against banks, he devised a scheme to get one indirectly. In 1839, he obtained from the legislature of Wisconsin a charter for an insurance company. The charter expressly excluded banking privileges, which meant the right to issue circulating notes. But Smith soon began to issue certificates of deposit payable to bearer, made similar to bank notes in appearance. These certificates attained a wide circulation under the name of "George Smith's money."

The charter contained no regulations for this kind of business and the legislature was forced to take notice of the fact that Smith was "wildcatting." A committee investigated the company and found it to be in sound condition, but recommended that the charter be repealed. This was done in 1846, but Smith continued to do business as before on the ground that the legislature could not repeal the charter. The circulation of his certificates rose to $1,470,000 and several runs for specie were met successfully. Smith also bought and sold exchange on New York at the various branches which he established thruout the West.

"George Smith's money" was an excellent illustration of currency issued according to the banking principle. The weakness of the plan lay in the failure of the state to regulate it properly. Its success was due to the remarkable qualities of the man who controlled the system.

In 1853, Wisconsin passed a law requiring a deposit of bonds against circulating notes. As this kind of banking did not suit Smith, he sold out his interest in the Wisconsin Marine and Fire Insurance Company and established a bank at Chicago. He then bought up two banks in Georgia, the notes of which he paid out in Chicago. The notes were redeemed in drafts on New York. The approach of the Civil War warned Smith to give up operations in the South. He then retired to London, where he died in 1900, leaving one of the largest fortunes in Great Britain. The Wisconsin corporation later became a national bank.

REVIEW

What regulations imposed on the early American banks have proved sound? What regulations were unsound?

What were the weaknesses of the safety-fund system?

Why did the free banking system fail?

What characteristics may be found in common in George Smith's bank, the State Banks of Ohio and Indiana, and the Suffolk system?

What weak feature of the early banking systems became a part of our present banking system? What was its origin?

Contrast the failure of the Second Bank of the United States with the failure of banks controlled by the various states. What cause underlay the failure of each and in what dissimilar ways did the cause operate?

CHAPTER XII

BANKING IN EUROPE

1. *Bank of England.*—Like many other banking institutions, the Bank of England had its origin in the needs of the state. It was established in 1694 chiefly for the purpose of assisting the fiscal operations of the government, which was badly in need of money on account of the war with France. Taxes of all sorts had been levied, but it was very difficult for the government to borrow because of the confiscation, in 1672, by Charles II of funds borrowed in like manner. Altho this sum, amounting to over £1,300,000, had finally been paid, bankers and individuals of wealth were still very cautious about making advances to the government.

The original charter of the Bank of England provided that it should be given the power to issue notes, to deal in coin, bullion and commercial bills, and to make advances on goods and merchandise. These powers were contingent upon a loan to the government of £1,200,000 for which the bank was paid eight per cent interest. From its ability to issue notes the bank found itself possessed of an equal amount of currency which it was at liberty to lend. These notes were not payable to bearer, hence they passed only by indorsement. They were post notes and bore interest. In 1697, the capital of the bank was increased, a further loan was made to the government, and the bank was given the right to issue demand notes without interest.

In 1709, an attempt was made to give to the Bank of England a monopoly of the banking business by providing that no corporation or partnership composed of more than six persons should be given the power to issue circulating notes. The issue of notes at that time was supposed to cover the entire field of banking, so it was thought that this provision would prohibit any organization of more than six persons from engaging in banking in any form. It is obvious that this did not prohibit the issue of notes by individuals or corporations of less than six persons, nor did it prohibit the operation of banks of deposit by larger organizations. This fact was not understood for many years, however, and with the exception of small institutions, the Bank of England enjoyed a monopoly of the entire field of banking. The effect of this monopoly was not felt at first, but with the general development of commerce which occurred in the latter part of the eighteenth century a demand for credit instruments arose which the Bank of England could not meet. Accordingly, a great number of small, weak banks sprang up whose notes soon flooded the country. They were issued for the most part in small amounts, and, in 1777, a successful attempt was made to drive them out of circulation by prohibiting the issue of notes in denominations smaller than £5.

2. *Development of the use of checks.*—Charles A. Conant, in his "History of Modern Banks of Issue," says:

> The prohibition upon note issues was probably one of the causes which contributed to the use of checks. The notes issued by private bankers were at first written on paper for any odd sums like promissory notes. The practice was introduced by Child and Company in 1729 of having the notes partly printed and partly written, like a modern check. These notes continued to be issued till about 1793, when the existing system of giving the depositor a credit for the full amount of his deposit and authorizing him to draw checks at his convenience against it was introduced. The issue of notes by private bankers was not forbidden until the Bank Act of 1844, but their use gradually diminished as the greater convenience of checks came to be understood.

3. *The Bank and the government.*—The intimate relation between the Bank of England and the government, which had been established at the outset, continued as time passed. The charter was renewed from time to time, usually on the condition of additional loans to the government. The war against Napoleon was financed largely by the Bank of England, Mr. Pitt drawing heavily upon the Bank for money which was sent to the Continent to finance the war. These drains of specie continued unabated until in 1797 the Bank was forced by Parliament to suspend specie payment. The suspension, or restriction, as it was called, continued until 1821.

During the earlier part of this period the Bank of

England was able to keep its notes circulating at par with coin. The Act of 1797 had made them legal tender. Finally, however, depreciation began, and during the boom which followed the panic of 1810 it assumed considerable proportions. In that year, a committee was appointed by Parliament to investigate the financial and monetary situation, and a report known as the Bullion Report was the result. In this report the real evils of the situation were ably expounded, and recommendations were made which might have restored the currency to a stable value if they had been adopted promptly. Altho the recommendations were not adopted, they served to educate the minds of bankers and public men to an understanding of the problems involved, an education which bore fruit a few years later.

In 1816, England adopted the gold standard and in 1821, when the Bank had accumulated a large amount of gold, resumption became a fact. At the same time the government's power to borrow from the Bank was restricted so that no further loans could be made without special authority from Parliament.

In 1823, it was discovered that the Bank of England had not been given a monopoly of banking except in its note issue function. Accordingly, a movement followed to establish joint stock banks of deposit. This had little effect, as no banks were immediately established, but it resulted in certain concessions from the Bank of England, because of the fear of competition. In 1826 the Bank consented to the establishment of joint stock banks of issue at a distance of more than sixty-five miles from London. In 1833, joint stock banks were authorized in London and the vicinity, but they were not given the right of issue.

In 1833, an act was passed by Parliament which made the notes of the Bank of England legal tender as long as they were being redeemed in gold at the Bank.

4. *Bank Act of 1844.*—During the decade which followed the authorization of joint stock banks of issue, seventy-two of these banks were organized and note issues increased. In 1836 and again in 1839 panics occurred, and it was popularly thought that they were caused by an excessive issue of notes. As a result the famous debate over the currency principle as opposed to the banking principle of issue arose.

The advocates of the currency principle won out in Parliament and succeeded in getting their ideas incorporated in the Bank Act of 1844. The charter of the Bank of England was before Parliament for renewal. The new charter provided for the entire separation of the banking and issue departments. The banking department was ordered to deposit with the issue department £14,000,000 of government securities; this represented the average amount of circulation then outstanding. This deposit included the government's debt to the bank, which amounted to £11,015,000. Up to the amount of the bonds deposited, the bank was permitted to issue uncovered notes, that is, notes not backed by a gold reserve of one hundred per cent. More notes could be issued only when a deposit of an equal amount of gold coin or bullion was made with the issue department. The right of deposit was open to anyone. Joint stock banks of issue were allowed to continue issuing notes, but if they retired their circulation it could not be re-issued. In order that this might not cause too sudden a contraction of the currency, the Bank of England was given the right to increase its deposits of bonds and to issue uncovered notes against them to the amount of two-thirds of the circulation retired by the joint stock banks.

Under the operation of this plan the amount of notes issued against securities had increased to £18,-459,450 in 1914. In 1908, there were fourteen joint stock banks which retained the right of issue and had outstanding slightly over £900,000 of notes. At the same time, about £480,000 of notes put out by private banks were in circulation.

5. *Character of the Bank of England note.*—By this Act the character of the bank note was changed entirely. Formerly it had been a credit instrument, depending for its redemption upon the Bank's reserve and general assets—the bonds, notes, etc., for which it had been exchanged. Its volume expanded and contracted with the demand for a medium of exchange. The Bank Act converted it into a gold certificate—a warehouse receipt for gold—destroying entirely its character as a real bank note. Now its vol-

ume can expand only after a deposit of an equivalent amount of gold, hence the only economy the system attains is in the greater convenience of paper money. England's currency supply is extremely inelastic. It varies only with the supply of gold which is left in the country by the movement of foreign trade.

The Bank Act was followed by a considerable increase in deposit banking. Accordingly this inelasticity was not felt until the panic of 1847. In that year, and again in the panics of 1857 and 1866, the demand on the Bank for notes was so great that the government suspended the Bank Act and allowed the bank to issue notes based on its general assets. The rate of interest at which the Bank could lend its notes was fixed in 1857 at eight per cent, and in 1866 at ten per cent. The interest was to be credited to the government's account, so that the Bank would not increase its loans unnecessarily with the idea of making large profits for itself. In this suspension system lies the only elasticity of the English plan of note issue. In the panics in which it has been used, it has had the desired effect; but it is a dangerous device to rely upon because it depends upon the consent of Parliament or an order in council. There is always the danger that consent will not be granted in time. At best the Bank can only use its notes to check a panic already under way. It cannot well use them as a preventive.

6. *A banker's bank.*—With the growth of deposit banking, the resultant increase of joint stock banks

of deposit and the restriction upon note issue, the Bank of England has become chiefly a banker's bank. It may be said to hold the cash reserves of all England. There are no laws compelling banks to keep cash reserves, this being left entirely to the judgment of the bankers themselves. The banks carry only till money and keep their reserves on deposit with the Bank of England. Against these deposits the Bank of England usually carries a reserve of between forty and fifty per cent. The total cash reserve upon which the English credit system is based probably amounts to no more than six per cent. To Americans this seems an amazingly small figure. It is made possible by the concentration of reserves and by the commanding position which the Bank of England occupies.

In England there are a number of great institutions which are engaged in making acceptances. We have already seen how profit is made in the acceptance business and how greatly a system of acceptances benefits a country. When these great acceptance houses and joint stock companies feel a need for cash, they draw on their balances at the Bank of England. If they do not wish to deplete their reserves they take commercial paper to the Bank and have it rediscounted. The proceeds are placed to their credit subject to withdrawal.

The Bank of England cannot refuse payment on deposits after they are once made. Accordingly, in order to protect its reserve, it raises the discount rate.

The banks, finding themselves subjected to a heavier charge when rediscounting, will raise their own discount rates to customers. The effect of this is that the only customers able to borrow are those who need accommodation most and who can offer the best paper. Credit is contracted automatically, prices fall, imports of merchandise slacken, gold exports drop off and the country is restored to a normal basis. In such a time it would be extremely desirable for the Bank of England to have an elastic issue power. To get this, however, the Bank Act must be suspended.

It is feared by some that the rapid growth of the large joint stock banks will lower the prestige of the Bank of England. If the Bank should cease to be the main reliance of English banks for rediscounting purposes, it would no longer be able to control the general discount rate and thus to contract credit and check gold exports single handed. A general agreement among the larger banks would be necessary and at times this might be prevented thru competition and jealousy. Action certainly could not be taken as promptly as at present. It is thought that an elastic note issue power would materially increase the prestige of the Bank. As it is, the Bank's rate is carefully watched the world over as a barometer of trade. If the rate is lowered, it means that reserves are piled up in the Bank which it is anxious to lend; if it is raised, it indicates that the Bank is attempting to contract credit and to build up its reserves.

7. *A private institution.*—The Bank of England

has always remained a private institution, bent upon earning profits for its stockholders. In the early days, it became much involved in government affairs thru its loans. It did not dare refuse the demands of the government for fear that the latter would repudiate its debt. It still greatly assists the fiscal operations of the government by managing the public debt, receiving government revenues and making various payments, but the government has no direct control over these functions except when its contracts with the Bank expire.

The directors of the Bank are elected by the stockholders. They must not be "bankers" in the English sense of the term, that is, lenders of money for short terms on commercial paper, but this rule does not exclude the great financiers who are engaged in other branches of the banking business. The twenty-four directors elect a governor and a deputy governor for a term of one year. Usually the senior director, who has not already served, is made governor and the next in seniority, deputy governor. It is usually about twenty years from the time of a man's entry upon the board of directors until he is reached in his turn as governor. The board meets every Thursday in the historic "bank parlor" to pass upon the reports for the week.

Altho run for profit, the bank has been managed in the interests of the whole country, and its management has been so efficient and unselfish that many people are under the impression that it is a government institution. In general, it has been found best that the great central banks should be managed by the government or at least that the government should have the right to determine the general policy of the bank.

8. *Early banking in France.*—The earliest attempt to establish a central bank of issue in France was made in 1716 by John Law, a Scotchman. The bank was well conceived and successful until it became involved in the operations of Law's famous Mississippi Company. This company was one of the most ambitious schemes to dominate world trade that was ever planned. It started out with a monopoly of the trade of Louisiana, Canada and the West Coast of Africa. It proceeded to take over France's public debt, to assume responsibility for collecting the nation's taxes and to take over the tobacco monopoly. The plan was to control the commerce of two continents. Shares having a par value of 500 livres sold up to 12,000. A dividend of forty per cent was declared in 1720. Paris became the center of one of the wildest speculative movements the world has ever known. The bank and the Mississippi Company were made practically one. A commission which was appointed to examine the bank found that against 3,000,000,000 livres of circulation it had 21,000,000 livres of coin, 28,000,000 in bullion and 240,000,000 in commercial paper, less than ten per cent of assets in all against its outstanding notes. In the resulting run on the bank several unfortunates were trampled to death. The

bursting of the Mississippi "bubble" spread ruin thruout Europe. It so prejudiced the people of France against banking that for fifty years no attempt was made to establish another bank.

The success of the Bank of England and the expansion of business finally prompted the organization of the Bank of Commercial Discount in 1776. This institution received its death blow at the hands of the government in 1789. During its brief existence it was well managed and gave excellent service. The government, however, found that its own credit was unstable and in an effort to repair it by enforcing loans from the bank, it dragged the bank down with itself. The climax came when the bank was ordered to pay into the treasury a large sum of notes in return for worthless assignats. In 1793, the bank was suppressed by a decree of the National Convention. The Reign of Terror followed, during which no financial institution could live.

9. *Bank of France.*—The Bank of France was founded by Napoleon in 1800 with a capital of 30,000,000 francs. At the outset, it had no special privileges with regard to the issue of notes, nor was it a government institution in any sense. In 1803, the capital was raised to 45,000,000 francs, and it was given the exclusive right of issue in Paris. In 1806, the capital was further increased to 90,000,000 francs and the present system of management was adopted.

Under this system a governor and two deputy governors are appointed by the head of the state. These officials must be stockholders. There is also a board of fifteen regents chosen by the stockholders, but the governor presides over this board and has general supervision of all the loans and bank affairs. The government has never been a shareholder in the bank.

In 1808, the bank was given exclusive right of note issue in all towns in which it had branches. During the years following the fall of Napoleon its influence waned somewhat and public sentiment favored the establishment of a bank in each one of the departments into which France is divided for administrative purposes. A large number of these came into existence between 1830 and 1840 as the result of a belief that the Bank of France was not properly organized to administer the banking affairs of the average citizen. It was popularly believed to be only a banker's bank. The growth of the departmental banks soon resulted in a spirited contest with the Bank of France. The main point at issue was whether the privilege of note issue should be confined to the one bank or bestowed upon all. The final result was the Act of 1848 which gave to the Bank of France a monopoly of the note issue function. The bank was required, however, to buy out the departmental banks of issue. It promptly did this by increasing its own capital stock.

The bank is required to maintain one branch in every department in France. Each branch is allotted a certain amount of the capital, and the law requires that half the capital of the branch shall be held locally. The total capital, in 1914, was 180,000,000 francs, or approximately $36,000,000. Loans are made at the branches as well as at the central institution, and at the same rate of interest. It is worthy of note that the bank often lends in very small sums, running down to a few francs.

10. *Meeting a crisis.*—In a time of crisis, the Bank of France can raise the discount rate just as the Bank of England does. There are banks in France engaged in the discount and acceptance business just as there are similar institutions in England. When they need cash, they take commercial paper to the Bank of France and have it rediscounted. In return, they get notes from the bank instead of leaving the proceeds on deposit as is done in England. As long as the Bank of France is confident that the paper is good it can continue to rediscount and pay out notes. Of course, there is a natural limit to this process. As soon as the currency supply begins to be excessive, prices rise, imports increase and gold begins to flow out of the country. When gold begins to leave the country, the bank knows that credit is over-expanded and it takes measures to force contraction.

The bank has three ways of protecting its gold reserve. It can raise the discount rate but this is a last resort. As a rule, the discount rate is steady, even when the rates of the Bank of England and of the Bank of Germany are fluctuating. The rate is also generally lower than that of the other central banks in Europe. The second method which the bank has of protecting its gold reserve is to charge a premium on gold. Both gold and silver are legal tender in France. If the bank has reason to believe that gold is wanted for export purposes it may exercise the option of redeeming its notes in silver or it may charge a premium on gold if note-holders insist on having it. If the premium is made too great people thruout the country will go to the trouble and expense of collecting gold. This pulls the precious metal from all the little nooks and crannies where it has been hoarded and makes it available to meet the emergency. Gold will be exported anyway, but the fear that the bank will charge a premium places a check on credit inflation. It should be noted that the policy of charging a premium does not keep the total gold supply of France from being drawn down, altho it may protect the bank's own reserve. But the bank's reserve, rather than the general gold supply of the country, should be protected, since the gold when in the bank is in a position to be more effectively used.

France is the only great nation which resorts to the expedient of charging a premium on gold. This inconvenience to business is offset by the steady and low rate of discount which is maintained by the bank. The raising of the discount rate is a most effective check upon inflation and gold exports when the bank chooses to employ it.

11. *Selling securities.*—Sometimes the Bank of France, and the other great central banks of Europe, find that the desired result cannot be attained by

merely raising the discount rate. Suppose the country is in the midst of a period of prosperity. Reserves are plentiful in all the banks. The market rate of interest is low and the various banks are well able to take care of all the demands made by customers from their own resources without having to rediscount at the central bank. Under these circumstances they may pay no attention to a rise in the rate at the central bank but may go on loaning at low rates. The rise in the rate does not affect them so long as they are not compelled to rediscount. It may have some moral effect as it indicates what the banks will have to pay in case they are forced to rediscount. Moreover, it is well known that the central bank would not raise its rate unless it foresaw danger of inflation or of gold export, which would mean rediscounting if it came.

Suppose the banks do not heed the warning. They must be made to see the light before it is too late. In order to bring this about, the central banks are always accustomed to keep on hand a large supply of securities, especially of foreign bills, which can be thrown into the market. The selling of these securities acts as a sponge in soaking up the surplus of loanable funds. A banker who has a million to loan buys securities instead, because he gets a good bargain. Now, if he wants to loan, he must rediscount. He will charge a rate higher than he has to pay at the central bank. This is the result desired. Inflation is checked, a certain amount of liquidation is forced and the threatened tide of outflowing gold is stemmed. If necessary, the central bank may sell its securities abroad so as to build up foreign credits and thus lessen the need for gold exportation. Of course, the central bank may sell its securities at a price below that which it originally paid for them and it may suffer a considerable loss. It does all this with full knowledge for the purpose of forestalling a crisis and so aiding the general business of the country at its own expense. A central bank is more than a money-making affair. It is a patriotic institution.

American bankers have been equally desirous of rendering service to the nation under similar circumstances but they have never had the machinery which was necessary to make their efforts effective. We have the Federal Reserve system now. It must be borne in mind, however, that a bank cannot begin to collect securities on the eve of a crisis. The operation of buying has an effect, the exact opposite to that of selling. A large supply must be accumulated in ordinary times and kept ready for an emergency. Buying at a late hour will only aggravate the situation, for it will set free additional funds to swell the already redundant supply.

12. *Suspension of specie payment.*—The Bank of France has twice been forced to suspend specie payment. In the revolution of 1848, the bank suspended payment and its notes were made legal tender, but it

was ready to resume at the end of three months. The government, however, forbade resumption until 1850, when the legal tender provision was repealed.

The bank suspended payment again in 1870, at the beginning of the Franco-Prussian War, and its notes were again made legal tender. The bank at that time held specie nearly equal in amount to its outstanding notes, and equal to about seventy-five per cent of all demand liabilities. It was in a position to meet a run, in addition to making the usual loans to the community and the necessary loans to the government. The people thought, however, that specie was flowing into Prussia and so they demanded suspension. Even after suspension the notes never fell more than four per cent below par. Specie payments were resumed in 1878.

The Bank of France guaranteed the Morgan loan of 250,000,000 francs in 1870 and later made it possible for the government to pay the $1,000,000,000 indemnity to Germany at a time when the country was still smoking from the fires of a disastrous war. Thru her excellent credit system, France, tho defeated in war, kept her commerce moving in 1873 when victorious Germany was suffering from a severe panic.

13. *Imperial Bank of Germany.*—The Imperial Bank of Germany, or Reichsbank, was organized upon the foundations of the Bank of Prussia in 1875. Its organization was one of the measures adopted by Bismarck to bring order out of the monetary chaos

that had existed in the German states prior to the unification of the Empire. Before the establishment of the Imperial Bank there had been five different currency systems in the Germanic Confederation, with a heterogeneous coinage, a variety of state bank notes circulating at varying rates of discount, and a sprinkling of legal tender paper put out by the various state governments. Part of the stock in the Bank of Prussia was owned by the Prussian government. This was bought by the German Empire and resold to private subscribers. The Imperial Bank is privately owned.

In 1873, Germany adopted the gold standard. The successful passing to the gold standard and the remarkable success of the Imperial Bank at the very beginning can be largely attributed to the $1,000,000,000 indemnity which Germany received after the Franco-Prussian War. About one-quarter of this was paid in gold, and a great part of the remainder consisted of exchange on London which was payable in gold.

14. *Government control.*—The bank is controlled by the government thru an official board of curators composed of the Chancellor of the Empire, who is president, and four other members, one named by the Emperor and three by the Federal Council. The administrative authority is vested in a board of directors who are selected for life by the Emperor from a list submitted by the Federal Council. The officers of the bank, tho paid from the funds of the bank, are

considered government employes and are forbidden to hold stock. The influence of private owners is exerted thru a central commission of fifteen members, elected by the shareholders from among themselves. This commission directs many of the details of the bank so long as their course does not conflict with the general policy of those above them. Three of the commission are charged with the daily supervision of the bank's affairs and they may sit at all meetings of the directorate with consulting powers.

The profits of the Reichsbank are divided as follows: three and one-half per cent on the capital stock to the shareholders, ten per cent of the excess to surplus, three-fourths of the remainder to the government and the other fourth to the shareholders.

15. *Note issue.*—The note issue of the Imperial Bank is modelled somewhat on the English Bank Act of 1844. When the Act of 1875 was passed, there were thirty-two independent banks of issue in the Empire. They were allowed to issue in the aggregate, 135,000,000 marks and the Reichsbank 250,000,000 marks of notes uncovered by gold. It was provided that if any of the independent banks should retire its circulation, its right of issue should pass to the Reichsbank. By 1908, all but four of the banks had given up the right of issue, and they had an authorized circulation of only 68,771,000 marks. The uncovered issue of Reichsbank had at that time risen to nearly 473,000,000 marks, which is called the "contingent circulation." Imperial Bank notes are legal

tender and they are issued in denominations as low as 20 marks ($5).

The German law, like that of England, requires that for all issues above the contingent circulation the bank shall hold an equal amount of cash in its reserve. The fund is not sequestered and held against notes alone as in the case of the Bank of England, nor is the rule inflexible like the English law. The bank may exceed the limit of cash reserve by paying a tax of five per cent on the surplus issue, provided it maintains a reserve equal to one-third of its circulation. The other two-thirds must be covered by three-name paper having not over ninety days to run.

The management of the bank has at times lent notes under this provision at a rate of interest lower than the tax rate, thus imposing a loss on the bank for the good of the community. While a tax on circulation is not generally considered as good as the tax on deficiency in reserves, this provision gives to the note issue a certain degree of elasticity which makes it superior to that of the Bank of England.

16. *Giro system.*—One of the most important services rendered by the Imperial Bank is the transfer of deposits on current account. The Reichsbank has hundreds of branches scattered thruout the Empire. By the Giro system a person in any town where there is a branch of the bank, wishing to make a payment to some one in another town, may pay the amount into the local branch of the bank and it will be credited the following day to the person in whose favor it is de-

posited. No charge is made for the transfer and the person who makes the payment need not have an account with the bank. The system results in an enormous economy in the use of specie. It may be compared in some respects to the American clearing house and it operates somewhat as a substitute for our check system.

17. *Control over the money market.*—The Reichsbank does not hesitate to vary the discount rate in order to control the money market. In addition to this method, the bank has two other ways of giving flexibility to its resources and of checking sudden movements of gold. One of these is the accumulation in its portfolio of foreign bills, especially those drawn on England. When exchange approaches the gold export point the bank sells these abroad and relieves the tension.

The other measure is also practiced by the Bank of England and there it is called "borrowing from the market." The principles involved were explained in Section 11. The process in England consists of offering treasury bills for discount in the market, thereby absorbing surplus cash and preventing a too rapid fall in the open market rate of discount. The Reichsbank may sell either treasury bills or commercial paper. Both of these processes need to be administered with care. An unskilled employment of the power at the wrong time may have disastrous effects.

The most notable development in later German banking has been the tendency of the great discount and acceptance houses to combine. Early in 1914, two banks combined with a joint capital of $75,000,000; and there was one bank already in existence which had a capital as large. This is regarded as an important development in the direction of the increased influence of the Berlin money market. It may in time lower the prestige of the Reichsbank at home.

18. *Other European systems.*—The three great systems just described may be taken as representative of the banking systems of Europe. Scotland has an excellent system with some unique features, but most of these are also found in the Canadian system which is described in the following chapter. In general it may be said that the European countries have seen the advantages of having a strong central institution capable of controlling the money market in the interest of the community. Most of the great European banks are privately owned but controlled by the government, the Bank of England being the notable exception to the rule of public control. The use of rediscounts and acceptances is one of the features most worthy of imitation. The German Giro system indicates, in a way, the enormous advantages to be gained in America by a sensible extension of the clearing house principle.

REVIEW

Assume that in a given country the currency has become inflated. Prices are rising, imports are increasing and there is an immediate prospect that gold will be exported. What steps to remedy this situation may be taken by the Bank of England? The Bank of France? The Reichsbank?

What feature not possessed by the early Banks of the United States do the Banks of France and Germany possess?

Which is more desirable—the protection of the central bank's gold reserve or the general supply of gold in the country? Why?

Does the German system of note issue make for any greater elasticity than the English system? How?

What feature of the German banking system may prove of especial interest to the United States?

In the Text, it is stated that the formation of great discount and acceptance houses may in time lower the prestige of the Reichsbank. What reasons do you assign for this statement?

CHAPTER XIII

CANADIAN BANKING SYSTEM

1. *Banks and the government.*—The Canadian banking system is generally recognized as one of the best in the world, if not the very best. It is so often held up as a model for the United States to follow that every student of banking in this country should be conversant with the principal features of the system.

In 1916, there were twenty-two large joint stock banks, privately owned and managed, but working under a uniform law. The banks were taken from provincial control and placed under the Dominion government in 1867, when the British North America Act was passed by the Imperial Parliament to weld the provinces into the Dominion of Canada.

No bank is chartered with less than $500,000 capital and one-half of this must be paid in before business is begun. Rigid examination is made into all applications for new bank charters, and there is a rule that a majority of the directors in every bank must be British subjects living in Canada. It is difficult for new banks to be established unless they are sure of a great volume of business from the start. Banking facilities are extended, not by establishing new banks, but by increasing the number of branches and by adding to the capital and surplus of the parent banks already established. There are over three thousand branches scattered thruout Canada and a few in other countries. Canadian banks have been particularly active in the West Indies. The tendency since 1894 has been to decrease the number of parent banks thru consolidation and otherwise. In that year, there were thirty-nine banks. In 1908, there were thirty; and in 1916, twenty-two. The Canadian Banking Act is revised every ten years and all charters are renewed at this time with such changes as may seem desirable. The last revision was due in 1910, but for certain reasons it was delayed and the most urgent needs were taken care of by amendments to the Act of 1901. Revision was finally made in 1913 and one or two important changes were made.

2. *Note issue.*—The chartered banks have the exclusive privilege of issuing bank notes. The denominations are $5 and multiples thereof.

The greatest virtue of the Canadian bank note currency is elasticity. It adapts itself easily to the needs of business. Any bank may issue notes in exchange for commercial paper or any proper banking asset, up to the amount of its paid-up and unimpaired capital stock. This provides for easy expansion. Bank notes are sent thru the clearing houses of Canada just as checks are sent thru in the United States. This means that, as soon as a note is no longer needed for business and is deposited, it goes back immediately to the issuing bank for redemption. This secures the highly desirable feature of contractibility to meet decreasing demands of trade. Canada is an agricultural country and it is subject to the same seasonal fluctuations in the need for currency that are experienced in the United States.

3. *Emergency circulation.*—At times, the limitation of the total volume of notes to the amount of the capital stock has been found embarrassing. Accordingly, the Bank Act was amended in 1908 so as to permit the issue of an emergency circulation in excess of the capital during the crop moving season (September 1 to the end of February). This emergency circulation is subject to a tax not exceeding five per cent, which insures that it will be retired as soon as possible. The amount of emergency circulation issued by any one bank cannot exceed fifteen per cent of its combined paid-up and unimpaired capital and surplus or "rest," as it is called in Canada.

On the thirty-first day of July, 1913, the paid-up capital of Canadian banks amounted to slightly over $116,500,000. This was the upper limit of the ordinary circulation. Of course, a single bank might reach its limit long before the total of all banks amounted to $116,500,000. The total surplus was nearly $109,000,000. Fifteen per cent of capital and surplus would allow for an emergency issue of slightly over $33,800,000. Regular circulation passed $108,000,000 in July, when no emergency notes could be issued. Some of the banks were crowding the limit.

In November, 1912, the emergency circulation had approached $10,000,000 at a time when the fifteen per cent limit was somewhat over $33,000,000. Appearances indicated an even heavier demand during the fall months of 1913. The comparatively small margin alarmed the bankers and a movement was started to secure still greater elasticity.

4. *Central gold reserve.*—To meet the situation outlined above, the Bank Act of 1913 made provision for the establishment of a central gold reserve. A bank may now deposit any amount of gold or legal tender in the central reserve and issue an equal amount of notes over and above the amount allowed it by the regular limit and the fifteen per cent emergency provision. This gives additional elasticity as the banks are expected to keep a considerable part of their gold and legal tender reserve in the central reserve. This works no hardship as no special reserve, in the bank's own vaults, is required by law.

It is to be noted that the turning in of gold to the central reserve and the issue of notes against it weakens the bank's own reserve against the remainder of its circulation and its other liabilities. This is not serious, however, as the banks usually carry ample reserves. The old limit of issue to the capital stock was too low. It was made all the more severe by the custom of increasing surplus instead of capital which developed among Canadian bankers. The central reserve plan is designed to remove the old limit without opening the way for excessive issue.

Four trustees have charge of the central reserve. Three are appointed by the Canadian Bankers' Association with the approval of the minister of finance, and one by the minister himself. The Association also makes the by-laws and regulations for the custody and management of the reserve, which is in charge of the trustees at Montreal, Canada's financial center.

Canadian bank notes have now a rare degree of elasticity. The provision for contracting issue thru clearing house payments insures the retirement of every bank note as soon as its work is done. It acts as a continual test of the solvency of the issuing bank and it is perhaps the chief source of the high credit which Canadian bank notes enjoy.

5. *Seasonal fluctuations.*—The way in which bank circulation varies with the seasons is shown by the following table:

CIRCULATION OF CANADIAN BANKS

Volume in millions as reported in the government statement at the end of each month, 1901–16.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Capital
1901	45	46	48	47	46	49	49	51	56	58	58	54	67
1902	49	50	52	51	51	54	52	55	61	66	65	61	73
1903	55	56	58	56	57	59	58	60	64	71	67	63	79
1904	57	58	60	59	58	60	60	60	64	72	69	65	80
1905	58	59	59	60	58	62	61	62	70	77	73	70	85
1906	61	62	66	67	64	69	68	70	77	84	81	78	95
1907	68	71	76	73	71	76	73	77	79	84	84	78	96
1908	67	69	69	67	68	68	67	70	76	83	80	73	96
1909	66	67	69	67	69	70	71	72	79	90	86	81	97
1910	73	75	78	79	77	80	81	81	87	96	90	88	100
1911	77	80	82	84	82	89	89	91	97	106	102	102	108
1912	88	89	96	95	94	102	96	102	104	111	116	110	115
1913	95	97	102	98	103	106	99	106	111	118	119	109	118
1914	97	98	97	93	98	99	95	115	120	123	115	106	114
1915	97	97	97	96	99	100	100	100	106	123	124	122	114
1916	111	114	115	119	115	123	124	122	135	145	..	..	..

For thirty years prior to 1896, the lowest point in the year had been reached regularly in May or June, but since that date it has been transferred to January with equal regularity. This month is usually marked by a lull in business; the holiday trade is over; winter has set in steadily; some outdoor occupations are suspended for a time and the majority of business men, in both retail and wholesale trade, are taking stock. As winter wears on business becomes much more active and the note circulation rises for a time. A slight fall is experienced in the early spring when many factories shut down for repairs, lumber camps close and the men are discharged, and other winter employments come to an end. It resumes the upward course as summer occupations begin, navigation on the Great Lakes reopens, and general business gets into full swing. Midsummer brings a slight falling off, as might be expected, but soon the heavier movement of farm produce begins and the note circulation responds at once. The rise is somewhat gradual at first, but as cattle buyers, owners of cheese factories, and finally grain buyers look to the banks for notes with which to pay the farmers, it increases vigorously. Now the volume of the circulation begins to mount by leaps and bounds. It reaches its height at the end of October or the middle of November, when every effort is being made to hurry as much as possible of the western crop to market and to the seaboard before navigation closes on the inland waterways. The period of rapid expansion covers August, September, October and the first two weeks in November. During this period, in late years, the increase in volume has ranged from twenty to thirty-five per cent, according to the size of the crop to be marketed. A period of contraction, even a little more rapid than the expansion, now follows and lasts until the end of January, when the lowest level of the year is reached.

6. *Security of bank notes.*—We have already mentioned the factor of quick and easy redemption which gives Canadian bank notes their general acceptability. The ultimate security rests: first, on the double liability of the shareholders; secondly, on the prior lien which note-holders have on the assets of a bank that fails; thirdly, on the bank circulation redemption fund; and finally, on a provision for the payment of five per cent interest on the notes of failed banks from the date of refusal to redeem to the date when readiness to redeem is announcd. The last provision actually makes the notes of a defunct bank much sought after by other banks, and one who is not a banker is rarely able to obtain them.

The bank circulation fund should not be confused with the central reserve fund. The redemption fund is held by the minister of finance and it draws three per cent interest. It is maintained out of contributions by the banks and must always equal five per cent of their average monthly circulation. It is especially set apart for the payment of notes of banks that fail. If the fund becomes impaired, the banks must contribute annually to its recoupment a sum not exceeding one per cent of their average circulation for the preceding year.

To secure redemption, the law requires that the banks shall make such arrangements as are necessary to insure the circulation of all notes issued at par in every part of the country. To this end, each bank is required to establish redemption agencies in at least one city of each province.

The Canadian law does not require the banks to keep a minimum reserve. The question is one which has been widely discussed in Canada, but the weight of the argument seems to be on the side of those who think that a reserve requirement does more injury than benefit to the community. A reserve which cannot be used is of no avail in emergencies. As a matter of fact business prudence has led the Canadian banks to maintain adequate reserves, and they have been able to lend funds in the United States when our own banks have been paralyzed.

7. *Dominion notes.*—With the exception of bank notes, the only other kind of paper circulation in Canada is Dominion notes or "legal tenders," as they are often called. These are issued by the Dominion government. Against the first $30,000,000 of Dominion notes a reserve of 25 per cent is held in gold and securities, the amount of gold not to be under 15 per cent. All above $30,000,000 are backed by a gold reserve of 100 per cent. The gold reserve against the total issue usually amounts to from 80 to 85 per cent.

Dominion notes are issued in the following denominations: fractional, \$1, \$2, \$4, \$5, \$50, \$100, \$500, \$1,000, \$5,000. The notes above \$2 circulate very little among the people. They are used principally by banks for clearing and reserve purposes. While the banks are not required to hold any specific reserve, there is a requirement that 40 per cent of whatever reserves they choose to hold in Canada must consist of Dominion notes. Over 70 per cent of the Dominion notes is in large denominations and circulates only among banks. On the other hand over 75 per cent of the paper currency in circulation among the people consists of bank notes.

The advantage of having the general circulation consist largely of bank notes is readily apparent. Bank notes are elastic. Dominion notes are not. The more the total circulation is made up of the elastic element, the nearer will it approach perfect elasticity. The Dominion notes in circulation are for the most part in small denominations where elasticity is relatively unimportant.

Dominion notes closely resemble the United States gold certificates, except that they are issued in small denominations. Their resemblance to the Bank of England note is even closer.

8. *Branch banking.*—The advantages of branch banking are:

1. Large capital behind each institution. No matter how small the branch, the customers share in the security which a large capital offers.

2. Unity of policy on the part of the leading banks during a stringency, in contrast to the playing at cross purposes which distinguished the action of the national banks in the central reserve cities of the United States against the smaller banks in the panic of 1893. In 1907, if the country banks had been branches of the large city banks, they would not have withdrawn funds from those banks when they were so badly needed, and the crisis would not have been so severe.

3. Power to equip every branch with ample reserves for maintaining commercial credit by means of note issues. In Canada it is impossible for the business needs of any community, no matter how remote, to outstrip its banking facilities, as so often occurs with us. The resources of the branch bank are extended quickly and indefinitely. Moreover, when the need for additional facilities has passed, the business of the branch can contract accordingly without loss to any one.

4. Uniformity of interest rates thruout the whole country. Rates do not vary more than one or two per cent between the large cities in the East and the newer towns and rapidly expanding cities of the West. In the absence of competition, the necessity of depending upon small local banks for accommodation requires the business men of western towns in the United States to pay monopoly rates for the use of capital.

5. Expert supervision by the central office prevents bad banking. The boards of directors of the large banks are responsible for all the branches and they are therefore forced to put into practice a method of examination and supervision which is much more effective than government examination in the United States.

6. Branches can be maintained in localities where the profit of the business would not justify the establishment of a separate bank with independent capital. The city banks can establish branches with a small outlay of additional capital. Branches can be established where the business is so small as to justify simply the employment of a few clerks in a rented office.

The objection is sometimes made that the managers sent out from a central institution are not sympathetic with local conditions. This disadvantage is more than offset by the advantages just enumerated.

9. *The line of credit.*—The large capital of the Canadian banks, averaging over $5,000,000 each, enables them, singly, to take care of almost any business that can come to them. In fact, the practice is to discourage a man from doing business with more than one bank. In the United States, a man may not be able to borrow all that he needs from one bank. He may have to go to several. This results sometimes in his borrowing more than he can repay, without any one of the creditor banks knowing that he has overstepped the limits of safety. In Canada, a man is supposed to stick to one bank until he has a good reason for changing, such as removal to another locality where his bank does not have a branch. One bank will not accept the customer of another until it is satisfied that he has a good reason for making the change. The bank, on its part, is able to assure the customer that he will be able to borrow all that his business justifies. What the bank does is to extend a line of credit, as it is called. At the beginning of the season the customer estimates about how much accommodation he will need to carry him thru. He talks this over with his banker and, if his calculations seem reasonable and conservative, the bank will agree to advance that amount to him as he needs it in the course of business. The amount is placed to his credit

at the bank and he checks on it as he needs funds. Interest is paid only on the sum which is actually placed at his disposal. As the customer checks on his account, he sends to the bank collateral security in the form of warehouse receipts, bills of lading, and the other documents that are ordinarily obtained in the course of trade. The customer has the great advantage of beginning the season with the knowledge that he can secure the credit he needs. With this knowledge he can go about his business without worry.

The system develops an intimate relationship of sympathy and confidence between the banker and the business man to the great advantage of both. The Scotch have a somewhat similar system which they call "cash credits."

10. *Loans on warehouse receipts.*—Loans on warehouse receipts and bills of lading are made by Canadian bankers to any person just as they are by bankers in the United States. So long as the security represents a bona fide deposit or shipment of goods and so long as the warehouse or carrier is a reputable concern, this sort of loan is simple. Something remains to be done in both countries in the way of standardizing certain kinds of goods for warehouse purposes. English bankers still force our bankers to assume all risks incident to the correctness of bills of lading on certain classes of exports, especially of cotton, because of frauds committed in the past. Our bankers also assume the risk on bills drawn against goods imported from England.

11. *Loans on assignments.*—Canadian bankers have a unique method of making loans on assignments. The matter is too technical to be described here in detail, but it is worth while to know the general outline of the plan. This kind of loan can be made only to certain classes of wholesale dealers, shippers and manufacturers. An illustration from the lumber industry will explain the most important points involved.

Suppose the Spruce Lumber Company, engaged in cutting timber, logging, sawing, and manufacturing furniture for sale to dealers, wishes to make sure of sufficient working capital to carry it thru the season. Assume that the bank agrees to furnish the sum desired. The company wishes to give as security the goods produced thru the use of the borrowed funds. These goods will not be in existence until work is actually begun. Before any advance is made the company hands to the bank a written "promise" to give security. It is also customary for the bank to obtain an "undertaking" from the customer regarding insurance of the goods in question. Pledges or assignments of goods are then made as soon as they are produced and can be described and located. Of course a part of the loan may be secured by an assignment of certain goods in existence at the time of the original contract.

In the assignment, a sweeping and detailed description is made of all goods that are expected to come into the company's possession as a result of the loan and, perhaps, otherwise. The pledge then covers the wood from the time it is cut, thru all the processes of manufacture, until it leaves the possession of the company in the form of furniture.

Ordinarily the advance is a demand loan. The bank can call for payment if at any time it appears that its interests are being endangered by dishonest or unwise management. If default is made on payment when demanded, the bank is impowered to sell the goods at public auction, after due notice to the borrower and to the public. The bank becomes the adviser and friend of the company and to all practical purposes a silent partner in the business. It may not be so silent if things begin to go wrong.

The law in reference to this kind of loan is highly technical, and as a result, the banks must be extremely careful to comply in detail. Loans on assignment are rarely made to firms of doubtful credit, for the law is comparatively new and untried in the courts and there are various ways of evading the contract if the bank does not proceed with care. Most of the loans of this kind that have been made have proved successful.

12. *Substitution.*—The law authorizes a bank to permit the removal of pledged goods and the substitution of other goods for them. This is avoided by the banks whenever possible because of the danger of loss, but it is impossible to escape it when loans are made to active trading concerns. The claim to substituted goods depends upon the assignment of the goods removed. For this reason, the bank keeps all

assignments until all advances arranged for are taken care of. When pledged goods are removed without the bank's permission, the validity of the security is not affected. In order to prevent embarrassment and trouble the bank is always careful to have a definite understanding with the borrower that goods will not be removed without its consent. Of course, there will be no objection to the removal of the goods when the proceeds of the sale are applied directly toward reducing the loan.

13. *Call loans.*—Call loans in Canada differ somewhat from loans of that kind in other countries. They are made on the security of stocks and bonds, and a margin is required as elsewhere, but Canadian call loans are not really call loans at all, in the strict meaning of the term. The securities given as collateral have only a local market. They are not traded in on the exchanges at New York, London and other financial centers. A single bank may be able to reduce its call loans at a particular time for its own purposes as the brokers would borrow from other banks to meet the call. A general reduction of call loans by all the banks, however, would be almost impossible unless the brokers had their affairs in an extremely liquid state. In case of a general call, securities would be thrown upon the market in huge quantities, and the local market would have the whole strain to bear as there would be no market for the securities abroad.

Because of this condition, the rate on call loans in

Canada is usually higher than in other countries. It seldom falls below five per cent. In normal times, it is slightly below the rate on commercial loans. In times of stringency it usually runs far above the commercial rate, which is fairly stable.

It may be noted that brokers customarily borrow from several banks at the same time in contrast to the practice of commercial borrowers, who follow the "one bank" idea. It is recognized that they must be permitted to get their funds wherever they can. Bankers take care of their regular commercial customers first and the brokers get what is left.

The real call loans of Canadian banks are made in New York and in London and other financial centers abroad.

14. *Bank examinations.*—In Canada, the government exercises little supervision over banking. This seems surprising when we consider the elaborate system of reports and official inspection that has been developed in the United States. The idea of independence of government control is handed down from the Scotch system from which the Canadian system is patterned in many respects. At various times, proposals for government supervision have been brought before Parliament only to be voted down by sympathizers of the banks. The argument is advanced that government inspectors could not ascertain accurately the real character of banking assets, and that the fact of government inspection would mislead the public into a confidence which might sometime prove

to be misplaced. Examination by the Canadian Bankers' Association has been objected to on the same grounds.

The large banks have excellent systems of examination of their own, and their examiners are equal in rank to the managers of the branches, a point which has certain advantages.

The Canadian Bankers' Association was organized in 1892, as a private voluntary association. Eight years later the organization was incorporated and given power to regulate the issues of the chartered banks. It has powers of inspection so far as circulation goes, but it cannot look into the loans of the banks. The Canadian system is often criticized because of the lack of any adequate inspection of the parent banks.

15. *Shareholders' audit.*—The Bank Act of 1913 provides for shareholders' audit. At each general meeting the shareholders of each bank appoint auditors from a list of not less than forty names, which is selected by the general managers, subject to the approval of the minister of finance. These auditors have general access to the affairs of the banks and they make reports to the stockholders annually or whenever required. The auditors must make an examination at least once during the year. They are not compelled to audit branches, but they may do so if they wish.

The minister of finance may require any duly appointed auditor, or an auditor whom he may select, to make a special examination of the affairs of any bank and report fully to him. One weakness of the Canadian system has been the lack of outside examination. This has been corrected to a great extent.

16. *Other financial institutions.*—The privileges of Canadian chartered banks are so broad that, with their well established reputation and large capital, they have almost been able to monopolize the entire field of banking. There are trust companies, but they are not nearly as powerful as are those of the United States. They took out charters originally with the provincial governments, but because of doubt as to who has authority to grant trust company charters, they have since secured charters from the Dominion also.

The need for savings banks has hardly been felt in Canada. The chartered banks operate savings bank departments. The Dominion government also maintains two savings banks. One, operated by the Post Office Department, is called the Postal Savings Bank; the other, operated by the Finance Department, is called the Government Savings Bank. The former accepts deposits at every post office and is gradually absorbing the business of the latter. Aside from the government savings banks, there are two well-known independent institutions organized for conducting savings business—the City and District Savings Bank of Montreal and La Caisse d'Economie of Quebec.

The chartered banks do a financial as well as a commercial banking business. They buy stocks and bonds, underwrite new issues of securities, make loans for development purposes and in general they may carry on all the operations which are practised by the various types of banks in the United States.

REVIEW

How do Canadian banks finance the crop movement?

What is the principal reason that Canadian currency is elastic? Give one other important reason.

A Canadian manufacturing company wishes to make arrangements to finance its business during the coming fiscal year. What two methods can you suggest? Outline both.

A arranges for a line of credit of $20,000 during the season. He has occasion to ask that $14,000 of the amount be actually placed at his disposal. What interest will he pay?

Why does the circulation of small denomination Dominion notes have little effect upon the elasticity of the currency?

If any equally large amount of large denomination notes were in circulation, what would the effect be? Why?

What are the three gauges of note issue by Canadian banks?

CHAPTER XIV

THE NATIONAL BANKING SYSTEM

1. *Origin of the national banking system.*—The establishment of the national banking system was the result of the unsatisfactory financial conditions which obtained during the Civil War. Partly thru incompetency and partly thru fear of political consequences, Congress did not attempt to secure revenue by raising taxes in sufficient amounts. The only recourse left was to borrow. Bond issues sold slowly in the United States, and hardly at all abroad. Mr. Chase, Secretary of the Treasury, then issued interest-bearing demand notes in denominations under fifty dollars. These were followed in 1862 by the greenbacks—legal tender notes not payable on demand and bearing no interest. The greenbacks soon drove gold out of the country or into private hoards, and took the place of gold as the standard of value. All promises to pay were redeemable in depreciated government paper. Foreign capitalists refused to advance a farthing to a government that was plunging so recklessly into inflation. At home, bonds had to be sold for depreciated greenbacks. The Union was in a sorry plight. If the bankers of New York, Boston and Philadelphia had not come to the rescue with a

superb spirit of patriotism, the financing of the war would have been an almost hopeless problem.

The difficulty of the situation was augmented by a general derangement of all the currency as well as of the greenbacks. After gold disappeared, the circulation was composed of greenbacks, notes issued by over 15,000 state banks and some subsidiary coins. A large amount of the state bank issue was worthless and almost all of it circulated at a discount when it was at any distance from its place of redemption. The discounts on different notes varied so widely that business men found it necessary to keep a huge bank-note register or directory always at hand in order to determine the value of notes received in the course of business.

Two problems stood out before Congress. The first was how to improve the market for government bonds. The second was how to provide a uniform and stable currency.

2. *Secretary Chase's plan.*—Secretary Chase devised a plan for improving the situation by the establishment of a national banking system. Bank charters were to be granted by the Federal government. The chief feature of the plan was the requirement that all banks which desired to incorporate under the national law should buy government bonds, deposit them with the Treasury and receive permission to issue circulating notes to the extent of 90 per cent of their bond deposits. No bank notes could be issued by them except against bond deposits, and they

were to buy a certain quantity of bonds even if they did not want to issue notes at all. Thus all these notes would be uniform because they were to be printed by the government, and they would always be secure because the deposited bonds were pledged to their redemption. Furthermore, a new demand for government bonds would result, and this would increase the nation's borrowing power.

In Mr. Chase's own words, the principal features of the plan were:

> First, a circulation of notes bearing a common impression, and authenticated by a common authority; second, the redemption of these notes by the associations and institutions to which they may be delivered for issue; and, third, the security of that redemption by the pledge of United States stocks, and an adequate provision of specie.
>
> In this plan the people in their ordinary business would find the advantages of uniformity in currency; of uniformity in security; of effectual safeguard, if effectual safeguard is possible, against depreciation, and of protection from losses in discounts and exchanges; while in the operations of the government the people would find the further advantages of a large demand for government securities, and of increased facilities for obtaining the loans required by the war. . . .

3. *Early history of the Act.*—The plan was recommended as early as 1861, but it was not until 1863 that it became a law. When it was adopted it did not result in as great a benefit to the finances of the Union as had been expected. There was a decided prejudice against the issue of notes secured by the deposit of bonds. This was the result of the failure of several state systems which operated on that plan.

Furthermore, the original act was defective in many respects. The state banks, a majority of which, it was expected, would incorporate under the new law, did not do so in any large numbers. Therefore there was no great demand for government bonds.

In 1864, the law was amended so as to make the conditions of incorporation somewhat more attractive, but it was not until 1865, when a law was passed providing for a tax of ten per cent on all notes issued by state banks, that conversion of state into national banks became general. By this provision all state banks that wished to issue notes were forced into the system. Thus, the demand for bonds did not come until after the war was over and the necessity for their immediate sale had disappeared.

This National Banking Act, as amended at various times, became the backbone of our banking system. Its provisions, therefore, are worthy of careful attention.

4. *Comptroller of the Currency.*—Control of the national banking system is vested in a bureau of the United States Treasury under the direction of the Comptroller of the Currency. Certain powers of the bureau are now exercised by the Federal Reserve Board. It is the function of this bureau to supervise the issue and redemption of notes, the granting of charters, and the enforcement of the various provisions of the law. To accomplish this end, examiners are appointed by the Comptroller whose duty it is to examine the affairs of each bank in the system

from time to time. These examinations are made at any time the Comptroller selects and without previous notice to the banks. The examiner has access to all the books and accounts of the banks, and he is required to make a thoro investigation of all loans outstanding. This examination is reported in detail to the Comptroller, who calls the banks to account for any illegal or unsound practices which may be revealed. Once a year the Comptroller makes a report to Congress showing the condition of the banks in detail. In case of the failure of any national bank, a receiver is appointed by the Comptroller.

5. *Summary of the National Banking Act.*—Charters are granted for periods not longer than twenty years. Application must be made by not fewer than five persons, and the Comptroller must be satisfied of their good character.

Fifty per cent of the capital must be paid in before a bank can open, and the remainder within six months. The minimum capital for cities of 3,000 population or less is $25,000; for cities between 3,000 and 6,000, $50,000; for those between 6,000 and 50,000, $100,000; and for those greater than 50,000, $200,000.

Each bank is required to have a board of directors of not less than five members, each of whom must own at least ten shares of stock. The stockholders are individually liable for all obligations of the bank up to an amount equal to their holdings of stock. In case of failure they may be assessed to pay deposits.

The technical powers of national banks are briefly as follows: (1) to receive deposits, (2) to issue notes, (3) to lend credit on personal security, (4) to discount notes and other evidences of debt. A bank may own only such real estate as is necessary for conducting its business and which may come into its possession in settlement of previously contracted debts. In the latter case, the property must be sold within five years. A bank may not lend more than one-tenth of its capital and surplus to one individual or corporation.

Before a national bank could open it was required by the Act to deposit with the United States Treasury a certain amount of government bonds. This amount varied with the capitalization of the bank. For banks with a capital of $200,000, or less, the requirement was an amount equal to one-fourth of their capital; for those of over $200,000, it was $50,000. This amount had to be deposited irrespective of whether or not the bank expected to issue notes. It is entitled, however, if it desires, to receive from the Comptroller, circulating notes equal in amount to the par value of the deposited bonds. These notes are "receivable at par in all parts of the United States in payment of all taxes and excises, and all other dues to the United States except duties on imports; and also for all salaries and other debts and demands owing by the United States to individuals, except interest on the public debts." They are also legal tender in payment of any debts to national banks. National banks are no longer required to purchase and deposit bonds unless they wish to issue notes.

6. *Circulating notes.*—National bank notes are redeemable on demand in lawful money at the counter of the issuing bank, and, to facilitate redemption further, each bank is required to deposit with the Treasury an amount of lawful money equal to five per cent of its outstanding circulation. When notes are presented to the government they are redeemed out of this fund. Circulation may be retired by redeeming the notes over the bank's counter and sending them to Washington for cancellation, or by depositing money to an equal amount in the Treasury. The deposited bonds are then freed. The law restricted redemption, however, by providing that not more than $9,000,000 of national bank notes might be retired in any one month by the deposit of lawful money. This restriction was changed by the Federal Reserve Act, as will be seen in Chapter XVII.

The notes are subject to taxation by the government. When they are secured by the two per cent bonds, the banks must pay one-fourth of one per cent semi-annually on the average circulation. When they are secured by higher-rate bonds the tax is one-half of one per cent semi-annually. The expense of redemption is also borne by the banks. It is estimated that it amounts to about $63 for each $100,000 of circulation. It is to be noted that the cost of redeeming notes under the Suffolk system was only $10 per $100,000.

On December 1, 1917, the amount of circulation secured by United States bonds was $717,052,065. A majority of these bonds bore only two per cent interest, the lowest rate paid by any nation in the world, and were selling slightly under par. Thus the prediction that the law would create a market for government bonds was fulfilled. The second object in the adoption of the law—that it might provide a uniform currency—was likewise accomplished, for national bank notes have always circulated freely and without discount. The note of a Maine bank is as acceptable in California as one issued by a bank in San Francisco.

The danger in the system lay in the price which was paid for these benefits. In making the currency stable and uniform it was made inflexible, and in requiring a deposit of government bonds a system was founded which assumed the continuance of the national debt.

7. *Reserve requirements.*—All national banks are required to keep a certain amount of lawful money on hand as a reserve. In New York, Chicago and St. Louis,—designated central reserve cities—this amount was 25 per cent of the deposits until 1913, when the requirement was changed by the passing of the Federal Reserve Act. In certain other cities, called reserve cities, the amount was 25 per cent, but one-half of this might consist of demand deposits with national banks in New York, Chicago and St. Louis which were approved as re-

serve agents by the Comptroller. All other national banks were required to keep a reserve of 15 per cent, three-fifths of which might be deposited with reserve agents in reserve or central reserve cities. The five per cent redemption fund might be counted as a part of the reserve. The enforcement of this reserve provision was the duty of the bank examiners and the Comptroller of the Currency.

The reserve requirements made by the Federal Reserve Act will be given in Chapter XVII.

8. *Development of bank deposit currency.*—The history of banking in the United States, since the establishment of the national banking system and the attendant restrictions upon note issue by the state banks, deals chiefly with the development of the deposit function. The following table shows the increase of deposits relative to capital and note issues in 1917 as compared with 1865:

	1865	1917
Capital and surplus and undivided profits...	$464,220,865	$ 2,171,035
Deposits	549,081,254	9,696,459,000
Notes	171,321,903	717,052,065

While national banks had increased five times in number, the capital and surplus over four times, and the notes over four times, the deposits had increased over seventeen times. In addition to this, moreover, we must count the $12,000,000,000 of deposits in state banks which issue no notes whatever.

This deposit system gave rise to check circulation —the most perfect currency known, a currency which performs a vast amount of money work at a minimum cost, and which expands and contracts during ordinary times with the varying needs of business. The national banking law completely subordinated the issue of notes to this function.

In parts of the country, particularly the rural districts of the South and West, banking facilities are poor and the people must use either notes or actual money. Furthermore, at certain times of the year their demand for currency of one form or another increases. It is obviously poor economy to force these districts to use gold in their hand to hand transactions when that gold can perform three times the money work if held in bank reserves as a basis for deposit currency. While the deposit currency will expand somewhat to meet the seasonal increases of business in the financial centers, it does not aid in any way the rural community which needs more actual money. For this, if for no other reason, the subordination of the note issue function prevented the greatest economy in banking.

The great danger of the system, however, lay in the reserve requirements and customs. All country banks were permitted to keep a portion of their reserve on deposit in reserve city banks. This permission was incorporated into the law with the idea of enabling the country banker to keep a city account without expense as a basis for exchange. A further reason was to increase the mobility of loanable funds by enabling the city banker to lend the deposits of the country bank in the large centers. These needs continued to exist as they did in the beginning, but the lending of the country banker's deposits by the city banker was so greatly abused that its dangers became as great as its benefits.

9. *Seasonal demands.*—This abuse grew out of the custom of the country banks of depositing in financial centers not only a portion of their reserve during certain seasons of the year but also a large amount of additional cash. Since competition between the city banks resulted in the payment of interest on country balances these deposits had to be loaned, and since they were demand deposits they had to be loaned on demand or call. As the chief field for this sort of loan was in the stock market, the promotion of speculation was the principal function of these country balances.

When the demand for loans as well as for actual money increased in the country, as it invariably does in the late summer, these deposits were withdrawn and shipments of currency were requested. Loans in the financial centers had to be sharply contracted. The deposit currency would not meet the need, because the demand was for a circulating medium of general acceptability. Here was a demand, therefore, which could have been met under a system of elastic note issue without shipment of gold, the consequent depletion of reserves and the calling of loans.

Perhaps it is well that under our system of reserve deposits we had this check upon speculation, but the desideratum is a system which will lessen the necessity of keeping cash balances in the cities by enabling the country banker to increase his own currency supply. This would increase his purchases of commercial paper with funds diverted from the stock market.

10. *Depletion of reserves.*—The danger of depleting reserves was most acute in times of panic. At such times a general demand for the liquidation of all credits arose, including these deposit credits. Bank runs are deplored by all bankers, yet the country banks themselves were the first to withdraw deposits. Each bank was anxious to increase the cash reserve in its own vaults, and this could be done only at the expense of some other bank. As reserves were depleted, loans had to be called, and the lending power of the banks was sadly crippled at a time when it was greatly needed. With the calling of loans came falling prices, and if those in need of funds could not borrow they had to sell their property at great sacrifice. It would not be the function of bank notes to prevent failures of concerns which are over-extended and unhealthy, but the issue of true bank notes at such times would save many solvent firms temporarily in need of funds.

This withdrawal of deposits became so general, both on the part of the individual and of the country bank, that during a panic the city banks were forced to refuse the payment of deposits in currency. This was done illegally, of course, but at such times expediency rather than legality is the paramount influence. It was only in this way that bank reserves could be maintained.

A very certain method of obtaining money to increase reserves is the purchase of gold abroad. Gold may always be obtained, provided a sufficiently high price is bid for it. The large banks, particularly those in New York, can exchange their interest-earning resources, a large amount of which are standard securities, for gold in the markets of the world. Obviously, however, this method is extremely slow and very likely to be expensive, as it involves the sale of good collateral at sacrifice prices.

11. *Inelasticity.*—Altho the aggregate amount of notes outstanding increased four times in the course of forty-five years, the increase had nothing to do with the expansion and contraction of business. A perfect currency must have the attribute of elasticity. This means not only the ability to expand when necessary but the power to contract automatically when the necessity for expansion is removed. In neither respect did our national bank notes meet this need. The requirement that bonds must be purchased and deposited in advance made the procedure so slow that oftentimes the notes could not be issued until the demand for them had disappeared. Contraction was even slower because of the provision that only $9,000,000 in the aggregate might be retired in any one month.

The amount of notes outstanding varied not at all with the business needs of the country, but rather with the price of government bonds. All the profit to be made out of circulation depended upon this and upon the current commercial rate of interest. When bonds were low there was a tendency to purchase them and increase circulation. When they were high, the tendency was in the opposite direction. The National City Bank of New York stated in one of its monthly circular letters:

> Owing to the fact that the bank must part with more money to buy bonds which it will require as a basis for circulation than it will receive back in circulating notes (because of the premium on government bonds) its profits in circulation increase as the average rate of interest in the money market declines; and as average money market rates advance, the profits on circulation decline. This is caused from the fact that it could loan the entire sum which it invests in bonds at the average money market rate, but if it takes out circulation it can only loan an amount equal to the par value of the bonds and loses the interest on the premium.

The higher the market rate of interest the greater was the loss on this premium; hence, a smaller profit on circulation. Inasmuch as the rate of interest increases with increased demand for loans, the profit on circulation declined when an increase of notes was needed most.

The dependence of the aggregate amount of circulation upon these two influences was never proved more completely than during 1908. The price of government bonds and the rate of interest were very low and, in response, circulation increased many million dollars.

It is obvious that comprehensive reform was necessary if the nation was to have a currency which would finance its business needs economically and enable it to pass from periods of great activity to those of quietude without complete paralysis of its economic machinery. The chief defects of the system were decentralization and inelasticity.

12. *Lack of unity in the system.*—In addition to the seven thousand national banks there were a great many more state banks and trust companies, which were not only direct competitors of the national banks but which were governed by different laws and regulations. The result was a mechanism with over twenty-five thousand managers, each interested in the welfare of his own institution. A system was needed which would enable the banks to work in unison instead of at cross purposes with one another, and which would render possible the issue and redemption of notes as the need for notes might arise and pass away.

13. *Banks and the Federal Treasury.*—When the Second Bank of the United States ceased operation the government had no option but to deposit funds in the state banks, as it had no vaults of its own. During the panic of 1837, the government was much embarrassed thru the suspension of specie payments by some of the depositories. Consequently, in 1840 an act was passed which provided for the establishment of an independent treasury. The law was repealed in 1841 but reenacted in substantially the same

form in 1846. All the funds of the government were to be kept in the Federal Treasury and none deposited in the banks. An objection to this plan was raised at the time, that this would result in a contraction of the country's currency supply when the receipts of the government were outrunning the expenditures and money was piling up in the Treasury vaults, and vice versa. But the people were more concerned then with safety than with elasticity.

The Treasury was again put in touch with the banks by the passage of the National Banking Act, which authorized the Secretary of the Treasury to use national banks as depositories of public money except receipts from customs. These receipts have been so large, however, and so variable in amount that they have often caused stringencies. A certain amount of money is in the pockets of the people, a certain amount in the bank reserves, serving as a basis for credit, and a certain amount lies in the Treasury. It has frequently happened in the autumnal season that both the amount demanded in circulation and the amount lodged in the Treasury have increased suddenly at the expense of the bank reserves, especially those in New York City. This has often necessitated a contraction of credit and, at times, has caused an acute financial stringency.

The condition outlined in the foregoing paragraphs was evidently caused by bad laws. However, the bankers of the country, particularly those of New York, were often loudly blamed for allowing such conditions to arise. But, among so many, who was to assume the responsibility of maintaining such reserves as would be necessary, or who would have had the power? The banker is conducting a private business for private gain and there is no reason why he should be expected to assume a public function of such magnitude. The thing needed was a banking system which would make the interest of the bankers coincident with the interest of the whole community.

14. *Expedients of the Secretary.*—The responsibility fell largely upon the Secretary of the Treasury. He was given specific discretionary powers in enforcing the laws, and from these powers certain expedients were devised and used from time to time, tho not necessarily concurrently under certain conditions. They may be summarized as follows:

1. The Secretary induced national banks in one way or another to take out notes in advance of their actual needs.
2. He anticipated the payment of interest on United States bonds in order to put cash into circulation.
3. He made purchases of United States bonds for the same purpose.
4. He made a ruling that the banks need not keep a reserve against government deposits. The New York Clearing House Association, however, continued to enforce its reserve requirements against members, so that the effect of the ruling was nullified so far as it concerned New York banks.
5. He allowed the government depository banks to substitute county, city, state, and other bonds, including, it is understood, some railway bonds, in the place of United States bonds as security for public deposits. This privilege was

extended only to such banks as would agree to use the United States bonds thus released for taking out additional circulation.

6. He warned the depository banks to abstain from using their funds in Wall Street as a basis for call loans to speculators.

7. He entered into the foreign exchange market to assist the gold importing movement, by giving the banks temporary deposits of gold equal to the amount they engaged for import from abroad. This removed the disadvantage under which our importing bankers labored—that of losing interest during the time the gold was in transit—and it stimulated gold imports to a considerable extent.

15. *Maintenance of the gold standard.*—The Treasury of the United States has assumed the responsibility of maintaining the gold standard. National bank notes and Federal Reserve notes may be redeemed in lawful money by the banks if they choose. The Act of 1900 pledges the Treasury to maintain the parity of all kinds of money with gold and requires that greenbacks and Treasury notes of 1890 be redeemed in gold on demand. The only way to maintain the parity of other forms of money is to redeem in gold. The Treasury, therefore, has the burden thrust upon it of redeeming, in gold, bank notes, silver and subsidiary coins, silver certificates, and gold certificates. The maintenance of the gold standard has depended entirely upon the solvency of the Federal Treasury. When gold in large quantities is needed for exportation, the natural way to get it is to present bank notes and other kinds of current money to the Treasury or one of the sub-treasuries

for gold. This may result in acute embarrassment to the Treasury. Following the panic of 1893 greenbacks flowed into the Treasury in enormous amounts and the gold supply was drawn down to a dangerously low point.

Against gold certificates the Treasury holds an equal amount of gold so that no problem is presented in this connection. But it is likewise liable for the redemption of some $346,000,000 of greenbacks, $565,000,000 of silver, the national bank notes and Federal Reserve notes and theoretically for $170,000,000 of subsidiary coins. Against these liabilities the Treasury holds a gold reserve of only $150,000,000. An excessive issue of notes is likely to bring pressure on the Treasury for gold to be exported. The Treasury is not in the banking business and it can obtain gold only by selling bonds. The fact that bonds must be sold under such conditions weakens the credit of the government and they must be sold at a sacrifice.

No other government imposes such a burden upon its financial department. In the great European countries practically all the credit money in circulation consists of bank notes, for which the banks alone are liable. This is true in Canada also. The Canadian Government does issue Dominion notes, but the great majority of those in circulation are in either one or two dollar denominations, and are thus always needed in the country as change money. Most of the Dominion notes are in such large denominations that they are of use only as bank reserves. Moreover, they are backed by heavy gold reserves and are practically gold certificates.

16. *Lack of control over the money market.*—Up to 1913, there was no single agency in the United States which could control the money market. The result was that interest rates rose to prohibitive figures in times of stringency. Call rates have gone higher than 100 per cent. Many banks had to stop loaning altogether, because their own resources were exhausted and there was no agency to which they could go and rediscount commercial paper for cash. Business men often could not secure loans at any rate. Heavy liquidation, bankruptcy and panic were the result.

The great central banks of Europe have demonstrated that the way to stop a panic is to loan freely, instead of shutting off all loans, as our banks were compelled to do. Of course, the rate of interest should be raised. In fact, it should be raised before the crisis comes, in order to check inflation of credit and to warn bankers and business men of the necessity for shortening sail. By raising the rate in advance, commitments are checked, a certain amount of liquidation is forced and business is prepared for trouble. In our system, what bank was to raise the rate ahead of time? If one should put up its rate and the others did not, it would lose business. The only possibility was an agreement among all to bring about a common rise. But such action smacked of combination in restraint of trade and it might draw down upon the bankers' heads a thunderous remonstration from political demagogs at Washington and elsewhere. Combined action was seldom undertaken until it was too late to prevent trouble. It came as a cure after the damage had been done. Our bankers were forced to go on competing with one another, making loans at usual rates, until all had exhausted their loaning facilities and they were compelled to stop loaning altogether.

It will be remembered that raising the rate of interest in advance of a crisis helps to protect a country's gold supply and it even brings new gold into the country from abroad. We were unable to take this precautionary measure until a crisis was upon us. When the trouble came, interest rates rose readily enough and prices fell. Foreign bankers loaned in this market at excessive rates and bought our securities at bankrupt prices. They sent us gold finally, but not until they had taken enormous profits out of the deal, and not until ruin had been spread thruout the country. They were not to blame. New York was not to blame. The trouble was decentralization of our bank reserves and bank control, lack of rediscounting facilities and inelasticity of credit.

REVIEW

Outline the steps in a panic under the old national banking system from the time credit became inflated and prices began to rise.

At what stage would the presence of a central rediscounting agency have operated to check wholesale liquidation?

How did the country bank's custom of depositing part of its reserves in New York banks affect the financial situation?

What is the result of the seasonal demands for currency?

In what way did note issue under the national banking system run counter to the needs of business?

What is the most perfect currency known? Why? Why could it not take the place of an elastic note circulation?

CHAPTER XV

BANKING REFORM IN THE UNITED STATES

1. *Defects of the national banking system.*—The advantages and defects of the national banking system have already been pointed out. It may be well to summarize the defects briefly. There are four important criticisms, as follows: (1) the note circulation was inelastic; (2) there was no central reserve and no central control of the system; (3) the assets of the banks were not liquid, because of the lack of a system of rediscounts and acceptances; (4) the Federal treasury was unduly burdened with the redemption of credit money. There were other defects but they were due primarily to these four.

For twenty years bankers and economists worked for needed reforms in our banking and currency system. Their efforts resulted in the Federal Reserve Act of 1913, which is considered by many as the most important piece of Federal legislation since the Civil War. A survey of the various movements for reform will help to explain the provisions of the present law, for it will show what was in the minds of the people who were responsible for the passage of the Act.

2. *Baltimore bankers' convention.*—The need for a

currency system, more adaptable to commercial needs and more capable of expansion and contraction, was felt soon after the close of the Civil War. The reconstruction of the South and the rapid development of the West made demands upon the national banking system which could not be met. Many think that the demand for silver legislation would never have been so pronounced if the bank circulation had been adequate for the requirements of business. The Democratic platform of 1892 contained a plank recommending the repeal of the ten per cent tax on state bank issue. The recommendation was not accepted by Congress. President Cleveland mentioned the need for reform but refrained from making any specific proposal.

In 1894, a convention of bankers at Baltimore took up the question. Their plan was strikingly similar to the Canadian system. They proposed to drop the bond deposit idea. Notes were to be issued against general assets, as in Canada. The proposed limit was 50 per cent of the paid-up capital, instead of the Canadian limit of 100 per cent. The notes were to be secured further by a guarantee fund deposited with the United States Treasury. This guarantee fund was to be built up to five per cent of the outstanding circulation by gradual payments from the banks, and the notes were to be a prior lien on the assets of any bank that failed. An emergency circulation to the amount of 25 per cent of the capital was recommended, instead of 15 per cent of capital and surplus, which is the Canadian limit. This emergency circulation was to be taxed heavily so as to insure speedy redemption as soon as the need for the circulation should pass.

3. *Proposals of Secretary Carlisle.*—President Cleveland strongly urged the need for currency reform in his next message to Congress. Detailed proposals were made by John G. Carlisle, Secretary of the Treasury. They may be summarized as follows:

1. Repeal the bond deposit requirement.
2. Permit national banks to issue notes up to 75 per cent of their paid-up capital, to be secured by their general assets and a guarantee fund deposited with the Treasury, consisting of United States legal tender notes to the amount of 35 per cent of the notes outstanding.
3. Make notes a first lien upon assets of a failed bank.
4. Provide a safety fund by taxing the banks, the fund to be invested in United States bonds and applied to the immediate redemption of notes of a failed bank.
5. Limit the retirement of greenbacks to an amount not in excess of 70 per cent of new circulation issued by the banks.
6. Suspend the 10 per cent tax on state bank note issue in the case of state banks which could comply with sections two and three above.

Secretary Carlisle's plan suggests the Canadian system. It would have been an improvement. The 54th Congress was hostile to President Cleveland and would not enact any reform which might have appeared as an administration measure. In 1896 all ordinary plans for banking reform were submerged in the silver controversy.

4. *Indianapolis Monetary Commission.*—The triumph of the Republican party did not stifle the demands for reform. Three things were advocated strongly: (1) positive adoption and security of the gold standard; (2) retirement of the government legal tenders—greenbacks and treasury notes of 1890; (3) provision for an elastic bank note circulation.

In January, 1897, a large convention was held at Indianapolis to discuss the banking and currency problems. An executive committee was appointed, with authority to organize a commission to investigate and make recommendations on the subject if Congress did not take satisfactory steps. President McKinley recommended that Congress appoint a commission but no action was taken. Accordingly the commission, known as the Indianapolis Monetary Commission, was appointed.

Its report may be summarized as follows:

(1) Make gold the standard of value, in which all obligations of the United States shall be redeemable. To carry out this object, establish in the Treasury Department a separate Division of Issue and Redemption charged with custody of the gold reserve. Maintain a gold reserve equal to at least 25 per cent of outstanding legal tenders and 5 per cent of the outstanding silver dollars. Gradually retire the government paper as national bank circulation increases.

It may be noted here that the country had already legally adopted the gold standard in the Act of 1873, which was called the "Crime of 1873" during the political campaign of 1896. We should actually have gone on a gold basis when specie payment was resumed in 1879 had it not been for the silver legislation of 1878, which made the silver dollar legal tender without making it redeemable in gold, and gave us what is called the "limping" standard. We actually went on the gold standard in 1890, when the silver dollar was made redeemable in gold thru the government's declaration that it intended to maintain the parity of all circulation with gold. The idea of the Commission was that the gold standard should be reaffirmed as a rebuke to the advocates of free silver, and that some tangible provision should be made to guarantee the maintenance of gold payment. The plan was to make this provision in the form of a gold reserve.

(2) Gradually reduce the amount of bonds required as deposit to secure bank notes, permitting notes to be issued more and more against general assets. As the bond requirement is being reduced, gradually build up a guarantee fund which shall be maintained at five per cent of outstanding circulation by a tax on note issue.

When the recommendation reached Congress, the time of adjournment was so near that it was held over for the next session. During the recess, committees of the Senate and the House worked out some plans which resulted in the Gold Standard Act of 1900.

5. *Gold Standard Act of 1900.*—The Act of 1900 is improperly called the Gold Standard Act. It did not establish the gold standard, which was adopted long before 1900, nor did it undertake to reform the

banking system. Its aim was to provide a reserve for the maintenance of the gold standard, and its provisions were closely in line with the recommendations of the Indianapolis Monetary Commission.

A Division of Issue and Redemption was established. The Act provided that all legal tender notes should be redeemed in gold coin on demand and that a gold reserve of not less than $100,000,000 should be maintained for the purpose. It authorized the sale of bonds to replenish the fund and to build it up to not over $150,000,000 if it should ever fall below the minimum, and it provided that notes redeemed out of the fund should not be issued again except in exchange for gold. While the Act did not specify gold redemption of silver dollars, it did repeat the pledge to maintain all coins at par with gold. The only way to secure parity with gold is to redeem in gold on demand, so this has always been considered as a pledge of gold redemption of all circulation.

Instead of attempting to reform the banking system, the Act included two or three provisions which were intended to encourage the extension and perpetuation of bond-secured circulation. It lowered the tax on issue. It raised the amount which might be issued from 90 to 100 per cent of the market value of bonds deposited up to par, and it increased the available supply of low-priced bonds by converting a large issue of four per cents into two per cents, and permitted the establishment of banks with a capital of $25,000 in smaller communities.

The last provision largely increased the number of banks and appreciably augmented the capital and issues. The actual result was an enormous stimulation to bank note issue. The increase in circulation during 1899 was less than $4,000,000. During 1900 it was over $85,000,000; and the following year saw an increase of over $107,000,000.

6. *Secretary Shaw's paternalism.*—The wave of prosperity which followed 1900 dulled the consciousness of any need for banking reform. The National Monetary Commission and Lyman J. Gage, who was Secretary of the Treasury under President McKinley, continued to urge reform, but their warnings fell upon ears attuned only to the whir of prosperity and the clink of inflowing gold. The estimated stock of gold in the country rose from $597,927,254 in 1895 to $1,419,943,194 in 1905, an increase of over 137 per cent in ten years.

A certain amount of pressure continued to be felt every autumn but Mr. Shaw, who became Secretary of the Treasury in 1902, devised many unique tho utterly unscientific ways of meeting the situation. His paternalistic dabbling in the currency and credit affairs of the country started a policy of Federal interference which is sometimes called the "grandfatherly attitude of the Secretary." A previous chapter referred to some of the expedients which secretaries of the Treasury are accustomed to practise. An illustration of Secretary Shaw's peculiar gifts in this field is his action on an occasion when gold was being imported. He concluded that the inflow was not proceeding with sufficient rapidity. Accordingly, he arranged privately with two New York banks that, if they would undertake to accelerate the movement, he would deposit as much gold as they imported as soon as arrangements were completed for importation, so that they would not lose interest on the amount while the gold was in transit. A few days later he announced that he would do the same for other banks which were depositories of government funds. The result was a speeding up of importation, altho probably not an increase in the total amount which would have come in finally. Of course, government depositories had an unfair advantage over other gold importers in that they were saved interest on amounts in transit.

7. *New York Chamber of Commerce Committee.*—All the various expedients adopted in the administration of the law convinced certain thinking men that the law was not what it should be. Each successive autumn brought a worse strain on the financial system. Finally, a committee was appointed by the New York Chamber of Commerce to frame a measure for banking and currency reform. A report of the committee was adopted by the Chamber on November 1, 1906. It advocated the establishment of a central bank which should be under the control of a Board of Governors appointed in part by the President of the United States. The bank was to take over certain functions from the office of the Sec-

retary of the Treasury. The following is a brief résumé of the argument advanced for the central bank idea:

> The operations of central banks in Europe, especially in France, Germany, Austria-Hungary and the Netherlands, make it impossible to doubt that the existence of such a bank in this country would be of incalculable benefit to our financial and business interests. Such a bank in times of stress or emergency would be able by regulation of its note issues to prevent those sudden and great fluctuations in rates of interest which have in the past proved so disastrous. Furthermore, it would have the power to curb dangerous tendencies to speculation and undue expansion, for by the control of its rate of interest and of its issues of notes it would be able to exert great influence on the money market and on public opinion. Such power is not now possessed by any institution in the United States. Under our present system of independent banks, there is no centralization of financial responsibility, so that in times of dangerous over-expansion no united effort can be made to impose a check which will prevent reaction and depression. This is what a large central bank would be in a position to do most effectively. A central note-issuing bank would supply an elastic currency varying automatically with the needs of the country. This currency could never be in excess, for notes not needed by the country would be presented for deposit or redemption.

Because of hostility in certain quarters to the idea of a central bank, an alternative plan was proposed. This plan was too complicated to allow of an adequate description here. The principal feature was that a bank might issue some of its notes against bond deposits, but that it might also issue others against its general assets. The latter class of note was to bear a heavier tax than the former, and the tax was to be raised as the amount of issue increased. The total issue was not to exceed the bank's capital. The notes were to be secured by a guarantee fund created from taxes on circulation.

8. *American Bankers' Association plan.*—Just before the New York Chamber of Commerce report was adopted, the American Bankers' Association met in St. Louis and appointed a committee to draw up a currency measure. This committee recommended a plan which was not essentially different from that proposed by the Chamber of Commerce Committee. A bill embodying the plan was introduced in Congress but it failed to get consideration before adjournment on March 4, 1907. Before the Congress met again the financial system of the nation was shaken to its very roots by the panic of 1907.

The panic painted the defects of the banking system in such a vivid light that people all over the country arose and demanded reform of some kind. Few knew just what was needed. Party leaders thought that public opinion was not ripe for the establishment of a central bank. A bill for temporary relief was passed by the Senate and another of an entirely different character was reported favorably in the House. The House refused to consider the Senate bill.

A new bill was introduced in the House by Representative Vreeland, providing for the appointment of a National Monetary Commission to conduct an investigation and recommend legislation. The bill became law. It was realized that some time must pass before the Commission could complete its recommendations and report its findings. Accordingly, the Act, known as the Aldrich-Vreeland Act, provided for the issue of emergency circulation during a limited period, which was supposed to be sufficient for the Commission to finish its work.

9. *Aldrich-Vreeland Act.*—The Aldrich-Vreeland Act, which became law on May 30, 1908, was to expire by limitation on June 30, 1914. The following are the most important provisons of the Act:

(1) National banks in any locality having unimpaired capital and a surplus of 20 per cent, with aggregate capital and surplus of at least, $5,000,000 might form a currency association. The banks were required to be not less than ten in number. The currency association was to elect officers and to incorporate under the Federal government.

(2) Any member, having outstanding circulation secured by United States bonds to an amount not less than 40 per cent of its capital, could apply to the association for emergency circulation, offering as collateral any securities, including commercial paper, which it might have in its possession. Emergency circulation was not to exceed in amount 75 per cent of the market value of the collateral deposited. All banks in the association were to be jointly and severally liable for notes so issued.

(3) Any national bank qualified to become a member of an association might also apply directly to the Comptroller of the Currency for emergency notes. The collateral for these notes to be received from the Comptroller might consist not only of United States bonds but also of other interest-bearing obligations of any state of the United States, or any legally authorized bonds of any city, town, county, munici-

pality or district of the United States. Notes issued in this way were not to exceed in amount 90 per cent of the market value of the securities deposited.

(4) The total circulation of any bank, regular bond-secured and emergency notes, was not to exceed its paid-up capital and surplus. The total emergency circulation of all banks was not to exceed $500,000,000.

(5) Emergency notes were subject to a tax of 5 per cent per annum for the first month and afterwards to an additional tax of 1 per cent for each month until a tax of 10 per cent was reached, which rate was to continue as long as they remained outstanding.

(6) A redemption fund of 10 per cent was to be maintained with the Federal treasury against all emergency notes, that is, 5 per cent more than that required against ordinary national bank notes. The treasury assumed responsibility for redeeming the notes of all failed banks.

The Aldrich-Vreeland Act did two things. It permitted the Comptroller to issue notes to national banks upon the deposit of security other than United States bonds. It permitted him to issue notes to them thru the currency associations upon the deposit of commercial paper as well as of bonds. The latter plan is almost identical with that which the banks had been accustomed to follow, in the issue of clearing house loan certificates. It will be recalled that while most of the clearing house certificates were payable only among banks in settlement of clearing house balances, some of them were intended for general circulation and actually did circulate among the people.

10. *Aldrich-Vreeland notes and the crisis of 1914.* —The Federal Reserve Act, which became a law

December 23, 1913, extended the life of the Aldrich-Vreeland Act by one year, to June 30, 1915, for fear that some emergency might arise before the Federal Reserve system could be put into actual operation. It also amended the Act in certain particulars so as to make emergency issue easier. The tax rate was lowered to three per cent per annum for the first three months and an additional rate of one-half per cent for each month until six per cent should be reached.

From 1908 until 1914, no stringency occurred which made it necessary for the banks to issue emergency notes. The outbreak of the European war, however, brought on a severe crisis which even caused the New York Stock Exchange and other important exchanges thruout the country to close. Immediate recourse was taken to emergency circulation. From the date of first issue, on August 4, 1914, to the date of the last issue, on February 13, 1915, the authorized issue of Aldrich-Vreeland notes was $386,444,215. Of this amount, $910,500 was issued by the Comptroller direct to the banks under the third provision in the preceding section. The remainder was issued thru currency associations. By May 1, 1915, $380,039,030 of the amount authorized had been retired; and, by June 30, 1915, the entire amount had been retired except $200,000, which was issued by a national bank that failed and was placed in the hands of a receiver.

The volume of ordinary national bank notes did not vary materially during the crucial period, but remained between $720,000,000 and $750,000,000. The authorized issue of emergency circulation was approximately one-half of the regular bond-secured circulation. It was over one-tenth of the total monetary circulation. No further statement is necessary to show how valuable the Aldrich-Vreeland Act was during the early days of the war.

From the first week in August until the middle of October, 1914, loan certificates were issued by twelve clearing houses, the maximum amount issued being $211,778,000. They were all retired by December 15. In the panic of 1907, fifty-one clearing houses issued loan certificates, the maximum amount being $255,536,300. The difference is less than $45,000,000. There is no way of telling what might have happened if we had not had access to emergency circulation. Let it be borne in mind that all but $910,500 of the Aldrich-Vreeland notes were closely akin to the clearing house loan certificates. They were issued in much the same way but were intended primarily for general circulation, while loan certificates were for payments between banks.

11. *Aldrich plan.*—After four years of extensive investigation the National Monetary Commission submitted to Congress a report which included a plan for the establishment of a new banking system. The system is ordinarily called the Aldrich plan, as the Honorable Nelson W. Aldrich, then senior senator from Rhode Island, was chairman of the Commission. The essential feature was

the establishment of a banking association, to be called the National Reserve Association. In reality it amounted to the establishment of a central bank in Washington, D. C. Its stock was to be subscribed by the national banks of the country in certain amounts proportionate to their capital. The government was to share in all earnings above a certain per cent, which was to go to the stockholders and to surplus. No bank was to be compelled to join the association.

In speaking of the plan before the Eighteenth Annual Convention of the National Association of Credit Men, Professor W. A. Scott said:

> The plan of reform in the bill took account of our banking history and conditions. It proposed the establishment of local associations of banks and the grouping of these into regional associations, and the grouping of these regional associations into a national association with its head office at Washington. The functions assigned to this organization of the banking institutions of the country were essentially the same as the functions performed by the great central banks of Europe—i.e., the rediscount of commercial paper for banking institutions, the holding and administration of the bank reserves of the country, the service as depository and distributing agent of the United States Government, the issue of notes against commercial assets; and a system of control was devised which, in the opinion of the commission, and of most other persons who gave it careful attention, would prevent its domination by any group or interest.

People all over the country began to take an active interest in banking legislation and to study the problems of finance. The eve of a presidential election is not a good time for attempting to pass thru Congress a measure about which there was so much fear of public disapproval as there was in the case of the proposal to establish a central bank. Staunch support could not be marshalled from politicians who were about to go before the people for reelection. The result of the Commission's work was primarily educational. It did cause all three of the important political parties to include a plank for banking reform in their platforms of 1912. The final outcome of the agitation and study was the Federal Reserve Act of 1913, which is discussed in some detail in the following chapters.

REVIEW

Which plans for banking reform are somewhat analogous to the European systems? Which to the Canadian system?

How does the government profit directly from the Federal Reserve banking system?

What two means were adopted to relieve the financial stringency in 1914?

What was the inception of the investigation which resulted in the recommendation of the Federal Reserve system? What arrangement to take care of emergencies was made while the investigation was going on?

Was the Act of 1900 a banking reform act? Explain.

When did gold become the nominal standard? When the actual standard?

What four defects of the National Banking Act were to be remedied by banking reform? How was this accomplished in each case?

CHAPTER XVI

THE FEDERAL RESERVE SYSTEM

1. *Federal Reserve Act.*—When the Democratic Party came into power in 1912, it considered itself bound by pre-election pledges to bring about some sort of banking and currency reform, but it felt committed against any scheme which would involve the establishment of a central bank. The party leaders in Congress immediately began to cast about for some plan which would correct the recognized defects of the national banking system without including the central bank idea, which twice had been found successful in this country during the lives of the First and Second Banks of the United States, and which had been the bulwark of credit in all the great countries of Europe for so many years. An alternative to a central bank system was the Canadian plan, a system composed of a few large banks with a great number of branches thruout the country. This was not considered seriously, for the country seemed definitely committed against the branch bank idea. The system finally adopted includes neither a central bank nor a branch banking organization. It is in many ways a new experiment in the field of banking.

The Federal Reserve Act, which became law December 23, 1913, provides for a regional system of twelve coordinate banks, each working independently in its own distinctive territory, but all bound together in certain respects by the Federal Reserve Board at Washington. We shall proceed first to describe the organization of the Federal Reserve system, and then explain the most important functions which it performs.

2. *Federal Reserve banks.*—The United States is divided into twelve Federal Reserve districts, which are designated by numbers from one to twelve. In each district a city is chosen to be a Federal Reserve city, and in that city a Federal Reserve bank is established. Each Federal Reserve bank bears a number corresponding to that of its district and takes its name from the city in which it is located. The Federal Reserve Bank of Boston is Number 1. The other reserve cities are: (2) New York, (3) Philadelphia, (4) Cleveland, (5) Richmond, (6) Atlanta, (7) Chicago, (8) St. Louis, (9) Minneapolis, (10) Kansas City, (11) Dallas, (12) San Francisco. Figure 3, page 282, shows how the United States was divided into districts on December 1, 1916.

All national banks in each district are compelled to subscribe to the capital stock of their reserve bank an amount equal to 6 per cent of their paid-up capital and surplus. State banks, which are permitted to join the system under certain conditions without becoming national banks, must also subscribe 6 per cent of their capital and surplus if they enter. One-

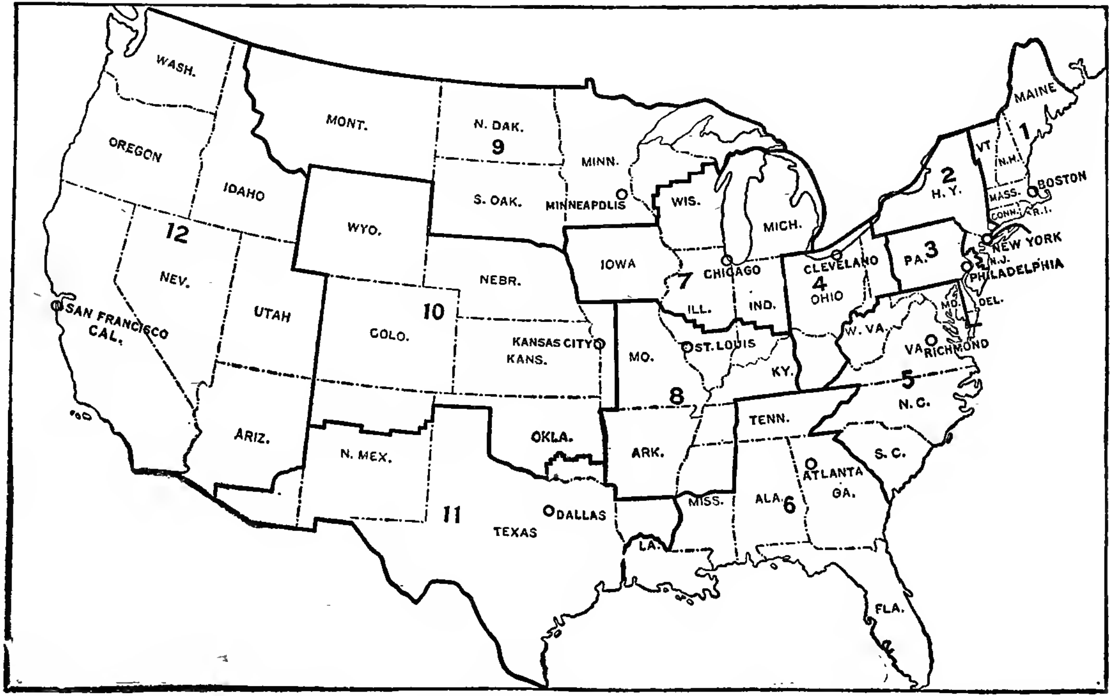

FIGURE 3. MAP SHOWING FEDERAL RESERVE DISTRICT WITH CHANGES BY FEDERAL RESERVE BOARD UP TO DECEMBER 1, 1916.

sixth of the capital subscription was paid in gold and gold certificates before the reserve banks opened for business on November 16, 1914, one-sixth was paid three months later, and another sixth was paid by May 2, 1915, making in all three-sixths which had been paid by that date. The remaining three-sixths is subject to call by the Federal Reserve Board. As new banks enter the system, or as member banks increase their capital and surplus, the capital of the reserve banks is increased. On the other hand, the reserve bank capital is decreased when member banks drop out of the system or lower their capital and surplus. The combined paid-up capital of the twelve reserve banks on November 23, 1917, was $67,136,000. National banks in Alaska and in the insular possessions, except in the Philippine Islands, may become members, but they are not required to do so.

Earnings of the reserve banks are to be distributed in the following manner: (1) after payment of all expenses the stockholders are to receive a 6 per cent cumulative dividend; (2) one-half of the remainder is to go to a surplus fund until it shall amount to 40 per cent of the paid-up capital stock of the bank; (3) all earnings above these amounts go to the United States as a franchise tax, and they may be added to the gold reserve against United States notes or be applied toward liquidating the bonded debt.

The principle of double liability is applied to stockholders of the reserve banks as well as to those of the national banks. Stockholders of national banks are held for all debts of the bank to the extent of their double liability. Those of reserve banks are held liable in the same way, but the liability is distributed equally and ratably and one is not liable for another.

3. *Control of reserve banks.*—All the stock of each reserve bank is owned by the member banks in its district and the stock may not be transferred or hypothecated. Each reserve bank is under the immediate control of a board of nine directors, divided into three classes, as follows: Class A, three members chosen by, and representative of, the member banks; Class B, three members chosen by member banks and representative of general business interests aside from banking; Class C, three members chosen by the Federal Reserve Board. One member of Class C who is a man of tested banking experience is designated by the Reserve Board as Federal Reserve agent and chairman of the board of directors of the reserve bank. He is looked upon as the personal representative of the Reserve Board within the bank. The directors are authorized to employ such help as is deemed necessary for the operation of the bank. Each of the banks has a governor who corresponds to the president of an ordinary bank.

4. *Federal Reserve Board.*—All the reserve banks are under the supervision and control of the Federal Reserve Board, which consists of seven members, as follows: the Secretary of the Treasury,

ex-officio; the Comptroller of the Currency, ex-officio; and five members appointed by the President of the United States with the consent of the Senate. The Comptroller, by virtue of his membership on the Board, receives $7,000 annually in addition to his regular salary. The five appointed members receive an annual salary of $12,000 each and they serve for rotating terms of ten years, that is, one goes out of office every second year. Two of these five are designated by the President as governor and deputy governor respectively of the Board. The governor is the active executive officer. The office of the Board is at Washington, D. C.

As we go along we shall find that the Federal Reserve Board has extensive powers over the operation of the reserve banks and, thru them, even over the member banks. Member bank, as distinguished from national bank, means any bank, national or state, which has subscribed to the stock of a Federal Reserve bank and has become thereby a member of the Federal Reserve system.

5. *Federal Advisory Council.*—There is a Federal Advisory Council consisting of twelve members, one elected and paid by each reserve bank. The Advisory Council is empowered to confer with the Reserve Board on general business conditions, to make representations about matters under the jurisdiction of the Board, and to make recommendations regarding discount rates and other operations of the reserve banks. The Council acts in an advisory capacity

only, and it has no direct voice in the control of the system. It meets at Washington at least four times a year.

In all probability, most of the members of the Council will always be prominent bankers selected from the various districts. Their work on the Council need not interfere seriously with their regular occupations. They will bring to the Board a great deal of valuable advice which will be especially welcome because it comes from men actually engaged in the field of banking. It must be remembered, however, that the Council has no effective means of enforcing its opinions. It is modeled, in a way, after the stockholders' committee of the Reichsbank and is supposed to voice the opinion and look after the interests of stockholders, but it does not have even as much power as its German counterpart.

6. *Comptroller of the Currency.*—Making the Comptroller of the Currency a member of the Board does not in any way change his responsibility as executive in charge of enforcing the National Banking Act, nor does it alter his responsibility to the Secretary of the Treasury and to Congress. His presence on the Board establishes a connecting link between that body and the office which supervises the national banking system as such, that is, as distinguished from the Federal Reserve system, which includes state as well as national banks. Many think that the functions of the Comptroller's office should be taken over by the Board and that the office should be abolished.

On the whole, this seems desirable as it would result in greater unity of action and would eliminate a certain amount of duplication. The Advisory Council, at its meeting on November 16, 1915, recommended that the Federal Reserve Act be amended so that the work of the Comptroller's office might be absorbed and administered by the Federal Reserve Board.

7. *Secretary of the Treasury.*—The Secretary of the Treasury assumes his work as Chairman of the Board in addition to all his other duties. Thru this connection the Board is informed of the policies of the Treasury Department, and often of those of the whole administration. On the other hand, the Secretary receives from the Board much helpful advice and information concerning the conditions and operation of banks in the country. It is stated specifically in the Act that the Board is not given any of the powers previously exercised by the Secretary within his department and that, wherever there may be apparent conflict of jurisdiction, the Board shall be subject to the will of the Secretary.

The reserve banks act as depositories of government funds and as fiscal agents for the government. It is expected that government deposits will be withdrawn gradually from the national banks which now hold them, and placed with the reserve banks. The matter is left to the discretion of the Secretary. It is to be hoped that the Treasury Department will stop meddling in the affairs of national banks now that the reserve banks have been established. The use of reserve banks as fiscal agents will have the good effect of placing the funds of the government where they may be useful instead of locking them up in treasury vaults. The hoarding of money by the government has often aggravated a currency stringency in seasons when government receipts were exceeding disbursements. On the other hand, when disbursements ran ahead money was arbitrarily thrown into circulation whether it was needed or not.

8. *Bureau of Audit and Examination.*—The Board has organized the Bureau of Audit and Examination and assigned to it the duties which the name implies. Its most important work, so far, is examining the reserve banks and state banks which are members of the system. It also examines state banks which apply for admission.

9. *Division of Reports and Statistics.*—The Division of Reports and Statistics collects information desired by the Board, analyzes it and presents it in such form as will make it possible for the Board to reach conclusions as quickly and accurately as possible. The twelve reserve banks telegraph the main items in their statements to Washington every Wednesday, or Tuesday if Wednesday is a holiday. These are analyzed and combined so as to be ready as soon as possible for the meeting of the discount committee Wednesday afternoon, or at least for the Board meeting on Thursday. The reserve banks also forward daily reports showing paper purchased, name

of maker, rate, maturity, etc. These reports are analyzed and laid before the Board, which uses them as a basis for its conclusions regarding various questions of policy such, for example, as changes in the discount rates.

Another important division is that of Clearing. The work of this office will be discussed later.

10. *Operations of the reserve banks.*—The banking operations are carried on by the twelve regional banks, instead of by a central institution as provided for in the Aldrich Plan. These reserve banks are essentially bankers' banks, and they have very slight dealings with the public directly. For example, individuals cannot borrow or deposit at the reserve banks. A part of the reserves of member banks are collected in twelve reservoirs instead of in one central bank. Some of the principal duties and powers of the reserve banks are outlined below. The most important ones will be considered in detail later.

(a) They may accept deposits only from the United States, member banks of their respective districts, and, for exchange and collection purposes only, from other reserve banks and non-member state banks and trust companies. Government funds, except the five per cent redemption funds, may be deposited either in the reserve banks or in member banks.

(b) From their own member banks and from other reserve banks they are required to receive for deposit, at par, checks and demand drafts drawn on any bank which is a member of the reserve system or on any non-member bank the checks of which can be collected at par.

(c) They may establish accounts with other reserve banks for exchange purposes and may open accounts in foreign countries and establish branches abroad with the consent of the Reserve Board. Thru these agencies they may buy and sell, with or without indorsement, bills of exchange having not over ninety days to run and bearing the signatures of at least two responsible parties. With the consent of the Reserve Board they may also open banking accounts for their foreign correspondents or agencies.

(d) They are required to establish branches in their districts, and they may do so in the districts of other reserve banks which fail or suspend. Only one branch had been established up to January 1, 1917. The Federal Reserve Bank of Atlanta has a branch in New Orleans which has operated successfully from the beginning. The branches are to have not more than seven nor less than three directors, a majority of one appointed by the reserve bank and the remainder by the Board.

(e) The banks may rediscount commercial notes, drafts and bills of exchange indorsed by member banks, "protest waived." This does not include those drawn to carry stocks or securities except obligations of the United States. Such discounted paper may not run over ninety days, exclusive of days of grace, except agricultural and cattle paper, which may run for six months exclusive of days of grace.

(f) They may rediscount bank acceptances having not more than six months to run, exclusive of days of grace, and indorsed by a member bank. Four kinds of bank acceptances may be rediscounted for member banks: (1) bills accepted by member banks, arising out of transactions involving the importation or exportation of goods; (2) bills accepted by member banks drawn upon them by foreign bankers for the purpose of furnishing dollar exchange; (3) bills accepted by member banks, arising out of transactions involving the domestic shipment of goods and with shipping documents conveying or securing title attached at the time of acceptance; (4) bills accepted by member banks, secured at the time of acceptance by a warehouse receipt or other such document conveying or securing title to readily marketable staples. Only bills of the first type described could be accepted by national banks and rediscounted for members by the reserve banks under the Federal Reserve Act as originally passed. But on September 7, 1916, the Act was amended so as to permit the other three classes of acceptances described.

(g) They may make loans to their member banks for not over fifteen days, provided that loans so made are secured by the deposit of pledge of bonds or notes of the United States, or by such notes, bills, etc., as the reserve banks are permitted to rediscount or buy.

(h) They may establish rates of discount from time to time, subject to review and determination by the Reserve Board. All of the rediscounting operations of the reserve banks are subject to the supervision and control of the Board. The rediscount feature makes the assets of member banks liquid, for they can be realized upon at any time so long as the reserve banks are able to continue rediscounting.

(i) They may issue Federal Reserve bank notes secured by bonds under the same conditions that apply to national bank notes, except that the total amount is not limited to the capital stock of the issuing bank.

(j) They may issue Federal Reserve notes under conditions which will be explained later. These notes should not be confused with the Federal Reserve bank notes described in the preceding paragraph.

(k) They may buy and sell in the open market, at home or abroad, cable transfers and bankers' acceptances and bills of exchange, of the kind eligible for rediscount, with or without the indorsement of a member bank.

(l) They may deal in gold coin or bullion at home or abroad.

(m) They may buy or sell, at home or abroad, securities of the United States and of any political division thereof, including irrigation, drainage and reclamation districts. Securities other than those of the United States cannot be bought until they are within six months of maturity. The Board issues regulations under which this power is exercised.

(n) They may purchase from member banks and sell bills of exchange arising out of commercial transactions.

11. *Powers and duties of the Federal Reserve Board.*—Many of the powers of the Board cannot be expressed in so many words. Some of them are not even fully understood as the Board has not had occasion to test its authority on all points before the courts. It may be said, in general, that the Board is able to step in and do almost anything it wishes with the reserve banks. The more important powers and duties may be summarized as follows:

(a) To pay its expenses, it levies semi-annually upon the reserve banks an assessment in proportion to their capital and surplus.

(b) It is required to make an annual report of its operations to Congress.

(c) It may examine the member banks and all reserve banks and may require such statements and reports as it may deem necessary. It is required to publish a weekly statement showing the condition of the reserve banks individually and collectively.

(d) It may permit or require one reserve bank to rediscount paper for another at a rate of interest determined by the Board. This is an important power; it means that the Board can force one reserve bank to go to the rescue of another which is in need of cash. Funds may thus be moved arbitrarily from one district to another.

(e) Suspend any reserve requirements specified in the Act for a period of not over thirty days, provided it establishes a graduated tax on deficiency in reserves.

(f) Supervise and regulate the issue and retirement of federal reserve notes.

(g) Add to or reclassify the reserve and central reserve cities, or terminate their designation as such.

(h) Suspend or remove any officer or director of a reserve bank for a cause stated in writing.

(i) Require the writing off of doubtful or worthless assets from the books of the reserve banks.

(j) Suspend, administer, liquidate or reorganize a reserve bank for due cause.

(k) Require bonds of Federal Reserve agents and make other precautionary regulations.

(l) Exercise general supervision over the Federal Reserve banks. Under this clause the Board can assume almost any power over the reserve banks which is not specifically mentioned in the Act.

(m) Permit national banks to act as trustees, executors, administrators or registrars of stocks and bonds when not contrary to state or local law.

(n) Employ necessary assistants, etc.

(o) Exercise the functions of a clearing house, or require one of the reserve banks to do so, and require reserve banks to do the same for member banks. It may also fix charges to be collected by member banks and reserve banks for checks cleared thru the reserve banks, such charges to approximate the cost of doing the business.

(p) Define the character of bills eligible for rediscount by reserve banks and limit and regulate rediscounts and acceptances.

(q) Establish the rate of interest to be charged reserve banks on Federal Reserve notes outstanding. No interest is charged now.

(r) Fix salaries of bank examiners.

It should be noted that the Federal Reserve Board has no capital and that it does no actual banking business. It is a controlling body.

12. *Operations of member banks.*—The Federal Reserve Act confers certain powers upon national banks in addition to those which they already possessed. Some of these powers are conferred also upon state banks which are members. It should be understood, however, that the Federal law does not confer any powers upon state banks which are contrary to the state laws under which they are incorporated. The Federal law simply affirms that certain of the powers granted by state law may be exercised by state banks after they enter the system. State banks cannot even enter the system if this action would contravene state law. For example, the law of some states forbids banks to own stock in any corporation. To become members of the Federal Reserve system they must buy stock in the reserve bank of their district. Thus they cannot become members until the state law is changed.

Any national bank having a capital and surplus of $1,000,000 or more may, with the permission of the Reserve Board, establish branches in foreign countries in order to further the foreign commerce of the United States or to act as fiscal agents of the United States if required. If such a bank does not wish to establish branches of its own, it may combine with other banks and purchase stock in a bank chartered under the laws of the United States or of any individual state and engaged principally in the business of international and foreign banking. National banks are not permitted to establish branches within the continental United States, but it has been ruled that where a national bank absorbs a state bank having branches in the same city, in accordance with state law, it may continue the branches. State banks which have branches when they enter the reserve system may retain their branches and continue to establish more, so long as in doing so they are not acting contrary to the law of the state and the conditions under which they entered the system.

Member banks are permitted to make acceptances of the kinds described in Section 10 of this chapter. The aggregate amount of acceptances based upon foreign and domestic shipments of goods and upon warehouse receipts, made by a single bank, may not exceed one-half of its paid-up and unimpaired capital and surplus; except that the amount may be increased to one hundred per cent with the approval of the Board, provided that the amount of domestic acceptances shall in no case exceed fifty per cent. The same limitation is placed upon acceptances based upon drafts drawn by foreign banks for the purpose of creating dollar exchange.

National banks located in places having a population of less than 5,000 may perform the ordinary functions of insurance agents under such regulations as may be prescribed by the Comptroller of the Currency.

13. *Loans on real estate.*—One of the most important advantages which state banks had over national banks under the National Banking Act was their greater freedom in making loans, especially loans on real estate. The Federal Reserve Act permits a national bank outside of the central reserve cities to make loans secured by improved and unencumbered farm land situated within its district or within a radius of 100 miles of the bank, irrespective of district lines. These loans may not run for longer than five years. National banks outside of central reserve cities may also make loans upon improved and unencumbered real estate other than farm land located within 100 miles of the bank; but such loans may not be made for a longer time than one year. In both cases, the amount loaned cannot exceed 50 per cent of the actual value of the property offered as security. The total amount of real estate loans made by a single bank may equal 25 per cent of its capital and surplus or one-third of its time deposits. The adjective "unencumbered" is significant. It indicates that the bank must hold a first mortgage on all property accepted as security for a loan.

It is not to be expected that the average national bank will do much long-time loaning on real estate any more than it might be expected that a man would hang himself if he were permitted to do so. Most of the banks are engaged primarily in a commercial banking business, and the bulk of their deposits are on demand. For them to make long-time loans on real estate or anything else would be suicidal. It is a well established principle that a bank which has most of its deposits subject to check must limit most of its loans to short maturities in order to keep its assets in a liquid state. Any banks which have a considerable amount of time deposits can afford to lend for comparatively long periods of time.

REVIEW

What power may the Federal Reserve Board exercise over reserve requirements? When may the exercise of this power be most important?

How is the capital stock of the reserve banks determined?

Under what conditions may Federal Reserve bank notes be issued?

A financial stringency is felt in the ninth and tenth Federal Reserve districts owing to the fall crop movement. Cash is scarce. What action may the Federal Reserve Board take to remedy the situation?

May a Federal Reserve bank make loans to its members? If so, how would the loans be secured and what limitation is placed on the exercise of this power?

A national bank in your city wishes to establish a branch abroad. It has a capital and surplus of $800,000. If you were a member of the board of directors, what plan would you suggest?

What is the limit upon the making of acceptances by member banks? What classes of acceptances may be made?

How are the earnings of reserve banks distributed? What is the principal difference between the present system and the Aldrich plan?

CHAPTER XVII

FEDERAL RESERVE SYSTEM[1] (*Continued*)

1. *Reserves of member banks.*—The Federal Reserve Act changes the reserve requirements for national banks in two important ways. The percentage of reserves required is lowered; and the reserves which might be deposited with approved reserve agents in reserve and central reserve cities under the National Banking Act were gradually withdrawn from those agents and placed partly in the banks' own vaults and partly on deposit with the reserve banks. As before, national banks are not required to carry any reserves against outstanding circulation. The five per cent redemption fund must be maintained, however, and it may not now be counted as a part of the legal reserve against deposits, as it could be under the National Banking Act. This is no great burden on the banks, because of the great reduction which has been made in their reserve requirements.

It will be remembered that before the establishment of the Federal Reserve system, national banks in reserve or central reserve cities were required to carry reserves of 25 per cent against both time and demand deposits, and country banks were required to carry reserves of 15 per cent. All member banks

[1] See also editor's note, page 161.

now maintain a reserve of only three per cent against time deposits. These are defined in the Act as deposits which are subject to not less than thirty days' notice before payment and postal savings deposits. All other deposits are counted as demand deposits.

The reserves required against demand deposits are changed radically. The classification of reserve and central reserve cities remains the same as under the National Banking Act, but it may be changed by the Reserve Board. A period of three years was allowed for the transferring of reserves to the Federal Reserve banks. After three years from the date of the establishment of the reserve banks, which was November 16, 1914, member banks were required to keep the following reserves against demand deposits and distribute them as specified below:

Central reserve city banks were required to maintain an 18 per cent reserve: six-eighteenths in their own vaults, seven-eighteenths in the reserve bank of the district, and the remainder either in their own vaults or in the reserve bank.

Reserve city banks were required to maintain a reserve of 15 per cent: five-fifteenths in their own vaults, six-fifteenths in the reserve bank, and the remainder either in their own vaults or in the reserve bank.

Country banks were required to maintain a 12 per cent reserve: four-twelfths in their own vaults, five-twelfths in the reserve bank, and the remainder either in their own vaults or in the reserve bank.

An amendment of September 7, 1916, provided that the Reserve Board might from time to time permit member banks to carry in the reserve banks such reserves as they were ordinarily required to keep in their own vaults. The idea of this amendment was to encourage the building up of heavy reserves in the twelve regional banks instead of leaving them scattered among all member banks. Figure 4, page 302, indicates the way in which reserves were shifted from approved reserve agents into the reserve banks. It also compares the total reserves required under the old law and the new respectively.

Reserve requirements against demand deposits were still further reduced and simplified by an amendment of June 21, 1917. They now stand as follows: for central reserve city banks, 13 per cent; for reserve city banks, 10 per cent; and for country banks, 7 per cent. All of this required reserve must be on deposit with the reserve banks. The law does not require now that member banks shall carry away reserves in their own vaults; altho, of course, they need to carry a certain amount for every day purposes. This same amendment reduced to 3 per cent the required reserve against time deposits, which was 5 per cent under the Act originally passed.

The reserve carried by a member bank with the reserve bank may be checked against, under regulations of the Reserve Board, but no bank may make any loans or pay dividends until its total legal reserve is fully restored.

RESERVE REQUIREMENTS

		Member banks under the Federal Reserve Act						National banks under the National Banking Act	
		Nov. 16 1915	May 16 1916	Nov. 16 1916	May 16 1917	Nov. 16 1917	Thereafter		
Country banks	(1) In vaults	5—12	5—12	5—12	5—12	5—12	4—12	In vaults	6%
	(2) In reserve bank	2—12	3—12	4—12	5—12	5—12	5—12	Either in vaults or with approved reserve agents	9%
	(3) In (1), (2), or with reserve agents	5—12	4—12	3—12	2—12	2—12	—		
	(4) In either (1) or (2)	—	—	—	—	—	3—12		
	Total	12%	12%	12%	12%	12%	12%	Total	15%
Reserve city banks	(1) In vaults	6—15	6—15	6—15	6—15	6—15	5—15	In vaults	12½%
	(2) In reserve bank	3—15	4—15	5—15	6—15	6—15	6—15	Either in vaults or with approved reserve agents	12½%
	(3) In (1), (2), or with reserve agents	6—15	5—15	4—15	3—15	3—15	—		
	(4) In either (1) or (2)	—	—	—	—	—	4—15		
	Total	15%	15%	15%	15%	15%	15%	Total	25%
Central reserve city banks	(1) In vaults	6—18	6—18	6—18	6—18	6—18	6—18	In vaults	25%
	(2) In reserve bank	7—18	7—18	7—18	7—18	7—18	7—18		
	(3) In either (1) or (2)	5—18	5—18	5—18	5—18	5—18	5—18		
	Total	18%	18%	18%	18%	18%	18%	Total	25%

FIGURE 4.

[1] Figures under the heading of "Federal Reserve Act" are for demand deposits only. All member banks must carry a 3 per cent reserve against time deposits (deposits subject to thirty days' notice or more). Figures under the heading "National Banking Act" are for both time and demand deposits. Figures under the column, "Nov. 16, 1915," are for the period between Nov. 16, 1914, and Nov. 16, 1915; those under "May 16, 1916," for the period between Nov. 16, 1915, and May 16, 1916, and so on.

State banks which join the system must maintain the same total reserve as that required of national banks, but a part of the reserve might, until November 17, 1917, be deposited with other banks, whether national or not, where the state laws required it. "Except as thus provided, no member shall keep on deposit with any non-member bank a sum in excess of ten per centum of its own paid-up capital and surplus."

2. *Combined reserves.*—A part of the bank reserves of the country are thus held in the twelve Federal Reserve banks, which are controlled by the Reserve Board. They may be forced to use their reserves together, just as a central bank would do, if the Board wishes. Against these deposits and others the reserve banks must carry a 35 per cent reserve in lawful money.

If the reserves of one reserve bank begin to drop to the danger point the Board may require some other reserve bank, which presumably is in a stronger position, to rediscount some paper for the weaker bank and thus enable it to build up its reserves again. Should excessive credit expansion and consequent gold exportation threaten the country the Reserve Board may require one of the reserve banks, or all of them together, to raise their discount rates and thus check the inflation, just as is done by the great central banks of Europe. The Board has power to determine the discount rates for each reserve bank and it may fix for one rates different from those specified for others.

It is quite natural that any one reserve bank should protest if it is required to raise its discount rate while the rates of other reserve banks remain low, as such action must necessarily curtail its lending operations and may reduce its profits. This is also true of rediscounting paper for other reserve banks. Such rediscounting lessens the lending power of the bank and transfers so much available funds to other districts. The separate reserve banks will always be influenced by customers to keep the rates as low as possible and thus make borrowing easy in the district. Each reserve bank will be pulling for capital for its own district, and the interests of different districts are sure to conflict sooner or later. The Reserve Board needs to carry a steady and firm hand and to exercise its powers wisely, having regard for the best interests of the country as a whole. It is to be hoped and expected, moreover, that the men in charge of the various reserve banks will be too broad-minded to think only of profits for their banks and of the needs of their own districts.

3. *Controlling the money market.*—The Federal Reserve banks have two ways of influencing or controlling the market rates of interest. Thru the market rates they can, of course, influence the inflow and outflow of gold. The banks do not have an option of paying either gold or silver, as the Bank of France has. All obligations are redeemable in gold, so the

banks cannot protect their gold reserves by charging a premium on gold. The two methods of control which they do have are (1) raising or lowering the rates of rediscount and (2) buying or selling securities and commercial paper.

If the rediscount rate is lowered to a point below the prevailing market rate, the market rate will be pulled down because banks can, if necessary, rediscount in order to give their customers cheap accommodation. It is to be expected that competition among the banks will make the lower rate effective. If one bank rediscounts and lowers its rate, others must do likewise or lose their borrowers. Banks may object to this sort of a forced drop in the market rates, for they sometimes make a larger net profit by lending small amounts at high rates than by lending larger amounts at comparatively low rates.

When the reserve banks raise their rediscount rates they force up the market rates, provided the banks are actually rediscounting. It has been explained in a preceding chapter that a raise in the central bank rate cannot be made effective in the market unless banks find themselves compelled to rediscount in order to accommodate their customers. So long as their resources are ample they can afford to ignore the rediscount rate and go on making loans at low rates. Of course, there may be a moral effect of more or less strength from the mere fact that the reserve banks think it wise to raise their rates.

The reserve banks have a way of reducing the funds available for loans in the market. They can sell any securities or commercial paper which they may have in their possession as a result of purchases allowed by the law. The sale of this paper will act as a sponge in the market, soaking up funds which might be used for loans if they were not exhausted in buying paper from the reserve banks. If the reserve banks have enough paper to sell, they can so reduce the market funds that the banks will be forced to rediscount in order to accommodate customers any further. This is the desired result. As soon as the banks are brought to their knees and compelled to rediscount, the reserve bank rates become effective in the market.

The reserve banks gain one more advantage by holding a good supply of salable paper. In case of threatened gold export they can sell the paper abroad, thus building up balances there against which to draw exchange instead of shipping gold.

The purchase of paper has an effect opposite to that of selling it. It releases funds which may be loaned and tends to ease the rates of interest. Obviously, if the reserve banks wish to use the weapon of selling paper, or "borrowing from the market," as they say in London, they must lay in their supply ahead of time. No results can be brought about by buying and selling at the same time. It is evident that the control of the reserve banks over the money market will grow in effectiveness as they become relatively more important in the banking strength of the country.

4. *Federal Reserve notes.*—Two new kinds of bank notes are provided for in the Act. The first is the Federal Reserve bank note, which is secured by a bond deposit. This was described briefly in Chapter 16. The second is the Federal Reserve note, which is capable of expansion to meet the increasing needs of business. This feature eliminates one of the greatest defects of the national banking system. It is to be regretted, however, that the volume of these notes must for several years bear only a small proportion to the total supply of credit money. While the notes themselves are elastic, their relative unimportance in the total currency supply causes their elasticity to be less effective than could be desired. The foreign countries which enjoy the benefits of an elastic currency have in their money supply a large proportion of the elastic medium.

Reserve banks may exchange Federal Reserve notes for commercial paper which member banks bring in for rediscount. This renders the notes capable of expansion. The fact that member banks can rediscount their paper also makes the credit of banks capable of expansion. Smith comes in to the First National Bank for a loan at a time when the bank is near the end of its rope. It has loaned and accepted deposits until its reserves are reduced almost to the legal minimum. To make any more loans means one of two things to the bank. Either its deposits will increase and thus lower the reserve ratio, or the borrower will take the proceeds of the loan out in cash and thus draw down the reserves and lower the ratio all the more. Without a bank of rediscount the loan could not be made. With the resources of the reserve bank at hand, the member bank can accommodate Smith by rediscounting some of its paper. If he wants cash, he can get Federal Reserve notes. If he wants a deposit account, the bank can give it to him and protect its reserves by building up its balance at the reserve bank thru rediscounting. Of course, Smith will pay a rate somewhat higher than the rediscount rate, but better something at a high rate than nothing at all.

Federal Reserve notes are obligations of the United States as well as of the issuing banks. They are redeemable in gold at the Federal Treasury and in gold or lawful money at any of the reserve banks. They are receivable for all debts to member banks, reserve banks and the United States. Each Reserve bank must deposit with the Federal Reserve agent of its district an amount of commercial paper equal to its reserve notes outstanding. The Reserve Board may require at any time the deposit of additional collateral and it may permit the substitution of new collateral in the place of paper which matures. Any reserve bank may reduce its outstanding circulation by depositing lawful money or its reserve notes with the Federal Reserve agent.

Under the amendment of June 21, 1917, the reserve banks may also issue Federal Reserve notes, dollar for dollar, against gold. The gold is deposited with the Federal Reserve agents just as commercial paper is when used as collateral security for note issue, and the gold so deposited may be counted as a part of the reserve bank's required reserve against their reserve notes outstanding. Thus a reserve bank with $100,000,000 gold can issue $100,000,000 in reserve notes against it and, then, counting it as legal reserve, issue additional notes against commercial paper until the total issue reaches $250,000,000 (40 per cent being the reserve requirements).

Every reserve bank is required to keep on deposit with the Federal Treasury a sum in gold sufficient, in the judgment of the Secretary of the Treasury, for the redemption of its notes outstanding, but in no event less than five per cent of the amount. This redemption fund may be counted as a part of the reserves required against notes, however, and so it works no hardship on the banks. The notes are issued in denominations of $5, $10, $20, $50, and $100, and they bear the distinctive numbers of the issuing banks.

5. *Contraction of Federal Reserve notes.*—While adequate provision is made for expanding the Federal Reserve notes, it is to be feared that the same is not true of contracting them. The Board may force contraction arbitrarily by levying a tax upon them, or it may use its influence to have the reserve banks deposit lawful money for retiring them. So far as arbitrary power goes, there is plenty. Moreover, the law for-

bids any reserve bank to pay out notes of another reserve bank under penalty of a ten per cent tax upon all notes paid out. Notes of other reserve banks must be returned to the issuing bank for credit or redemption or to the Federal Treasury for redemption. This is good as far as it goes. As soon as a Federal Reserve note gets into a reserve bank it is retired. If it goes to the issuing bank, it is retired at once. If it goes to another reserve bank, it is immediately sent home.

What provision is there to draw the notes into the reserve banks as soon as business needs them no longer? There is no incentive which makes member banks and others send them in for redemption as bank notes are sent home in Canada or as they were sent in by New England banks under the Suffolk System. They may be paid in to one bank and out again, in to another and out again, and so on for months before they reach a Federal Reserve bank. In some states, state banks are even permitted to count them as part of their legal reserves. There is no adequate way to contract the notes thru the natural channels of trade and without arbitrary interference, as there is in Canada. Of course, it is true that the notes are issued against a deposit of short-time commercial paper, and that the Board may force redemption of issue as fast as the collateral matures, by simply refusing to permit the reserve banks to substitute new collateral for that which comes due. A considerable inflation may be developed, however, in ninety days, which is the time the collateral ordinarily has to run.

6. *Reserves of Federal Reserve banks.*—Reserve banks are required to maintain a forty per cent gold reserve against reserve notes outstanding and not offset by gold or lawful money deposited with the Federal Reserve agent. In emergencies the Reserve Board may permit any reserve bank to lower its reserves, provided the Board establishes a graduated tax of not more than one per cent per annum upon any deficiency below forty per cent until reserves fall to thirty-two and one-half per cent. When the reserves fall below thirty-two and one-half per cent, a tax is levied at an increasing rate. There is an increase of not less than one-half per cent per annum upon each two and one-half per cent or fraction thereof that such reserve falls below thirty-two and one-half per cent. The tax on deficiency of reserves must be added to the rates of interest and discount fixed by the Reserve Board.

The reserve banks must maintain reserves in gold or lawful money of not less than 35 per cent against demand deposits. This requirement also may be suspended by the Board provided that a graduated tax is imposed on deficiency of reserves. The amounts of the tax in this case are to be fixed by the Board.

7. *National bank notes.*—Provision is made for the gradual retirement of national bank notes. At any time within twenty years after December 23, 1915, any national bank wishing to retire the whole or any

part of its notes may file with the Treasurer of the United States an application to sell for its account, at par and accrued interest, United States bonds securing the circulation to be retired. These applications are turned over to the Reserve Board, which may, at its discretion, require the reserve banks to purchase the bonds so offered. It is provided, however, that the reserve banks may not be permitted or required to purchase bonds in this way to the amount of over $25,000,000 in any one year. The amount allotted to each reserve bank is in proportion to its capital and surplus. The reserve banks may also buy bonds in the open market, and there is no limit to the amount which may be bought in this way, except as the Board may determine. Bonds purchased in the open market must be taken into account by the Reserve Board when it considers the matter of requiring any reserve bank to buy bonds thru the Federal treasury as described above. They must be subtracted from the bank's share of the allotment to be required. As was stated before, the reserve banks can issue Federal Reserve bank notes against the bonds purchased.

If the reserve banks do not wish to hold the bonds as a basis of circulation, they may turn them over to the government. Upon application of any reserve bank, approved by the Reserve Board, the Secretary of the Treasury may issue in exchange for United States two per cent gold bonds bearing the circulation privileges but against which no circulation is outstanding, one-year three per cent gold notes of the United States without the circulation privilege for not over one-half of the bonds presented, and thirty-year three per cent gold bonds without the circulation privilege for the remainder. The government reserves the right for a period of thirty years to sell back to a reserve bank for gold any one-year notes which it may have redeemed, not to exceed the amount issued to the bank in the first instance. Upon application of any reserve bank, approved by the Reserve Board, the Secretary of the Treasury may issue at par thirty-year bonds in exchange for the one-year notes. It should be noted that the Secretary of the Treasury is not required to convert any two per cent bonds unless he wishes to do so.

National bank notes may now be retired in any of the following ways:

(a) If the national banks want to sell, reserve banks may be compelled to buy bonds to the amount of not over $25,000,000 in any one year.

(b) Reserve banks may buy bonds in the open market to any amount, whether from national banks or not. Of course, bonds in the open market do not have circulation outstanding against them, altho they bear the circulation privilege. The purchase of bonds in the open market prevents so much new issue by national banks. It does not retire any circulation.

(c) National banks may present their notes in any amount for cancellation.

(d) National banks may send to the Federal

Treasury lawful money for the retirement of their notes, but the aggregate amount retired in this way may not exceed $9,000,000 in any one month.

It is apparent from this summary that national banks act as they like about retiring their notes, except that an upper limit is set. They may issue more if they wish. Even if the notes are retired, their place may be taken by a similar bond-secured circulation issued by the Federal Reserve banks.

During the year 1916, the reserve banks bought so many bonds in the open market that they were not required to buy any thru the Federal treasury. The amount of two per cent bonds converted during the year was $30,000,000. Of this amount, $14,239,000 was converted into one-year notes, and $15,761,000 into thirty-year bonds. The Secretary of the Treasury announced on October 28, 1916, that he would convert not more than $30,000,000 during the year 1917.

The provision of the National Banking Act which required national banks, upon organization, to purchase and deposit with the Federal treasury a certain amount of registered United States bonds, is repealed. National banks do not need to buy bonds now unless they wish to issue notes.

8. *Reserve bank clearings.*—In a preceding chapter the inefficiency of our system of clearing country checks was mentioned. A plan which should relieve the situation to a great extent was put into operation by the reserve banks on July 15, 1916. The Act de-

clares that the Board may require each reserve bank to "exercise the function of a clearing house for its member banks." We shall outline the plan briefly.

Each reserve bank will receive at par from its member banks (and from any non-member state banks and trust companies which maintain with the reserve bank a balance sufficient to offset the items in transit held for its account by the reserve bank) checks drawn on all member banks, whether in its own district or in other districts, and checks drawn on non-member banks whose checks can be collected at par.

All member banks are required to pay checks at par when presented. In order that all banks may know which non-member banks have agreed to pay checks at par, the Board publishes from time to time a "par list" which contains the names of all such banks. Before the establishment of the clearing system banks were accustomed to make an "exchange" charge for remitting funds to redeem their checks, and many still follow the practice. The charge was explained by the cost of shipping currency, the trouble involved, etc. Member banks no longer need to ship currency except to the reserve banks. Member banks are not compelled to deposit checks to be cleared. They may continue using their regular channels of collection which were developed before the clearing system was started. They are simply required to pay their own checks at par when presented, and it is decided that presentation may be made by mail as well as over the counter. Non-member banks which choose not to clear thru the reserve banks can make their checks pass at par thruout the country, nevertheless, by agreeing to pay them at par, for then the reserve banks everywhere will receive them from member banks at par.

The actual cost of clearing and collection is paid by the reserve banks and assessed against the "clearing" banks in proportion to the number of items cleared for them. During the first four months of operation the cost ran from one to two cents per item. No charge can be assessed against a member bank which does not choose to clear.

As soon as checks are received by the reserve banks they are credited at par, subject to collection. They do not become available for withdrawal or as reserves, however, until they are actually collected. Each reserve bank publishes a table showing the time required to collect funds on the various banks. The time varies all the way from immediately to eight days, depending on the location of the reserve bank and of the bank upon which the check is drawn.

Member banks can maintain with the reserve banks funds with which to pay their checks, in the following ways: (1) by depositing checks against other banks, (2) by shipping currency, and (3) by rediscounting.

During the month from October 16 to November 15, 1917, the average number of items handled daily by the twelve reserve banks was 325,690 and the average amount cleared daily was $283,938,810. Clearings were made for 7,826 member banks. Checks were received for collection on all member banks and on 9,210 non-member banks which had expressed their willingness to pay checks at par.

9. *Advantages and disadvantages of the clearing plan.*—The advantages and disadvantages of the reserve clearing plan are stated clearly in a letter sent out by the National Association of Credit Men to its members. A part of it is quoted below.

The advantages as summarized are:

1. Direct and prompt presentation of checks.
2. The elimination of exchange charges, which in some cases have not been equitable, in other cases quite excessive.
3. Reduction of the expense of collection to as near absolute cost as possible.
4. The release and more equitable distribution of the large balances at present maintained by the smaller banks in the banks in larger centers for the purpose of receiving par collection of out-of-town miscellaneous items.

The disadvantages, as summarized, are:

1. The loss of exchange on the part of the smaller banks, which exchange they have deducted in remitting checks on themselves.
2. The revision and, in many cases, termination of the reciprocal relations which have under the old system been maintained for many years between the smaller banks and their correspondents in larger cities, as the Federal Reserve banks will to a great extent render the same service.

Balancing advantages against disadvantages, the unprejudiced must recognize what is to be gained under the system as of greater value to business than what would be lost to the banks.

10. *Gold settlement fund.*—Provision is made also for clearings between the reserve banks. Each of the reserve banks is required to maintain a balance of at least $1,000,000 in the so-called gold settlement fund, which is in care of the Reserve Board at Washington. At the close of business on each Wednesday each reserve bank telegraphs to the Board the amounts in even thousands which it owes to each of the other eleven reserve banks. The telegram is confirmed by mail; it is sent at the close of business on Tuesday if Wednesday is a holiday. On Thursday morning the settling agent of the Board calculates the net debit and credit balances of each reserve bank, and corresponding entries are made on the books of the gold settlement fund. A reserve bank may draw out at its pleasure any amount of its credit balance above the $1,000,000 minimum which must always be on deposit. If the balance of any bank falls below $1,000,000 it must be built up again immediately by the deposit of gold, gold certificates or gold order certificates. The last named are certificates issued by the Treasurer of the United States against gold deposited with him from the fund.

On November 22, 1917, the twelve reserve banks had nearly $376,000,000 on deposit in the fund after clearing. Exchanges for the month preceding that date amounted to over $3,800,000,000 but the net deposits or credits were under $380,000,000, meaning that the amount which changed ownership was slightly under ten per cent of the total clearings.

REVIEW

The Federal Reserve Board desires to force up the market rate of interest as a means of checking over-speculation and inflation. The banks have large reserves on hand. The re-discount rate is raised. In your opinion will this achieve the desired result? Explain.

If your answer to the preceding question is in the negative, outline in detail what plan may be followed.

What effect have Federal Reserve notes on the elasticity of the currency? Why do they affect it?

In emergencies how may the Reserve Board regulate a member bank's reserve?

How may national bank notes be retired? Does this plan make for slow or rapid retirement?

Outline the method of clearing checks thru reserve banks.

CHAPTER XVIII

STATE BANKS AND TRUST COMPANIES

1. *Growth of state banks.*—State banking has not received the attention from writers on banking which its relative importance warrants. This neglect is probably due in part to the great difficulty of obtaining accurate information concerning the many varieties of banking practice which have been developed in the different states.

The years immediately following the Civil War witnessed a rapid decline in the importance of state banking institutions. This was due to the repressive influence of the National Banking Act, hastened in its effect by the ten per cent tax on state bank notes. The number of state banks fell from one thousand five hundred and sixty-two in the year 1860 to two hundred and forty-seven in 1868. The state banking systems became moribund. The old laws regulating banks of issue were swept away by code revision, or remained unchanged on the statute books. It was generally thought that a bank could not operate profitably without the right to issue notes.

The national banking system had not been long in operation, however, before it was seen that there was a field for banks of discount and deposit. The inelasticity of the national bank note system gave an impetus to the use of the check book. Furthermore, national banks in certain parts of the country found that the bond-secured circulation was not yielding a profit because of the high price of United States bonds. There were certain restrictions, too, which hampered the operation of national banks and put them at a disadvantage with state banks.

Chief among these restrictions was the prohibition against making loans on real estate. This did not benefit the state banks to any great extent during the early stages of the development period. During the years immediately following the Civil War both the South and the West were drawing capital from the East. Eastern capital preferred to go into pure commercial banking as practised by the national banks, rather than into real estate loans, which were not easily liquidated and the safety of which could not be judged easily at a distance.

After a few years the South and the West began to accumulate capital of their own. Immediately the number of state banks began to grow. The rapid growth of state banking since that time (about 1886) may be ascribed to four causes. First, the note issue of national banks was not highly profitable; second, state banks were generally permitted to make loans on real estate, whereas national banks were not; third, state banks were not required to have as high an initial capital in most states as was required of national banks, and could therefore be more easily established in new communities; fourth, the reserve requirements were not so strict in most states as they were in the national banking system. To these four factors might be added others, such as the fact that in some states banks were allowed to establish branches. Perhaps the most important advantage which state banks had was the comparative freedom in making loans.

On June 30, 1916, the Comptroller of the Currency reported 7,579 national banks with combined resources of nearly $14,800,000,000. At the same time he published reports from 15,450 state banks with combined resources of nearly $5,553,000,000. The capital and surplus of state banks was about $832,-000,000, as compared with $1,797,000,000 for national banks. The figures are gathered annually for the Comptroller of the Currency by the state officials having supervision over banking. In addition to these, there were 1,864 savings banks, 1,606 loan and trust companies, and 1,014 private banks reporting. A great many private banks did not report. In all, reports were received from 19,934 banking institutions operating outside of the national banking system, with combined resources of over $18,000,000,000, and capital and surplus of over $2,000,000,000. The growth of state and private banking institutions has taken place largely in the western, southern and Pacific states.

2. *Trust companies.*—The growth of the modern trust company dates likewise from a comparatively

late time. The word "trust" has long been used for titles of banking and financial institutions for the purpose of signifying strength and inspiring confidence. These old institutions, such as the North American Trust and Banking Company of New York and the Ohio Life Insurance and Trust Company, were not trust companies in the modern sense of the word.

It appears that the first institution, in the United States, to be incorporated with the power to act as trustee was the Farmers' Loan and Trust Company of New York, which was incorporated in 1822 under the title of the Farmers' Fire Insurance and Loan Company. The first charters allowing the trust privilege were given to insurance companies, and for many years the insurance and trust functions were carried on together. When the business of trusteeship began to expand and to assume more and more the nature of general banking, the trust companies gradually divorced themselves from the insurance companies or else were separated by legislation. Insurance companies have remained an important factor in the financial field because of the enormous sums which they have to invest.

In the larger cities trust companies have become formidable rivals of the state and national banks. The number of loan and trust companies reported by the Comptroller of the Currency in 1916 was 1,606. These had resources of over $7,000,000,000, or nearly one-half the resources of national banks. The aggregate capital and surplus amounted to over $984,-000,000. The big trust company development has come in the eastern and middle-western states.

3. *Danger of trust companies.*—It is evident that there is a danger in combining trust business with banking business. A certain part of the trust company's liabilities takes the form of time deposits. Another part consists of demand items. Ordinarily about 75 per cent of the resources consist of bonds, securities and commercial paper. A considerable part of the resources is kept as deposits in the banks, and for this a low rate of interest is received. This enables trust companies to pay interest on demand deposits and thus gives them an advantage in competing for deposits. When a sudden demand for cash comes, the trust companies draw out their deposits and embarrass the banks. The inherent danger of the situation is well illustrated by the failure of the Knickerbocker Trust Company in 1907 and the consequent embarrassment of other banks in New York City. Some states, notably New York, have passed laws requiring trust companies to carry cash reserves in their own vaults and imposing certain other restrictions.

4. *State banking legislation.*—The states have been slow to change their banking laws since the passage of the National Banking Act. This is especially true in the South, where the whole tendency is for the states to interfere as little as possible with private business. It is highly desirable that certain changes

should be made so as to harmonize the state systems with the Federal Reserve system. For the most part, where amendments have been made at all, they have been modeled after the Federal law. Then, one state often copies another. For instance, Kansas followed the example set by Missouri, and Oklahoma, in turn, was influenced by Kansas. Despite the common model which all had in the National Banking Act and the tendency to follow one another, the forty-eight states have almost as many different kinds of legislation. We shall consider a few of the more important legal provisions.

5. *Incorporation.*—The power of chartering banks, as well as other corporations, rests in the legislature unless the state constitution provides otherwise. Most of the states have a general banking law which applies alike to all banks within the state. This is under the administration of some official, generally the superintendent of banking. In a few states a special act of the legislature is necessary for incorporating a bank. In some states the banking law is merged with the general corporation laws. National banks have a strong hold in New England, and the provisions for establishing state banks are so onerous as to be almost prohibitive. In general, it may be said that the general banking law has proved more satisfactory.

6. *Capital.*—Nearly all the states require some minimum capital, but in almost every case the amount is less than that required for national banks.

The minimum requirements vary from $5,000 to $100,000. In some states the amount is graded according to the size of the community in which the bank is to be established. This is the principle which was applied in the National Banking Act. It is a crude way of regulating the ratio of capital to the volume of business, but it has the advantage of being simple to administer. Kansas has adopted a more scientific plan. The law limits the total investments of any bank to four times its capital and surplus. As a result of this provision, the Kansas banks are accustomed to carry a large part of their earnings to surplus, thus adding to the strength of the bank.

While practically all the states now require the subscription of a minimum amount of capital, they do not have adequate laws to enforce the actual paying in of the capital or to prevent its retirement after it is paid in. Consequently many depositors have been deceived when reading bank advertising, because in many cases the nominal and not the actual paid-up capital is published. There is something to be said in favor of allowing a part of the capital to be paid in instalments after the bank begins business. Not all the capital is needed at first, and the provision makes it easier to establish banks in new communities. The trouble lies in the fact that people are often led to believe that the bank is stronger than it is. A general principle may be laid down that no bank should be allowed to impair its capital without good cause.

7. *Supervision.*—The aim of bank supervision is to make sure that the law is being complied with and to impower some official to act when violations occur. Two means are used in reaching a conclusion as to whether a bank is obeying the law: (1) frequent reports under oath are required from bank officials; (2) examinations are made from time to time by state officials. Reports and examinations should come at times when the bank is not expecting them, so as to prevent "window dressing."

Some state examiners are paid by fees, receiving so much for each bank that is examined. Sometimes the amount of the fee is made to vary with the size of the bank. Usually the expenses are paid by the banks. The fee system of payment is undesirable. It tends to cause the examiner to rush thru his examination so as to get to another bank and earn as much as possible. The same criticism has been made against the National Banking Act. The Comptroller of the Currency said, in his report for 1887: "The present system establishes relations between the bank and the examiner which are inconsistent with the duties of that officer, and with what ought to be his attitude toward the bank." The Federal Reserve Act corrects this evil by placing the examiners on a salary basis. Most states have already adopted the salary system. Banks are assessed for the expenses just as under the fee system.

A few of the states do not require regular reports; a still greater number do not make any provision for regular examinations. A considerable advance has been made in this respect, however, since 1880. The southern and northwestern states have been most backward. Over half the states give state officials power to apply for a receiver if the bank's condition is unsound. A somewhat smaller number give the officials power to take possession of a bank, pending the appointment of a receiver.

8. *Real estate loans.*—The permission to make loans on real estate has been one of the most characteristic distinctions between the powers of state and of national banks. The Federal Reserve Act alters this by permitting national banks to lend on real estate under certain conditions. The danger of lending on real estate is well known. While it may be permitted to a certain extent, the limits should be carefully defined.

Something may be said however, in favor of lending on real estate. In the development of every community there is a time when the functions of a savings bank and of a commercial bank are blended in one institution. In an agricultural community a bank is a place for the deposit of savings. If the proportion of long-time deposits is sufficiently large, there is no reason why a part of the bank's loans should not be based on real estate. The returns are relatively high. As a community grows, two kinds of banks arise which become quite distinct in their nature. The one is a savings or investment bank; the other, a commercial bank. Speaking generally, the distinction becomes more and more clear as the population becomes more dense. Commercial banks in large cities, and even in the most thickly populated states, such as New Jersey, have few time deposits and therefore they should not lend on real estate in any large amounts. This principle is recognized to a limited extent in the provision of the Federal Reserve Act, which prohibits banks in central reserve cities from making real estate loans. In conclusion, it may be said that there is nothing inherently bad in the real estate loan, so long as it is made by the right kind of bank and is not carried to excess.

9. *State bank failures.*—The two final tests of a banking system are the extent to which it meets the needs of the community, and the percentage of bank failures. Statistics of state bank failures are difficult to obtain. Many states are reluctant to give the officers charged with the execution of the banking laws any control over banks which have failed. For a long time the Comptroller of the Currency was unable to get any dependable information. It is claimed that such figures as the Federal authorities have published have been unfair to the state banks, because in many instances they included failures of private banks and savings banks. This mistake was made in the report of the Indianapolis Commission.

Since 1892 we have been fortunate in having the reports of the Bradstreet Commercial Agency, which are reasonably accurate. The Comptroller now relies chiefly on Bradstreet's for his information on bank failures. There is still a certain amount of confusion concerning state banks and savings banks. During the year ending June 30, 1916, twenty-three state bank failures were reported, the nominal assets of which at the time of the failure were slightly over 71 per cent of the liabilities. The total losses to creditors, after stockholders had contributed the additional amounts for which they were liable, is not known. The affairs of fifteen insolvent national banks were closed during the year ending June 30, 1916, the average dividends paid to creditors, running from 65 to 100 per cent. During the year ending June 30, 1916, the Comptroller received reports of failures of five savings banks, three trust companies and twelve private banks. The per cent of nominal assets to liabilities for the total of these failures was about sixty-four. On the whole the showing is rather unfavorable to state banks.

10. *Relation to the Federal Reserve system.*—State banks have been very slow and cautious about entering the Federal Reserve system—much slower than had been expected in certain quarters. Up to December 1, 1916, only thirty-eight state institutions had joined. Twenty-four of these were state banks and fourteen were savings banks and trust companies. Eleven of the thirty-eight were in the state of Texas. There were nearly twenty thousand banking institutions operating under state control. Only one in five hundred, approximately, had entered the system—a small beginning indeed.

The state institutions are stronger in banking power than the national banks. There are nearly three times as many of them, they have a somewhat larger capital and surplus, and their deposits are about twice as large. It is essential that a considerable part of this banking strength be brought into the Federal Reserve system if that system is to be as powerful for good in the country as it ought to be.

After the United States entered the war against the Central Powers, state banks and trust companies began to join the system in fair numbers. On December 1, 1917, one hundred and seventy-six had entered, having a total capital and surplus of $428,249,-896 and total resources of $4,275,468,908.

The Federal Reserve Act invites state banks to come in but it does not compel them to enter, as it does the national banks. The invitation is qualified, however, by certain standards and requirements. It is because of these specific requirements, together with some uncertainties, that the state banks have hesitated.

11. *Legal requirements of state banks.*—The provisions of the Act which apply to state banks are found in Sections 9, 19 and 21. The principal requirements are as follows: "No applying bank shall be admitted to membership in a Federal Reserve Bank unless it possesses a paid-up, unimpaired capital sufficient to entitle it to become a national banking association in the place where it is situated, under the provisions of the national-banking act." It

was required by the original Act to comply with the rules that apply to national banks respecting "the limitation of liability which may be incurred by any person, firm or corporation," against buying or lending on its own stock, and impairment of capital.

The amendment of June 21, 1917, provides, however, that "subject to the provisions of this act and to the regulations of the Board made, pursuant thereto, any bank becoming a member of the Federal Reserve system shall retain its full charter and statutory rights as a state bank or trust company, and may continue to exercise all corporate powers granted it by the State in which it was created, and shall be entitled to all privileges of member banks." There is a provision, however, that no reserve bank shall rediscount for such bank paper of a single borrower who is liable to the bank in an amount greater than ten per cent of the bank's capital and surplus.

12. *Advantages offered.*—Certain advantages are held out to state banks as an inducement to enter the system. In time, member banks will undoubtedly come to enjoy a certain prestige. They will have the privilege of making rediscounts and, as a corollary to that privilege, they will not need to maintain so large a call loan as they now do. The advantage which promises to be most important, however, is the proposed clearing of checks thru the reserve banks. Many other things are mentioned, such as serving as a depositary for government funds. When all these arguments in favor of joining the system are consid-

ered, it is evident that some reason other than the ordinary conservatism of the banking fraternity must be found to explain the tardiness with which state banks are falling into line.

13. *State banks' objections.*—The objections raised by state banks are numerous. Of these, four at least are raised by almost every state banker who is approached on the question. The first is a matter of stock earnings. If the state banks should join the system, they would be forced to subscribe to the stock of their reserve bank a sum equal to six per cent of their own capital and surplus. The dividend on this stock subscription is limited to six per cent per annum. Some state banks feel that they can make their capital earn more than six per cent. On the whole, however, this does not seem to be an insurmountable difficulty.

Some of our state bankers, especially those in the West and the South, still cling somewhat tenaciously to the doctrine of state rights. They fear that joining the Federal Reserve system would subject them to all sorts of vexatious control and regulation from Washington, and they object to this on principle as well as from sentiment. A more serious objection is raised on economic grounds. They fear that their banks will be examined by men sent out from Washington who may have very little knowledge of local conditions, and especially of the laws of the various states. It must be remembered that the state banks would still be regulated in many ways by the state laws, even after they had joined the Federal Reserve system. For that matter, even national banks are regulated to a certain extent by state laws. It is easy for a Montana banker to see how ridiculous it would be for the government to send an examiner out there whose experience and knowledge of banking had been limited entirely to conditions that obtain in Florida and on the Gulf coast. This very thing has been done before in the national banking system, and it has resulted in embarrassment for both the examiner and the bank. The law states that in the case of state banks and trust companies the Reserve Board may accept the examination by state authority in lieu of the regular Federal Bank examination, but the banks are not certain of the extent to which this course will be followed.

14. *Lack of clearness in the law.*—There are several questions regarding state banks on which the Act is not explicit. Much is left to the discretion of the Board. State banks do not quite like the Act, even where it is specific, and they like it even less where it is vague and where it delegates decision to the Reserve Board. National banks, on the other hand, are told just about what they must and must not do. State banks fear that while they may join the system under one set of regulations, they may in a few years find themselves compelled to operate under an entirely different set of regulations imposed by a new Board.

15. *Collection system.*—The collection system is,

and for some time will probably continue to be, the chief point of contention. Reserve banks collect checks at par for their members, charging only the actual cost of the operation. Member banks will not be permitted to charge anything like the old exchange rates. This will mean a considerable loss to some banks, especially those which are located in rural districts and in small towns; hence some of the state banks hesitate to enter under this scheme.

On the other hand, the collection plan as proposed in the beginning promised to be a most important force for pulling the state banks into the system. The reserve banks would receive checks for clearing only from member banks, but they would receive checks drawn not only upon member banks, whether in their own districts or not, but also upon such non-member banks as might agree to pay their checks at par. Under this arrangement, checks were cleared against over eight thousand non-member banks during November, 1916. These banks remitted at par for checks presented against them thru the reserve banks because they did not want their depositors to feel that checks on them were not as good as checks drawn upon member banks. They had to remit cash in payment for the checks, however. They could not offset with checks on other banks and they could not avail themselves of the cheap and direct collection facilities of the Federal Reserve clearing plan. In this way they lost the income from exchange charges without gaining any of the economies enjoyed by the member banks.

For a while it appeared that non-member banks might attempt to devise a scheme of nation-wide extent for overcoming this disadvantage. The Guaranty Trust Company of New York City offered to act as a clearing-house for non-member banks in New York State. Similar schemes were started in other states.

The situation was cleared up somewhat by the amendment of June 21, 1917, which provides that the reserve banks may accept items for collection and exchange from non-member state banks and trust companies under certain conditions, the most important of which is that they maintain with the reserve banks a balance sufficient to offset the items in transit held for their account. This removes a rather galling restriction.

16. *Federal Reserve Board regulation.*—The country waited impatiently for the Reserve Board to announce its regulations regarding membership of state banks. Finally, after other pressing tasks of the Board had been accomplished, on June 7, 1915, the regulation was announced. The entire spirit of the regulation, as well as a statement issued to the press, indicates that the Board is anxious to cooperate with the state banks. It is frankly stated that only commercial banks are desired for membership. This is as it should be. Investment banks would not derive much benefit from the system, nor would they contribute much toward its success.

We shall mention here only some of the most important features of the newly published rulings. A member state bank "shall invest only in loans on real estate or mortgages of a character and to an extent which, considering the nature of its liabilities, will not impair its liquid condition." This ruling is to be interpreted by the Reserve Board. Undoubtedly, a great many state institutions are ineligible under this provision. Some of them say that they can set their houses in order if they are allowed sufficient time for the purpose. Others will probably never care to change the nature of their business so as to render them eligible. A bank may not have loans which are secured by its own stock.

Another condition is that, while a bank may make a loan to one person, firm or corporation aggregating more than ten per cent of its capital and surplus, it cannot rediscount the paper of such a borrower at the reserve bank.

The withdrawal provision seems to have been arranged satisfactorily. Of course, it is to be hoped that the state banks will never wish to withdraw, but they like to feel that they can get out of the system without too great a sacrifice if it should ever be desirable for them to do so. At any rate, they can hold the threat of withdrawal as a club to enforce their rights. The matter of examination is left about where it was, except that the Reserve Board expresses its intention of cooperating with the state bank examiners, and thereby lessening the expense and inconvenience to member state banks.

17. *State laws on membership.*—Some of the states have adopted a rather hostile attitude toward the reserve system. In some cases there appears to be a certain amount of jealousy on the part of state bank officials. On the whole, the states have been quick to change their laws whenever necessary in order to permit state banks to invest in the stock of the reserve banks and take any other steps incident to entering the system.

Up to December 1, 1916, the following twenty-five states had passed laws expressly permitting state banks to become members:

California	Mississippi	Ohio
Idaho	Missouri	Oregon
Iowa	Montana	South Carolina
Kentucky	Nebraska	South Dakota
Louisiana	New Jersey	Texas
Maine	New Mexico	Utah
Massachusetts	New York	Virginia
Michigan	North Dakota	Washington
Minnesota		

In the following fifteen states there had been no specific legislation, but the state authorities had ruled that state banks might enter.

Alabama	Illinois	Rhode Island
Arizona	Indiana	Tennessee
Arkansas	Kansas	Vermont
Delaware	Maryland	West Virginia
Georgia	North Carolina	Wisconsin

In three states—Connecticut, Nevada and Wyoming—the authorities had filed opinions to the effect that state banks could not enter under the law. The remaining five states were doubtful.

18. *A satisfactory solution probable.*—The situation as it now stands is not all that could be desired, but it seems that the Reserve Board has shown good faith and that it intends to do all in its power to work out the solution of the problem in as satisfactory a way as possible. One or two influential state bankers have accused the Board of overstepping the bounds of its power under law, and of making its regulations more severe than was intended by Congress when the Act was passed. It has even been charged that at first the great national banks in the larger cities opposed the immediate entrance of state banks into the system, because of the shifting of reserves which would have been made necessary by their joining. This may or may not be true. The shifting of the reserves of national banks was a serious matter. The situation would have been much more serious, of course, if a great number of state banks had joined the system at the very beginning, and had begun to withdraw their deposits from reserve agents and to place them with the various Federal Reserve banks. It may be well that the state banks have delayed their entrance, but there can be no serious objection to their coming in gradually, now that the first shock has been withstood successfully.

State banks may wish to wait a little longer in order to see just how the system is going to work out and just how the state banks that have already joined the system are going to fare. Probably a little time will be needed for the Federal Reserve Board to convince state institutions that it is entirely friendly.

Up to January, 1918, the most successful argument for inducing them to enter was the plea that the country needed the close cooperation of all financial institutions in its efforts to win the war and, possibly, the fear that there might come a time of financial stringency when they would like very much to obtain the full benefits of the system but might find the way of entrance barred.

REVIEW

What enables the trust company to pay interest readily on demand deposits?

What advantages does a member of the reserve system have over a non-member bank?

What objections are advanced by state bankers against entering the system?

For what reason is it desirable that a large number of state banks enter the reserve system?

Outline the means taken by states to supervise banks formed under state laws.

What is the advantage of the Kansas law in regulating the ratio of capital to volume of business?

To what may the growth of state banking be ascribed?

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